Adaptive quadrature using $f(x) = e^x$ on [0, 2] with error ≤ 0.00001

```
S( 0.000, 1.000) =  1.718861,  S( 1.000, 2.000) =  4.672349
Need to divide further; error = -2.952e-02; maximum error = 1.000e-04

S( 0.000,  .500) =   .648735,  S(  .500, 1.000) =  1.069584
Need to divide further; error = -5.423e-04; maximum error = 5.000e-05

S( 0.000,  .250) =   .284026,  S(  .250,  .500) =   .364696
Approximation satisfactory; error = -1.310e-05; maximum error = 2.500e-05

S(  .500,  .750) =   .468279,  S(  .750, 1.000) =   .601283
Approximation satisfactory; error = -2.159e-05; maximum error = 2.500e-05

S( 1.000, 1.500) =  1.763445,  S( 1.500, 2.000) =  2.907430
Need to divide further; error = -1.474e-03; maximum error = 5.000e-05

S( 1.000, 1.250) =   .772062,  S( 1.250, 1.500) =   .991347
Need to divide further; error = -3.560e-05; maximum error = 2.500e-05

S( 1.000, 1.125) =   .361935,  S( 1.125, 1.250) =   .410126
Approximation satisfactory; error = -9.801e-07; maximum error = 1.250e-05

S( 1.250, 1.375) =   .464734,  S( 1.375, 1.500) =   .526612
Approximation satisfactory; error = -1.258e-06; maximum error = 1.250e-05

S( 1.500, 1.750) =  1.272915,  S( 1.750, 2.000) =  1.634456
Need to divide further; error = -5.869e-05; maximum error = 2.500e-05

S( 1.500, 1.625) =   .596730,  S( 1.625, 1.750) =   .676184
Approximation satisfactory; error = -1.615e-06; maximum error = 1.250e-05

S( 1.750, 1.875) =   .766217,  S( 1.875, 2.000) =   .868237
Approximation satisfactory; error = -2.075e-06; maximum error = 1.250e-05


The integral of F from   0.00000000 to   2.00000000 is
  6.38905882 to within 1.000e-05
The number of function evaluations is: 25
The maximum level achieved is: 4
```