```
STO-1G for Atomic Numbers 1 and 1
R = Rab = 1.401100e+00
Zeta 1 = 1.240000e+00    Zeta 2 = 1.240000e+00

Overlap integral = 4.221463e-01

Kinetic energy integrals:

t11 = +6.249191e-01 t12 = +3.019920e-01
t21 = +3.019920e-01 t22 = +6.249191e-01

Potential energy integrals on center A:

v11-A = -1.029998e+00    v12-A = -6.014846e-01
v21-A = -6.014846e-01    v22-A = -6.634196e-01

Potential energy integrals on center B:

v11-B = -6.634196e-01    v12-B = -6.014846e-01
v21-B = -6.014846e-01    v22-B = -1.029998e+00

Direct and exchange integrals:

v[1, 1, 1, 1] = 7.283185e-01  v[2, 1, 1, 1] = 4.528791e-01
v[2, 1, 2, 1] = 3.214666e-01  v[2, 2, 1, 1] = 5.703512e-01
v[2, 2, 2, 1] = 4.528791e-01  v[2, 2, 2, 2] = 7.283185e-01

Overlap integral = 4.221463e-01

Kinetic energy integrals:

T11 = +6.249191e-01 T12 = +3.019920e-01
T21 = +3.019920e-01 T22 = +6.249191e-01

Potential energy integrals on center A:

V11-A = -1.029998e+00    V12-A = -6.014324e-01
V21-A = -6.014324e-01    V22-A = -6.634085e-01

Potential energy integrals on center B:

V11-B = -6.634085e-01    V12-B = -6.014324e-01
V21-B = -6.014324e-01    V22-B = -1.029998e+00

Direct and exchange integrals:

V[1, 1, 1, 1] = 7.283185e-01  V[2, 1, 1, 1] = 4.528205e-01
```

```
V[2, 1, 2, 1] = 3.214666e-01  V[2, 2, 1, 1] = 5.703248e-01
V[2, 2, 2, 1] = 4.528205e-01  V[2, 2, 2, 2] = 7.283185e-01

Comparison of Two Error Functions
ERF from Abramowitz and Stegun
erf from C Translation of NUMAL by H. T. Lau
Difference below is the percent difference

x         ERF       erf       Difference

0.000000  0.000000  0.000000  0.000000
0.100000  0.112492  0.112463  0.025545
0.200000  0.222750  0.222703  0.021135
0.300000  0.328684  0.328627  0.017486
0.400000  0.428454  0.428392  0.014386
0.500000  0.520561  0.520500  0.011733
0.600000  0.603913  0.603856  0.009473
0.700000  0.677853  0.677801  0.007569
0.800000  0.742145  0.742101  0.005985
0.900000  0.796946  0.796908  0.004684
1.000000  0.842731  0.842701  0.003628
```