```
basis = {  !sigmaDZ
 S   He    0.904100000000D+04  0.134900000000D+04  0.302500000000D+03
0.842100000000D+02  0.267800000000D+02  0.920400000000D+01  0.328600000000D+01
0.119400000000D+01  0.439400000000D+00  0.162800000000D+00
 c 1.10   0.271335234466D-04  0.213594912203D-03  0.114717222383D-02
0.492826593426D-02  0.182601241208D-01  0.599253229831D-01  0.163758529414D+00
0.329537523716D+00  0.412998041425D+00  0.182200780993D+00
 c 1.10   0.426216231860D-04  0.321448209455D-03  0.185448971544D-02
0.746515558310D-02  0.325592976927D-01  0.123963656978D+00  0.518887016755D+00
0.537121787932D+00 -0.668752659201D+00 -0.456522011459D+00
 P   He    0.328600000000D+01  0.119400000000D+01  0.439400000000D+00
 c 1.3   0.250396089211D+00  0.562745223006D+00  0.314280162875D+00
}

basis = {  !sigmaTZ
 S   He    0.762900000000D+04  0.113600000000D+04  0.256600000000D+03
0.715200000000D+02  0.227400000000D+02  0.788200000000D+01  0.289700000000D+01
0.109300000000D+01  0.414500000000D+00  0.156900000000D+00
 c 1.10   0.336577899948D-04  0.263657762769D-03  0.140365759607D-02
0.602993918604D-02  0.221902424744D-01  0.696648733663D-01  0.175780137191D+00
0.332131447015D+00  0.399131910943D+00  0.166510790849D+00
 c 1.10   0.524351047839D-04  0.400984240545D-03  0.223948109747D-02
0.935772544104D-02  0.396813234623D-01  0.154593038044D+00  0.561231199965D+00
0.442981431552D+00 -0.697614175027D+00 -0.416311316258D+00
 c 1.10   0.756953983188D-04  0.795021098467D-03  0.264662202419D-02
0.227250359825D-01  0.648506474502D-01  0.714438338013D+00  0.586147597203D+00
-0.185729678734D+01  0.529380882938D+00  0.517195818528D+00
 P   He    0.788200000000D+01  0.289700000000D+01  0.109300000000D+01
0.414500000000D+00
 c 1.4   0.404473891029D-01  0.248922502629D+00  0.584633778425D+00
0.259495672437D+00
 c 1.4   0.291139604650D+00  0.879312459685D+00 -0.453267799623D+00
-0.506170705445D+00
 D   He    0.289700000000D+01  0.109300000000D+01  0.414500000000D+00
 c 1.3  -0.552075125154D+00 -0.503453894720D+00 -0.687389401788D-01
}

basis = {  !sigmaQZ
 S   He    0.677700000000D+04  0.101300000000D+04  0.229200000000D+03
0.643600000000D+02  0.206000000000D+02  0.717600000000D+01  0.265800000000D+01
0.102000000000D+01  0.395400000000D+00  0.152700000000D+00
 c 1.10   0.389717688855D-04  0.304133778037D-03  0.160930130749D-02
0.682323697590D-02  0.248162367784D-01  0.766716445566D-01  0.186284550107D+00
0.335530382784D+00  0.386256560056D+00  0.154876012960D+00
 c 1.10   0.607787556128D-04  0.466033200659D-03  0.254547736313D-02
0.107461374008D-01  0.445688328751D-01  0.178157080207D+00  0.592018572304D+00
0.367046770983D+00 -0.713507969554D+00 -0.385449035351D+00
 c 1.10   0.849416128513D-04  0.929295985430D-03  0.305227949072D-02
0.256819454763D-01  0.800597770111D-01  0.812126852015D+00  0.378320862288D+00
-0.183303758817D+01  0.647617370730D+00  0.465020148877D+00
 c 1.10  -0.143241316075D-03 -0.691009420057D-03 -0.821543222723D-02
-0.179966536126D-01 -0.378600959365D+00 -0.140151685763D+01  0.330438318767D+01
-0.241443397213D+01  0.111668259738D+00  0.638837509939D+00
```

```
 P   He    0.717600000000D+01  0.265800000000D+01  0.102000000000D+01
0.395400000000D+00  0.152700000000D+00
 c 1.5   0.502595300759D-01  0.276925235335D+00  0.580769801735D+00
0.219787964022D+00  0.838883680503D-02
 c 1.5   0.359099545588D+00  0.840398860659D+00 -0.541288898496D+00
-0.451136220102D+00  0.279159007347D-02
 c 1.5  -0.129901650948D+01  0.109486845904D+01  0.389487532111D+00
-0.889590077007D+00  0.746283366065D-01
 D   He    0.717600000000D+01  0.265800000000D+01  0.102000000000D+01
0.395400000000D+00
 c 1.4  -0.794572362477D-01 -0.535743861479D+00 -0.488251038102D+00
-0.392644232948D-01
 c 1.4   0.604472590022D+00  0.517011734439D+00 -0.873905842387D+00
-0.557661865138D-01
 F   He    0.717600000000D+01  0.265800000000D+01  0.102000000000D+01
 c 1.3  -0.164788169461D+00 -0.719732613047D+00 -0.265009083528D+00
}

basis = {  !sigma5Z
 S   He    0.597300000000D+04  0.895700000000D+03  0.203100000000D+03
0.572800000000D+02  0.185700000000D+02  0.667600000000D+01  0.257400000000D+01
0.101300000000D+01  0.395600000000D+00  0.153100000000D+00
 c 1.10   0.455660750065D-04  0.354461882382D-03  0.186644039191D-02
0.782848947803D-02  0.275155354256D-01  0.794818293195D-01  0.184154895682D+00
0.331377617364D+00  0.385111908679D+00  0.155437400127D+00
 c 1.10   0.702253173618D-04  0.543663122166D-03  0.293811627569D-02
0.124680738152D-01  0.501235861384D-01  0.189847735685D+00  0.586088616775D+00
0.350737432563D+00 -0.708390053481D+00 -0.387759993620D+00
 c 1.10   0.106931723293D-03  0.100627189062D-02  0.396791334716D-02
0.279661807242D-01  0.104789191894D+00  0.851632465829D+00  0.278087146185D+00
-0.179354550115D+01  0.636060313116D+00  0.470115334822D+00
 c 1.10  -0.198547876205D-03 -0.720299957250D-03 -0.105376128027D-01
-0.150929524908D-01 -0.473238962853D+00 -0.130369897076D+01  0.340155117609D+01
-0.255882712668D+01  0.165531646073D+00  0.632511663974D+00
 c 1.10  -0.471795444927D-03  0.137758400532D-02 -0.365169943708D-01
0.329277162493D-01 -0.220876762641D+01  0.390337690691D+01 -0.300663928423D+01
0.660251934192D+00  0.100016386251D+01 -0.834229133543D+00
 P   He    0.185700000000D+02  0.667600000000D+01  0.257400000000D+01
0.101300000000D+01  0.395600000000D+00  0.153100000000D+00
 c 1.6   0.774275278418D-02  0.453849596238D-01  0.290449685836D+00
0.562625007485D+00  0.225330597077D+00  0.606334659531D-02
 c 1.6   0.286542498369D-01  0.361162636662D+00  0.834402859228D+00
-0.572635838299D+00 -0.434479655549D+00 -0.212188242427D-02
 c 1.6  -0.139158053270D+00 -0.121443850014D+01  0.118363540376D+01
0.281799374887D+00 -0.832593700555D+00  0.640804218867D-01
 c 1.6  -0.326397994133D+00 -0.693969174779D+00  0.222933653193D+01
-0.279182792234D+01  0.166904474613D+01 -0.524225221427D-01
 D   He    0.185700000000D+02  0.667600000000D+01  0.257400000000D+01
0.101300000000D+01  0.395600000000D+00
 c 1.5  -0.442902904555D-02 -0.881588602808D-01 -0.539703901208D+00
-0.469542593687D+00 -0.425537727930D-01
 c 1.5   0.156704894510D-01  0.653073992474D+00  0.435708634699D+00
-0.850372616435D+00 -0.583232670147D-01
 c 1.5   0.197534511216D+00  0.107968693926D+01 -0.160742649373D+01
```

```
0.819731344869D+00  0.201410855567D+00
 F   He    0.185700000000D+02  0.667600000000D+01  0.257400000000D+01
0.101300000000D+01
 c 1.4   0.469244781340D-03 -0.191072120536D+00 -0.705150134969D+00
-0.252100669767D+00
 c 1.4   0.430434459415D-01  0.932730958033D+00 -0.227643824263D+00
-0.561471313638D+00
 G   He    0.667600000000D+01  0.257400000000D+01  0.101300000000D+01
 c 1.3   0.334882082683D+00  0.732410055134D+00  0.841102704268D-01
 }


basis = {  !asigmaDZ
 S   He    0.145700000000D+05  0.218300000000D+04  0.496700000000D+03
0.139900000000D+03  0.448800000000D+02  0.155300000000D+02  0.563400000000D+01
0.214700000000D+01  0.854600000000D+00  0.346100000000D+00  0.139400000000D+00
 c 1.11   0.149683029695D-04  0.116165969637D-03  0.611785025476D-03
0.260585394450D-02  0.970362412097D-02  0.328210901783D-01  0.956415155445D-01
0.212658846004D+00  0.344412318411D+00  0.353158154064D+00  0.121761482962D+00
 c 1.11   0.228628743929D-04  0.179854454967D-03  0.953852669371D-03
0.407019227841D-02  0.158631815570D-01  0.608817544715D-01  0.248890347722D+00
0.644952268528D+00  0.152936594301D+00 -0.731930766938D+00 -0.300633978575D+00
 c 1.11   0.409731884668D-04  0.246079715610D-03  0.186670858904D-02
0.528345090942D-02  0.371180590700D-01  0.148902157265D+00  0.102959698308D+01
-0.272474691201D+00 -0.156013841909D+01  0.850658183402D+00  0.338223508331D+00
 P   He    0.563400000000D+01  0.214700000000D+01  0.854600000000D+00
0.346100000000D+00
 c 1.4   0.839361640348D-01  0.352782541795D+00  0.538864312275D+00
0.157214682923D+00
 c 1.4   0.560857097215D+00  0.651524489697D+00 -0.709211880067D+00
-0.303383335505D+00
}

basis = {  !asigmaTZ
 S   He    0.980000000000D+04  0.146900000000D+04  0.334200000000D+03
0.949900000000D+02  0.309800000000D+02  0.109700000000D+02  0.414600000000D+01
0.167400000000D+01  0.703500000000D+00  0.299100000000D+00  0.126200000000D+00
 c 1.11   0.245103457073D-04  0.190759732109D-03  0.999613510547D-03
0.416409795864D-02  0.149559874256D-01  0.474918051550D-01  0.122158304726D+00
0.236892933064D+00  0.344975526506D+00  0.311523286945D+00  0.902470081692D-01
 c 1.11   0.385268902405D-04  0.291855215837D-03  0.155993952203D-02
0.654371824659D-02  0.253496695002D-01  0.957943935649D-01  0.356653354989D+00
0.627097674888D+00 -0.966625238028D-01 -0.700102607783D+00 -0.220342935995D+00
 c 1.11   0.640472127739D-04  0.499855412898D-03  0.241097460839D-02
0.122947428386D-01  0.482066286198D-01  0.350727103526D+00  0.107860955585D+01
-0.107751201801D+01 -0.944925377103D+00  0.859752687291D+00  0.250666747413D+00
 c 1.11  -0.487160259680D-04 -0.114830653929D-02 -0.440740383477D-04
-0.368152452577D-01 -0.395727471506D-01 -0.144693252848D+01  0.124297006489D+01
 0.155114086654D+01 -0.296731188963D+01  0.135069234639D+01  0.160926077316D+00
 P   He    0.109700000000D+02  0.414600000000D+01  0.167400000000D+01
0.703500000000D+00  0.299100000000D+00
 c 1.5   0.209909911722D-01  0.120351194368D+00  0.446960443391D+00
0.443103589975D+00  0.105192800419D+00
 c 1.5   0.119876458185D+00  0.720368342821D+00  0.309423924756D+00
```

```
-0.765437634286D+00 -0.168876819597D+00
 c 1.5  -0.593696543389D+00 -0.698475536555D+00  0.183225089218D+01
-0.914414608079D+00 -0.276917843539D+00
 D   He    0.414600000000D+01  0.167400000000D+01  0.703500000000D+00
0.299100000000D+00
 c 1.4  -0.293604722595D+00 -0.597182721700D+00 -0.235139718563D+00
-0.123662412784D-01
 c 1.4   0.111366942393D+01 -0.504476685579D+00 -0.479463608567D+00
-0.352756407858D-01
}
basis = {  !asigmaQZ
 S   He    0.826000000000D+04  0.122600000000D+04  0.279400000000D+03
0.793400000000D+02  0.259300000000D+02  0.931900000000D+01  0.361700000000D+01
0.149900000000D+01  0.642200000000D+00  0.279500000000D+00  0.121200000000D+00
 c 1.11   0.307729801582D-04  0.238855615686D-03  0.124965649077D-02
0.520550196916D-02  0.184015243740D-01  0.557164852170D-01  0.134226849864D+00
0.247586485345D+00  0.343803076904D+00  0.288840018068D+00  0.783344566210D-01
 c 1.11   0.476255287875D-04  0.369523540436D-03  0.194841137062D-02
0.825896310139D-02  0.315781298139D-01  0.118568247355D+00  0.408304137581D+00
0.587269412609D+00 -0.200937889202D+00 -0.669576018968D+00 -0.189643928371D+00
 c 1.11   0.758251221835D-04  0.632194268737D-03  0.289202547263D-02
0.165082802638D-01  0.619708645936D-01  0.474463904804D+00  0.986231695419D+00
-0.137611520309D+01 -0.625731041182D+00  0.820697610262D+00  0.219347136193D+00
 c 1.11  -0.873673680856D-04 -0.115525434120D-02 -0.232637410408D-02
-0.340051376711D-01 -0.124920425741D+00 -0.158190030262D+01  0.204274129194D+01
 0.564000582493D+00 -0.249336039383D+01  0.129689615062D+01  0.157543148240D+00
 c 1.11   0.742789520302D-04  0.464001214986D-03  0.716297661272D-02
0.307499569275D-02  0.362890868960D+00  0.121999767123D+01 -0.449195724799D+01
0.641287933755D+01 -0.474849219551D+01  0.103686893940D+01  0.614311723797D+00
 P   He    0.931900000000D+01  0.361700000000D+01  0.149900000000D+01
0.642200000000D+00  0.279500000000D+00  0.121200000000D+00
 c 1.6   0.292103814464D-01  0.150714319984D+00  0.473162081414D+00
0.400753239656D+00  0.807105142860D-01  0.260039775817D-02
 c 1.6   0.182811993748D+00  0.777903172919D+00  0.115280349354D+00
-0.745673416376D+00 -0.102020292043D+00 -0.190859791024D-01
 c 1.6  -0.835194816776D+00 -0.254437258097D+00  0.169472564856D+01
-0.112638616329D+01 -0.803777707206D-01 -0.559346282782D-01
 c 1.6   0.156429951601D+01 -0.272918374780D+01  0.208214294119D+01
-0.209461264867D+00 -0.695347800244D+00  0.454658408231D-01
 D   He    0.931900000000D+01  0.361700000000D+01  0.149900000000D+01
0.642200000000D+00  0.279500000000D+00
 c 1.5  -0.336393750765D-01 -0.333256571298D+00 -0.593170897544D+00
-0.170182061967D+00 -0.155298980110D-01
 c 1.5   0.307439680700D+00  0.887685010254D+00 -0.630087439123D+00
-0.357917747571D+00 -0.162789130877D-01
 c 1.5   0.119699426801D+01 -0.947988112867D+00 -0.295563147417D+00
0.801710304969D+00 -0.685255928314D-01
 F   He    0.931900000000D+01  0.361700000000D+01  0.149900000000D+01
0.642200000000D+00
 c 1.4  -0.630544454240D-01 -0.556429715290D+00 -0.488603424577D+00
-0.385585294882D-01
 c 1.4   0.494599500274D+00  0.640913193403D+00 -0.903453444408D+00
-0.688776522751D-01
}
```

```
basis = {  !asigma5Z
 S   He    0.781900000000D+04  0.117100000000D+04  0.265900000000D+03
0.749000000000D+02  0.244200000000D+02  0.899300000000D+01  0.365400000000D+01
0.155900000000D+01  0.669500000000D+00  0.288100000000D+00  0.123600000000D+00
 c 1.11   0.325762220196D-04  0.253357775882D-03  0.133532565312D-02
0.562619019926D-02  0.196355156451D-01  0.555359548303D-01  0.126774808852D+00
0.237650464064D+00  0.343860750498D+00  0.299392301118D+00  0.835032653045D-01
 c 1.11   0.507118714359D-04  0.390892293199D-03  0.208355742431D-02
0.895062598886D-02  0.339008589584D-01  0.119887541314D+00  0.384107728468D+00
0.588746841172D+00 -0.154437802237D+00 -0.683514219211D+00 -0.204102359817D+00
 c 1.11   0.812896656641D-04  0.662648286349D-03  0.328238988757D-02
0.167766697267D-01  0.724069247277D-01  0.471521711814D+00  0.977952398059D+00
-0.128420893507D+01 -0.742414133304D+00  0.826998791576D+00  0.238109660514D+00
 c 1.11  -0.889466961882D-04 -0.114089670777D-02 -0.296253156938D-02
-0.346392069508D-01 -0.150675075967D+00 -0.158839072886D+01  0.200158525043D+01
 0.750912281403D+00 -0.257830949456D+01  0.123390494985D+01  0.196637622595D+00
 c 1.11   0.131448886828D-03  0.387971841223D-03  0.750720236186D-02
0.807626406632D-02  0.411733778991D+00  0.128613267216D+01 -0.482197305871D+01
0.660452465587D+01 -0.457847526203D+01  0.854430847022D+00  0.646211614157D+00
 c 1.11  -0.447984193207D-03  0.179104964924D-02 -0.376313814617D-01
0.404079222392D-01 -0.257711022170D+01  0.527441236294D+01 -0.566848580097D+01
0.388085069796D+01 -0.130098937667D+01 -0.471859482786D+00  0.578115603424D+00
 P   He    0.244200000000D+02  0.899300000000D+01  0.365400000000D+01
0.155900000000D+01  0.669500000000D+00  0.288100000000D+00  0.123600000000D+00
 c 1.7   0.435253262624D-02  0.234803323960D-01  0.147766808427D+00
0.446912450456D+00  0.425249671057D+00  0.865064923456D-01  0.400848738045D-02
 c 1.7   0.184018276143D-01  0.159625012220D+00  0.777162633368D+00
0.140238122618D+00 -0.731243806763D+00 -0.136978453265D+00 -0.135386189808D-01
 c 1.7  -0.390013529130D-01 -0.808243816147D+00 -0.293586072850D+00
0.170951748455D+01 -0.104213155968D+01 -0.147901853126D+00 -0.419189777392D-01
 c 1.7   0.210630858780D+00  0.141736172371D+01 -0.283185890368D+01
0.226319464011D+01 -0.398994818397D+00 -0.545351010838D+00  0.340436135387D-01
 c 1.7  -0.167932760721D+01  0.232602638289D+01 -0.157872788398D+01
0.160603863321D+00  0.968100630848D+00 -0.956539557593D+00  0.172642749514D+00
 D   He    0.244200000000D+02  0.899300000000D+01  0.365400000000D+01
0.155900000000D+01  0.669500000000D+00  0.288100000000D+00
 c 1.6  -0.259776451353D-02 -0.327231283690D-01 -0.316460487055D+00
-0.583886361341D+00 -0.195864537334D+00 -0.147274655374D-01
 c 1.6   0.513455074387D-02  0.311261855807D+00  0.874941262485D+00
-0.583695986890D+00 -0.398650150133D+00 -0.152624136747D-01
 c 1.6   0.560651539733D-01  0.117877042112D+01 -0.957147841858D+00
-0.332785192731D+00  0.813055833603D+00 -0.622874240828D-01
 c 1.6  -0.128170128336D+00 -0.840538475003D+00  0.195353668386D+01
-0.225479844309D+01  0.117974098973D+01  0.248817602835D+00
 F   He    0.244200000000D+02  0.899300000000D+01  0.365400000000D+01
0.155900000000D+01  0.669500000000D+00
 c 1.5  -0.136790243672D-02 -0.644743624159D-01 -0.533023864061D+00
-0.496236680157D+00 -0.524187797951D-01
 c 1.5  -0.628660996733D-02  0.524801249631D+00  0.615936601490D+00
-0.868813059183D+00 -0.100421490606D+00
 c 1.5   0.980889044669D-01  0.115403057697D+01 -0.140293390068D+01
0.588590270589D+00  0.289351682587D+00
 G   He    0.899300000000D+01  0.365400000000D+01  0.155900000000D+01
```

```
0.669500000000D+00
 c 1.4   0.130851510328D+00  0.699076835883D+00  0.316424010909D+00
0.359630087545D-02
 c 1.4  -0.791746642787D+00 -0.112352510640D+00  0.765061789044D+00
-0.470235547523D-01
}


basis = {  !dasigmaDZ
 S   He    0.146100000000D+05  0.219600000000D+04  0.502600000000D+03
0.143900000000D+03  0.476400000000D+02  0.171400000000D+02  0.638200000000D+01
0.246000000000D+01  0.100000000000D+01  0.429000000000D+00  0.192700000000D+00
0.884200000000D-01
 c 1.12   0.148922176764D-04  0.115098360014D-03  0.598501886018D-03
0.246634090933D-02  0.870473922576D-02  0.282506804733D-01  0.827786106743D-01
0.189585077971D+00  0.310690827434D+00  0.340645743124D+00  0.186344004605D+00
0.234425938167D-01
 c 1.12   0.228971288747D-04  0.178406366750D-03  0.934084979509D-03
0.385654642249D-02  0.141705206394D-01  0.512383107961D-01  0.205335441081D+00
0.590395654583D+00  0.329801626072D+00 -0.588799508362D+00 -0.452230334199D+00
-0.592507194614D-01
 c 1.12   0.358346263865D-04  0.306560219697D-03  0.159136280380D-02
0.684717764618D-02  0.279546800631D-01  0.167845519540D+00  0.811952332832D+00
0.169214539524D+00 -0.155915071525D+01  0.224075101515D+00  0.668960523035D+00
0.824628814251D-01
 c 1.12   0.297884600667D-04  0.603240043521D-03  0.427062405143D-03
0.184566048168D-01  0.584861575164D-02  0.585945877811D+00  0.106283804085D+01
-0.322666181842D+01  0.237651517685D+01  0.189550134280D+00 -0.741859693156D+00
-0.115074424807D+00
 P   He    0.638200000000D+01  0.246000000000D+01  0.100000000000D+01
0.429000000000D+00  0.192700000000D+00
 c 1.5   0.645999301052D-01  0.289120817850D+00  0.544072917533D+00
0.213237976913D+00  0.250046277182D-01
 c 1.5   0.517605692563D+00  0.594656911180D+00 -0.348812251472D+00
-0.528990571419D+00 -0.375116419293D-01
 c 1.5  -0.134461893661D+01  0.124647330998D+01  0.360684292555D+00
-0.864280250383D+00 -0.255776543567D-01
}

basis = {  !dasigmaTZ
 S   He    0.147300000000D+05  0.218500000000D+04  0.499600000000D+03
0.144300000000D+03  0.478700000000D+02  0.169900000000D+02  0.631800000000D+01
0.246000000000D+01  0.100400000000D+01  0.430200000000D+00  0.193200000000D+00
0.890700000000D-01
 c 1.12   0.148337621186D-04  0.116000195127D-03  0.599827040470D-03
0.243826528754D-02  0.872703312915D-02  0.288664348424D-01  0.829682936255D-01
0.187830577912D+00  0.310131924768D+00  0.341428722769D+00  0.186402408257D+00
0.241558970876D-01
 c 1.12   0.224227782177D-04  0.178227528898D-03  0.940302379689D-03
0.379895533787D-02  0.142189147176D-01  0.525803036275D-01  0.205885068655D+00
0.586682059806D+00  0.331434254083D+00 -0.584914437081D+00 -0.456472801206D+00
-0.584425605750D-01
 c 1.12   0.416705143923D-04  0.249456199826D-03  0.183735443229D-02
0.496739447569D-02  0.326976614927D-01  0.119970309906D+00  0.889452404262D+00
```

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0.188052617046D+00 -0.177162435060D+01  0.527120297914D+00  0.499160680368D+00
0.909181978419D-01
 c 1.12  -0.453074347035D-04 -0.715003519075D-03 -0.485018471927D-03
-0.210806160568D-01 -0.172824306258D-01 -0.802041204637D+00 -0.499789334327D+00
 0.245623822859D+01 -0.155326380845D+01 -0.855356150824D+00  0.103741777539D+01
 0.919940330558D-01
 c 1.12   0.140367710322D-04 -0.156709596683D-02  0.418277681974D-02
-0.512793207863D-01  0.620804868519D-01 -0.195181687441D+01  0.320571485238D+01
-0.166239451209D+01 -0.154977323821D+01  0.349252085623D+01 -0.218258561352D+01
 0.178163416925D+00
 P   He    0.169900000000D+02  0.631800000000D+01  0.246000000000D+01
0.100400000000D+01  0.430200000000D+00  0.193200000000D+00
 c 1.6   0.886921925269D-02  0.509830080109D-01  0.302346102984D+00
0.529597433186D+00  0.224804714342D+00  0.212263434446D-01
 c 1.6   0.344005936964D-01  0.398238182848D+00  0.802368723161D+00
-0.570027723061D+00 -0.416483622767D+00 -0.352852128153D-01
 c 1.6  -0.320233412315D+00 -0.905792113801D+00  0.929940228834D+00
0.482958095684D+00 -0.817997192173D+00 -0.964230084895D-01
 c 1.6  -0.686600750086D+00 -0.160283690068D+00  0.186436175015D+01
-0.268457758952D+01  0.155414897872D+01  0.460351252413D-01
 D   He    0.631800000000D+01  0.246000000000D+01  0.100400000000D+01
0.430200000000D+00  0.193200000000D+00
 c 1.5  -0.110748663075D+00 -0.539372505408D+00 -0.447878200525D+00
-0.365881808704D-01 -0.110516695072D-01
 c 1.5   0.705110010361D+00  0.321485871357D+00 -0.695487931118D+00
-0.194663180158D+00 -0.152283333895D-01
 c 1.5   0.127880687035D+01 -0.170445568825D+01  0.747447339932D+00
0.301437019903D+00  0.267891782514D-01
 }

basis = {  !dasigmaQZ
 S   He    0.147700000000D+05  0.221600000000D+04  0.504700000000D+03
0.144100000000D+03  0.471300000000D+02  0.166100000000D+02  0.619700000000D+01
0.243800000000D+01  0.100200000000D+01  0.429800000000D+00  0.192900000000D+00
0.910500000000D-01
 c 1.12   0.142874860889D-04  0.114067881282D-03  0.593316985687D-03
0.247912183786D-02  0.897686503549D-02  0.297329967866D-01  0.838654905135D-01
0.187142918407D+00  0.308999814229D+00  0.341953223281D+00  0.185071666214D+00
0.246695833236D-01
 c 1.12   0.217565917150D-04  0.175365115648D-03  0.923529857826D-03
0.389461089299D-02  0.145135737134D-01  0.547178709541D-01  0.209023058373D+00
0.585322027040D+00  0.325770967843D+00 -0.584816768616D+00 -0.453244139132D+00
-0.604229442742D-01
 c 1.12   0.372496812312D-04  0.256972508089D-03  0.170735275518D-02
0.532752376297D-02  0.338245108801D-01  0.126840425871D+00  0.900495282919D+00
0.158701757557D+00 -0.176207170908D+01  0.534735020601D+00  0.483411193144D+00
0.100377530020D+00
 c 1.12  -0.263304238490D-04 -0.642724661780D-03 -0.495761817363D-03
-0.172251161601D-01 -0.110665573996D-01 -0.601425356354D+00 -0.108525760755D+01
 0.342985698370D+01 -0.269434118003D+01  0.670482137465D-01  0.637871892954D+00
 0.118261799763D+00
 c 1.12   0.294184977007D-04  0.775485834076D-03  0.188444276901D-05
0.229803787049D-01  0.311069425378D-01  0.124234900557D+01 -0.167683343683D+01
-0.452437669890D+00  0.375820181920D+01 -0.496398609308D+01  0.241220308462D+01
```

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 0.101825000168D+00
 c 1.12  -0.168143667861D-03  0.126186290768D-03 -0.755581291160D-02
0.555627629807D-02 -0.316458565442D+00 -0.163398748208D+01  0.465886660844D+01
-0.665709732580D+01  0.702432653953D+01 -0.530776377499D+01  0.205855289479D+01
 0.138819578788D-03
 P   He    0.166100000000D+02  0.619700000000D+01  0.243800000000D+01
0.100200000000D+01  0.429800000000D+00  0.192900000000D+00  0.910500000000D-01
 c 1.7   0.929349857186D-02  0.525686758279D-01  0.303344805468D+00
0.526220507816D+00  0.226054805045D+00  0.196772692553D-01  0.845945943993D-03
 c 1.7   0.372101647293D-01  0.407506484988D+00  0.791363412960D+00
-0.571751323571D+00 -0.417323215201D+00 -0.323448591029D-01 -0.178761684866D-02
 c 1.7  -0.192061340768D+00 -0.118067593491D+01  0.125743196401D+01
0.297858943539D+00 -0.907950365356D+00  0.115971577482D+00 -0.560952069761D-01
 c 1.7   0.107138082546D+01 -0.631143170957D+00 -0.949567097765D+00
0.189978760224D+01 -0.108213391705D+01 -0.154486528131D+00 -0.448874196216D-01
 c 1.7  -0.143828540389D+01  0.266085691203D+01 -0.294939733460D+01
0.215710277041D+01 -0.421292641135D+00 -0.644852572720D+00  0.694249400649D-01
 D   He    0.166100000000D+02  0.619700000000D+01  0.243800000000D+01
0.100200000000D+01  0.429800000000D+00  0.192900000000D+00
 c 1.6  -0.515628725501D-02 -0.108615598883D+00 -0.544606091266D+00
-0.438578393145D+00 -0.407066510011D-01 -0.931173262697D-02
 c 1.6   0.322706702107D-01  0.710137255393D+00  0.348661468419D+00
-0.849558927815D+00 -0.116813969576D-01 -0.415789498884D-01
 c 1.6   0.628772668436D+00  0.473261865541D+00 -0.120003427909D+01
0.599565897075D+00  0.292034133487D+00  0.643162536603D-02
 c 1.6   0.122911315088D+01 -0.157653865931D+01  0.961799185900D+00
0.182241047838D+00 -0.789054898056D+00  0.119956834142D+00
 F   He    0.619700000000D+01  0.243800000000D+01  0.100200000000D+01
0.429800000000D+00  0.192900000000D+00
 c 1.5  -0.227058648917D+00 -0.694087673584D+00 -0.219968975622D+00
-0.613740636412D-02 -0.215489671939D-02
 c 1.5   0.115936089075D+01 -0.641885064457D+00 -0.242254162352D+00
-0.338068832983D-01  0.205818856770D-02
 c 1.5   0.699689537078D+00 -0.149227063820D+01  0.134843073830D+01
-0.207548256898D-01  0.809090246997D-01
}

basis = {  !dasigma5Z
 S   He    0.147500000000D+05  0.219600000000D+04  0.502600000000D+03
0.143900000000D+03  0.476400000000D+02  0.171400000000D+02  0.636900000000D+01
0.245900000000D+01  0.100100000000D+01  0.429000000000D+00  0.192700000000D+00
0.884200000000D-01
 c 1.12   0.148212480406D-04  0.115331446350D-03  0.597852013297D-03
0.246854869876D-02  0.869633684551D-02  0.282997663012D-01  0.830194626066D-01
0.189024190054D+00  0.310820542855D+00  0.340788402507D+00  0.186264289930D+00
0.235621600963D-01
 c 1.12   0.228584177375D-04  0.177637754750D-03  0.932503454891D-03
0.386155803733D-02  0.141505847706D-01  0.514194300215D-01  0.205571723208D+00
0.590181311893D+00  0.328401512285D+00 -0.585204499868D+00 -0.457332012382D+00
-0.560740530228D-01
 c 1.12   0.430483845621D-04  0.251944623740D-03  0.182205245533D-02
0.486258067287D-02  0.340898792070D-01  0.113242164575D+00  0.890849629353D+00
0.190347361543D+00 -0.177252888057D+01  0.528673334700D+00  0.507192334355D+00
0.832685375337D-01
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 c 1.12  -0.245845411415D-04 -0.585445300855D-03 -0.669835402609D-03
-0.169388745539D-01 -0.966943524974D-02 -0.559995327952D+00 -0.112780942894D+01
 0.338195383715D+01 -0.259459977679D+01 -0.555006822804D-01  0.769857113131D+00
 0.509908567392D-01
 c 1.12  -0.215973837445D-04  0.171464812170D-02 -0.474081176355D-02
0.586312855625D-01 -0.518088709606D-01  0.222002359391D+01 -0.391003730651D+01
0.285278215599D+01 -0.772147807940D-01 -0.192251208914D+01  0.135647968172D+01
-0.575872467866D-01
 c 1.12   0.101314278631D+00 -0.164316829791D-01 -0.121336698309D+00
0.292782056951D+00 -0.654922250868D+00 -0.409172886830D+00  0.277524053617D+01
-0.545899685297D+01  0.743272299276D+01 -0.666685959979D+01  0.274469503922D+01
 0.130097466074D+00
 c 1.12  -0.800452429656D+00  0.131863310343D+00  0.964228765393D+00
-0.236070704200D+01  0.355881281075D+01 -0.382834149546D+01  0.346720319007D+01
-0.309057750119D+01  0.270155437570D+01 -0.192116435642D+01  0.749649832771D+00
-0.171183306666D-01
 P   He    0.476400000000D+02  0.171400000000D+02  0.636900000000D+01
0.245900000000D+01  0.100100000000D+01  0.429000000000D+00  0.192700000000D+00
0.884200000000D-01
 c 1.8   0.117864183044D-02  0.672609821629D-02  0.528014731392D-01
0.302065771188D+00  0.531746654256D+00  0.222270296496D+00  0.211352214529D-01
0.370519840356D-03
 c 1.8   0.661603597778D-02  0.221853349416D-01  0.408011153247D+00
0.796571750086D+00 -0.566721018249D+00 -0.419128855793D+00 -0.310718490347D-01
-0.194545632083D-02
 c 1.8  -0.112874051047D-01 -0.155662229601D+00 -0.119317449694D+01
0.122269779434D+01  0.325691775966D+00 -0.923323645838D+00  0.122022845988D+00
-0.558175175299D-01
 c 1.8  -0.228295628279D-01  0.523063606061D+00  0.433815858266D+00
-0.221951844895D+01  0.317571619528D+01 -0.210902291700D+01  0.375161295483D+00
-0.176899385663D+00
 c 1.8  -0.944678765031D-01 -0.164423777191D+01  0.279928217000D+01
-0.287631835750D+01  0.231325255024D+01 -0.127098707377D+01  0.328589720069D+00
-0.729925475615D-01
 c 1.8  -0.798820543938D-01  0.135758681916D-01  0.429225136427D+00
-0.131850831757D+01  0.271382621822D+01 -0.386773752257D+01  0.280016120971D+01
-0.256353267634D+00
 D   He    0.171400000000D+02  0.636900000000D+01  0.245900000000D+01
0.100100000000D+01  0.429000000000D+00  0.192700000000D+00  0.884200000000D-01
 c 1.7  -0.428225728923D-02 -0.104312032634D+00 -0.546627489107D+00
-0.444930433379D+00 -0.339748103706D-01 -0.164153723693D-01  0.494086960489D-02
 c 1.7   0.253894216803D-01  0.694061699995D+00  0.383350143132D+00
-0.876316715195D+00  0.222890561075D-01 -0.805736911944D-01  0.268170772766D-01
 c 1.7   0.243930738409D+00  0.100447744987D+01 -0.164647124993D+01
0.896440614300D+00  0.163989097320D+00  0.413046564639D-01 -0.137894478812D-01
 c 1.7  -0.116279402843D+01  0.110038133404D+01 -0.248259771242D+00
-0.760100511980D+00  0.991026055824D+00 -0.113299838110D+00  0.685640534680D-01
 c 1.7  -0.920405600894D+00  0.153229353513D+01 -0.195921990607D+01
0.221682934549D+01 -0.155371856541D+01  0.116954255224D+00 -0.979695329941D-01
 F   He    0.171400000000D+02  0.636900000000D+01  0.245900000000D+01
0.100100000000D+01  0.429000000000D+00  0.192700000000D+00
 c 1.6   0.595169452175D-03 -0.217695838493D+00 -0.702771344846D+00
-0.221943726214D+00 -0.553258400509D-02 -0.259793889060D-02
 c 1.6   0.612139151030D-01  0.932764355027D+00 -0.256311262250D+00
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-0.598749516445D+00  0.918768229089D-01 -0.431480001873D-01
 c 1.6   0.631266340321D+00  0.213050391171D+00 -0.104365567901D+01
0.100090056990D+01 -0.836842664990D-02  0.541826208345D-01
 c 1.6  -0.114595462450D+01  0.139200024785D+01 -0.121106613127D+01
0.637489234864D+00  0.162051216208D+00 -0.423225657806D-02
 G   He    0.636900000000D+01  0.245900000000D+01  0.100100000000D+01
0.429000000000D+00  0.192700000000D+00
 c 1.5   0.373073825503D+00  0.716777681120D+00  0.482565124408D-01
0.196121575554D-01  0.326056555335D-02
 c 1.5  -0.893291476084D+00  0.421485329011D+00  0.559869124727D+00
-0.438568795866D-01  0.302600377346D-01
 c 1.5   0.802941172502D+00 -0.134073046161D+01  0.130309498837D+01
-0.198399113202D+00  0.994834720251D-01
}

basis = {  !tasigmaDZ
 S   He    0.147500000000D+05  0.215000000000D+04  0.477900000000D+03
0.136100000000D+03  0.457800000000D+02  0.164700000000D+02  0.601500000000D+01
0.225500000000D+01  0.879900000000D+00  0.360400000000D+00  0.149800000000D+00
0.425700000000D-01  0.110300000000D-01
 c 1.13   0.150624755657D-04  0.120007406853D-03  0.648802388201D-03
0.261865809666D-02  0.898972194941D-02  0.301008689169D-01  0.897834944346D-01
0.210954679495D+00  0.342293794510D+00  0.349674744640D+00  0.136196433950D+00
0.230525551775D-02 -0.195114802805D-03
 c 1.13   0.259894156623D-04  0.173035200090D-03  0.105273287507D-02
0.398292755654D-02  0.149811326862D-01  0.543616558316D-01  0.229940112982D+00
0.641027737159D+00  0.204454051721D+00 -0.717008493706D+00 -0.329805257983D+00
-0.830314061504D-02  0.113244506002D-02
 c 1.13   0.374799483575D-04  0.294696676648D-03  0.176235027959D-02
0.678098975137D-02  0.309487562984D-01  0.173077471080D+00  0.897624995569D+00
-0.862255452509D-01 -0.153112337976D+01  0.581767149386D+00  0.532305095085D+00
-0.125629309987D-01  0.276077689813D-02
 c 1.13   0.577231185467D-04  0.538230248301D-03  0.721291307177D-03
0.207549100944D-01  0.149587604794D-01  0.734095322563D+00  0.613508087866D+00
-0.276752839251D+01  0.235565471250D+01 -0.118903019438D-01 -0.855350196215D+00
 0.739781948559D-01 -0.138566138215D-01
 c 1.13   0.321252635631D-04  0.111069285726D-02 -0.273754499248D-02
0.505934373436D-01 -0.934687685053D-02  0.213886765992D+01 -0.403830913461D+01
0.342642484566D+01 -0.107923948721D+01 -0.997390725646D+00  0.106748470079D+01
-0.154417076857D+00  0.329427220760D-01
 P   He    0.601500000000D+01  0.225500000000D+01  0.879900000000D+00
0.360400000000D+00  0.149800000000D+00  0.425700000000D-01
 c 1.6   0.733900370766D-01  0.340098798409D+00  0.555714230444D+00
0.153949105291D+00  0.134607391366D-01 -0.131901279645D-02
 c 1.6   0.582772212141D+00  0.539127892927D+00 -0.487952267070D+00
-0.427065431652D+00 -0.160835153252D-01 -0.297189511275D-02
 c 1.6  -0.138022303471D+01  0.151130554525D+01 -0.688764701559D-01
-0.644029003436D+00 -0.571285637431D-01 -0.150416061709D-02
 c 1.6  -0.105700678613D+01  0.257140844638D+01 -0.318651857264D+01
0.195287457918D+01 -0.149359712754D+00  0.690403800016D-01
}

basis = {  !tasigmaTZ
 S   He    0.137200000000D+05  0.210200000000D+04  0.482300000000D+03
```

```
0.139600000000D+03  0.492500000000D+02  0.212400000000D+02  0.103000000000D+02
0.505800000000D+01  0.241500000000D+01  0.110000000000D+01  0.486700000000D+00
0.214600000000D+00  0.943400000000D-01
 c 1.13   0.164882394564D-04  0.120931620636D-03  0.628629777957D-03
0.250530691730D-02  0.744102342081D-02  0.166498836776D-01  0.358573158172D-01
0.773378652516D-01  0.158122876886D+00  0.274796836383D+00  0.344004641483D+00
0.223329701524D+00  0.328778037743D-01
 c 1.13   0.257496281632D-04  0.185076510951D-03  0.981543558243D-03
0.387447295623D-02  0.123287897655D-01  0.283669327159D-01  0.764398105371D-01
0.204855107651D+00  0.501772220926D+00  0.373385706873D+00 -0.478458795090D+00
-0.550428954729D+00 -0.773927038244D-01
 c 1.13   0.386143982004D-04  0.322308433838D-03  0.152052121313D-02
0.715285439698D-02  0.201692763218D-01  0.809187882486D-01  0.231898933873D+00
0.870917822776D+00  0.294439678702D-01 -0.158311815808D+01  0.149530734489D+00
0.682815115806D+00  0.900589005631D-01
 c 1.13  -0.527798177057D-04 -0.445301001074D-03 -0.269389345981D-02
-0.102240216064D-01 -0.605919933258D-01 -0.268844046268D+00 -0.103869832097D+01
 0.321236208485D+00  0.210441712782D+01 -0.118575738154D+01 -0.119928630845D+01
 0.989060139476D+00  0.190114916669D+00
 c 1.13  -0.476066858179D-04 -0.561628675906D-03 -0.264341647592D-02
-0.154547510564D-01 -0.850638960745D-01 -0.728523646042D+00 -0.906071035230D+00
 0.333970195328D+01 -0.158148083758D+01 -0.242608826894D+01  0.374957107845D+01
-0.156396407985D+01 -0.271601317826D+00
 c 1.13   0.394962029757D-04 -0.182970208557D-02  0.468221659145D-02
-0.706331335724D-01  0.937619920392D-01 -0.288081194244D+01  0.458576247371D+01
-0.617311499772D+00 -0.492550267304D+01  0.686398984876D+01 -0.497083076327D+01
 0.169313781559D+01  0.699044232679D-01
 P   He    0.212400000000D+02  0.103000000000D+02  0.505800000000D+01
0.241500000000D+01  0.110000000000D+01  0.486700000000D+00  0.214600000000D+00
 c 1.7   0.556930515343D-02  0.106936359504D-01  0.664594249300D-01
0.253797405347D+00  0.491111755583D+00  0.277221193792D+00  0.330037341006D-01
 c 1.7   0.242619695953D-01  0.716178119858D-01  0.448823481593D+00
0.663771346225D+00 -0.426817669525D+00 -0.514962960103D+00 -0.513336981002D-01
 c 1.7  -0.110783843312D+00 -0.445443569106D+00 -0.733057970265D+00
0.990570907371D+00  0.532819310002D+00 -0.716677471416D+00 -0.242079838236D+00
 c 1.7  -0.417716441953D+00 -0.933791207948D+00  0.110226376220D+01
0.816427438192D+00 -0.179253249472D+01  0.675429372489D+00  0.424295702687D+00
 c 1.7   0.918883321402D+00  0.327955117011D+00 -0.331830505661D+01
0.440719989194D+01 -0.285158862460D+01  0.560509904702D+00  0.448811927237D+00
 D   He    0.103000000000D+02  0.505800000000D+01  0.241500000000D+01
0.110000000000D+01  0.486700000000D+00  0.214600000000D+00
 c 1.6  -0.224118296329D-01 -0.123723322464D+00 -0.478632681927D+00
-0.435377629406D+00 -0.799970139262D-01 -0.577645187410D-02
 c 1.6   0.833963938404D-01  0.759130894713D+00  0.170187516271D+00
-0.618806403044D+00 -0.258201321849D+00 -0.188476395280D-01
 c 1.6   0.910695399776D+00  0.908902501028D-01 -0.106074424010D+01
0.282616933290D+00  0.530960327941D+00  0.288153340736D-02
 c 1.6   0.182550934713D+01 -0.288773083624D+01  0.173279036581D+01
0.686731032781D-01 -0.679453485315D+00  0.539020952453D-02
 }

basis = {  !tasigmaQZ
 S   He    0.147200000000D+05  0.218900000000D+04  0.495300000000D+03
0.145100000000D+03  0.511000000000D+02  0.211600000000D+02  0.100900000000D+02
```

0.510300000000D+01 0.241600000000D+01 0.109300000000D+01 0.482800000000D+00
0.214400000000D+00 0.968500000000D-01
 c 1.13   0.147832274046D-04 0.115421038559D-03 0.612675042836D-03
0.235038265673D-02 0.728760765428D-02 0.177902968257D-01 0.354077499655D-01
0.756682428231D-01 0.160511333928D+00 0.277106635730D+00 0.342960075409D+00
0.219451850490D+00 0.343635814283D-01
 c 1.13   0.321941403828D-04 0.139892109342D-03 0.107836553471D-02
0.330188960531D-02 0.128470903799D-01 0.284347330343D-01 0.796142896150D-01
0.195400310887D+00 0.513381467988D+00 0.366574038915D+00 -0.483014608793D+00
-0.539943904248D+00 -0.818976602522D-01
 c 1.13   0.373776482071D-04 0.312242621344D-03 0.144021515414D-02
0.710175435544D-02 0.169907159574D-01 0.923181554030D-01 0.218915946146D+00
0.866545108707D+00 0.389434308666D-01 -0.159755860159D+01 0.169499874682D+00
0.675468416973D+00 0.904941122078D-01
 c 1.13   0.153458576742D-03 -0.139763868995D-02 0.137898197624D-02
-0.195509902229D-01 -0.121081986962D-01 -0.226451822832D+00 -0.981360700385D+00
-0.276448477927D+00 0.316951277500D+01 -0.220807856917D+01 -0.665202549131D+00
 0.101721753549D+01 0.303508637749D-01
 c 1.13   0.138160507492D-02 -0.552304012390D-02 0.219453016078D-01
-0.532222011653D-01 0.207284642439D+00 -0.194724944600D+00 0.260377601581D+01
-0.450972483796D+01 0.168621730181D+01 0.278401935048D+01 -0.401816331901D+01
 0.147333997987D+01 0.453596148317D+00
 c 1.13   0.108122688650D-02 -0.156201370870D-02 -0.630759925258D-02
-0.169949706264D-01 -0.263171673967D+00 -0.247670236160D+01 0.419663493404D+01
-0.753704980347D+00 -0.351050970148D+01 0.446998838773D+01 -0.268591962156D+01
 0.256230136116D+00 0.539421895936D+00
 c 1.13   0.476429391210D-02 -0.219300524046D-01 0.700248107640D-01
-0.250906250193D+00 0.440536111655D+00 -0.407677839379D+01 0.117248940137D+02
-0.162656677436D+02 0.142171615659D+02 -0.924187834095D+01 0.393669536211D+01
-0.210112327243D-01 -0.849825347516D+00
 P   He   0.511000000000D+02 0.211600000000D+02 0.100900000000D+02
0.510300000000D+01 0.241600000000D+01 0.109300000000D+01 0.482800000000D+00
0.214400000000D+00
 c 1.8   0.306562781208D-03 0.535668571092D-02 0.106395876904D-01
0.654366124691D-01 0.256594704947D+00 0.494010747172D+00 0.273324097742D+00
0.322237787308D-01
 c 1.8   0.161126072101D-02 0.232170767215D-01 0.707495246068D-01
0.444479836362D+00 0.669917828110D+00 -0.434512491647D+00 -0.511055005073D+00
-0.481201181508D-01
 c 1.8 -0.106861695625D-01 -0.644124116069D-01 -0.392053616186D+00
-0.101416156610D+01 0.135704691550D+01 0.367953618850D+00 -0.874991460235D+00
-0.243131320242D-01
 c 1.8   0.820759732276D-01 -0.349428746266D+00 0.236530467556D+01
-0.252361541593D+01 0.505628514944D-01 0.145707840686D+01 -0.625308113567D+00
-0.430187657813D+00
 c 1.8 -0.100761944662D+00 -0.202970534545D+01 0.253043651667D+01
-0.540403359369D+00 -0.988174966390D+00 0.784864220762D+00 0.157242805244D+00
-0.485105749384D+00
 c 1.8 -0.710856969699D-01 0.203863146025D+01 -0.527667552713D+01
0.640435073269D+01 -0.454763291440D+01 0.168642851340D+01 0.696995015905D+00
-0.112278353341D+01
 D   He   0.211600000000D+02 0.100900000000D+02 0.510300000000D+01
0.241600000000D+01 0.109300000000D+01 0.482800000000D+00 0.214400000000D+00
 c 1.7 -0.292917459031D-02 -0.168815535469D-01 -0.127166622589D+00

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-0.479204169847D+00 -0.437461091954D+00 -0.769063414074D-01 -0.598759170362D-02
 c 1.7   0.252506580777D-01  0.106806932867D+00  0.746909402639D+00
0.190831749449D+00 -0.727592277487D+00 -0.135770850441D+00 -0.135012083870D-01
 c 1.7  -0.192616569758D-01  0.114975478671D+01 -0.299407873298D+00
-0.943966917580D+00  0.445453196234D+00  0.371854689204D+00  0.366766397636D-01
 c 1.7  -0.120957750696D-01  0.121727042588D+01 -0.163354936890D+01
0.385869811274D+00  0.103947332369D+01 -0.990201706615D+00 -0.272458045664D+00
 c 1.7  -0.172358015010D+01  0.174700848323D+01 -0.796156050110D-01
-0.116985346794D+01  0.121022249823D+01 -0.543197336173D+00 -0.617485684643D-01
 F   He    0.100900000000D+02  0.510300000000D+01  0.241600000000D+01
0.109300000000D+01  0.482800000000D+00  0.214400000000D+00
 c 1.6  -0.294664380762D-01 -0.257343805376D+00 -0.603459236081D+00
-0.244488121146D+00 -0.111021663875D-01 -0.507115030457D-02
 c 1.6   0.173153485765D+00  0.103563734321D+01 -0.598521803040D+00
-0.501192575876D+00  0.151499930342D+00  0.544041530818D-01
 c 1.6   0.158011824252D+01 -0.162029044493D+01  0.315589936310D+00
0.234738642607D+00  0.166470669014D+00  0.126177872784D+00
 c 1.6   0.110272476763D+01 -0.198506661586D+01  0.199185749067D+01
-0.944469281197D+00 -0.425001866509D+00 -0.365501266978D-01
}

basis = {  !tasigma5Z
 S   He    0.138700000000D+05  0.210300000000D+04  0.480800000000D+03
0.140500000000D+03  0.481600000000D+02  0.209800000000D+02  0.105700000000D+02
0.503900000000D+01  0.238100000000D+01  0.109000000000D+01  0.481300000000D+00
0.214800000000D+00  0.956500000000D-01
 c 1.13   0.157194118821D-04  0.122320932691D-03  0.623905327817D-03
0.250952344594D-02  0.789233460000D-02  0.156904838386D-01  0.351063017848D-01
0.808805199921D-01  0.158680214515D+00  0.276256002467D+00  0.342649293938D+00
0.218819222818D+00  0.344406101721D-01
 c 1.13   0.241766676066D-04  0.188776572922D-03  0.973667724914D-03
0.389793602853D-02  0.130585899810D-01  0.269608937154D-01  0.734310150780D-01
0.216035124164D+00  0.502552731954D+00  0.363318045814D+00 -0.482014742195D+00
-0.542507580270D+00 -0.797558296844D-01
 c 1.13   0.375233675614D-04  0.318606282642D-03  0.152478402522D-02
0.710323145395D-02  0.211776754281D-01  0.772814973647D-01  0.228066818101D+00
0.883879245703D+00  0.142864319446D-01 -0.158930969517D+01  0.171141089438D+00
0.672422679538D+00  0.932778325608D-01
 c 1.13  -0.621801352817D-04 -0.367318727124D-03 -0.257361223594D-02
-0.700261819867D-02 -0.590754017375D-01 -0.865704397751D-01 -0.113442083861D+01
-0.134071850670D+00  0.309038632489D+01 -0.226579187094D+01 -0.552901629609D+00
 0.888070826447D+00  0.995867802796D-01
 c 1.13   0.116071037899D-03  0.247808982701D-03  0.372751214722D-02
0.138936437724D-03  0.117195918828D+00  0.116447285040D+00  0.220706859328D+01
-0.475132044941D+01  0.264854690211D+01  0.194941657866D+01 -0.383758027634D+01
 0.185407327457D+01  0.128927932579D+00
 c 1.13   0.136289922939D+00 -0.652680984708D-01 -0.142643651351D+00
0.261714018449D+00 -0.167880623656D-01 -0.343414121194D+01  0.515684367111D+01
-0.131228669065D+01 -0.345413215322D+01  0.505838356056D+01 -0.328828043441D+01
 0.387540726334D+00  0.668411093661D+00
 c 1.13  -0.493148526180D+00  0.252040878404D+00  0.430239258302D+00
-0.102594191914D+01  0.118646734450D+00 -0.144183223489D+01  0.517270919561D+01
-0.722338256954D+01  0.607571361772D+01 -0.300013528223D+01 -0.235855741244D+00
 0.206721479400D+01 -0.139534058853D+01
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 c 1.13  -0.468770167685D+00  0.251460247657D+00  0.413696635269D+00
-0.763440269610D+00  0.426066915191D+01 -0.938189911562D+01  0.101044604485D+02
-0.624312172710D+01  0.213017592998D+01  0.830500534933D+00 -0.241942561324D+01
 0.250908109390D+01 -0.117414289180D+01
 P   He    0.140500000000D+03  0.481600000000D+02  0.209800000000D+02
0.105700000000D+02  0.503900000000D+01  0.238100000000D+01  0.109000000000D+01
0.481300000000D+00  0.214800000000D+00
 c 1.9   0.182939164593D-03  0.853732759064D-03  0.319944041291D-02
0.131773547829D-01  0.666604616807D-01  0.259581973082D+00  0.488930565409D+00
0.274113527094D+00  0.312615426481D-01
 c 1.9   0.611490555167D-03  0.286197710705D-02  0.161458023992D-01
0.785389134084D-01  0.454287688373D+00  0.665280376342D+00 -0.447658808611D+00
-0.503859788832D+00 -0.500718460308D-01
 c 1.9  -0.135605350029D-02 -0.847144733772D-02 -0.529786095463D-01
-0.392300045370D+00 -0.104839564804D+01  0.143373119020D+01  0.273567019962D+00
-0.814364180745D+00 -0.483305583985D-01
 c 1.9  -0.468223675427D-01  0.196104115591D+00 -0.319096342591D+00
0.203728653596D+01 -0.214149938727D+01 -0.223086741699D+00  0.186163232463D+01
-0.112406671475D+01 -0.114285814723D+00
 c 1.9  -0.421185652709D-01 -0.229024783132D-01 -0.222424511974D+01
0.274902222344D+01 -0.571914748973D+00 -0.116566607386D+01  0.112673738073D+01
-0.413565621574D-01 -0.476622463597D+00
 c 1.9  -0.690132876680D-01  0.280185405330D+00 -0.212949435028D+01
0.410154329593D+01 -0.415791879994D+01  0.244045246237D+01  0.883472910192D-01
-0.201924129068D+01  0.173044930949D+01
 c 1.9  -0.778741296926D-01  0.260525538083D+01 -0.476895330312D+01
0.398017634462D+01 -0.147533776746D+01 -0.244555485123D+00  0.883339919050D+00
-0.775957980616D+00  0.330704543753D+00
 D   He    0.481600000000D+02  0.209800000000D+02  0.105700000000D+02
0.503900000000D+01  0.238100000000D+01  0.109000000000D+01  0.481300000000D+00
0.214800000000D+00
 c 1.8  -0.431784801406D-03 -0.156362806385D-02 -0.173041714919D-01
-0.134533451169D+00 -0.479105940723D+00 -0.430257002598D+00 -0.775678253012D-01
-0.572289882602D-02
 c 1.8   0.435826185191D-03  0.188707968818D-01  0.114615047992D+00
0.759112139768D+00  0.173090002431D+00 -0.725787773312D+00 -0.133374764214D+00
-0.141545297491D-01
 c 1.8   0.395127725990D-01 -0.723103825019D-01  0.884791729586D+00
0.241248742358D+00 -0.144284236165D+01  0.751243584645D+00  0.316220739524D+00
-0.209391914232D-01
 c 1.8  -0.764621760319D-01  0.303509678612D+00 -0.151364219117D+01
0.173150672329D+01 -0.319660765976D+00 -0.131618610906D+01  0.141864828179D+01
-0.735545490786D-01
 c 1.8   0.147490932305D+00 -0.219089013940D+01  0.222596873948D+01
-0.537848169008D+00 -0.643146776772D+00  0.851395955636D+00 -0.420857746136D+00
-0.466333187649D-01
 c 1.8   0.836376796765D-01 -0.102413937309D+01  0.216465991657D+01
-0.241818003348D+01  0.173675475332D+01 -0.428810455020D+00 -0.102064283443D+01
 0.139180924218D+01
 F   He    0.209800000000D+02  0.105700000000D+02  0.503900000000D+01
0.238100000000D+01  0.109000000000D+01  0.481300000000D+00  0.214800000000D+00
 c 1.7  -0.344724064408D-02 -0.218085986891D-01 -0.275159651518D+00
-0.595370058633D+00 -0.238533008668D+00 -0.134384218800D-01 -0.275590649224D-02
 c 1.7   0.113397056818D-01  0.235283587293D+00  0.875999650654D+00
```

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-0.423647550086D+00 -0.515463020220D+00 -0.100166560482D-03 -0.143062302809D-01
 c 1.7  -0.120011906436D+00  0.125559764546D+01 -0.684516765761D+00
-0.683719355592D+00  0.923121522433D+00 -0.573205869076D-01  0.926760507635D-01
 c 1.7  -0.200323557785D+00 -0.102802526606D+01  0.212757766936D+01
-0.204219642779D+01  0.966422018722D+00  0.196127865026D-01  0.332303106707D+00
 c 1.7  -0.192102137978D+01  0.252491561578D+01 -0.179179155637D+01
0.883192749203D+00 -0.118837556952D+00 -0.234094541844D+00 -0.480074542419D-01
 G   He    0.209800000000D+02  0.105700000000D+02  0.503900000000D+01
0.238100000000D+01  0.109000000000D+01  0.481300000000D+00
 c 1.6   0.448162114891D-02  0.396153133366D-01  0.451155746006D+00
0.562062096280D+00  0.873700739965D-01  0.709723798701D-02
 c 1.6   0.652273229365D-01 -0.647514934518D+00 -0.424284483255D+00
0.523775721723D+00  0.306151789140D+00  0.901530021168D-01
 c 1.6  -0.985867034532D-01  0.123939247314D+01 -0.111106938103D+01
-0.336899521103D-01  0.742500432837D+00 -0.283471486957D-01
 c 1.6   0.143068523194D+01 -0.110499188547D+01  0.464974331133D-01
0.491593872095D+00 -0.356827142434D+00 -0.138133132593D+00
}
```