```
The lower limit has the function value f = cos(0) = 1.
The upper limit has the function value f = cos(2.094395e+00) = -5.000000e-01.

Trapezoidal Rule:
For term = 1, the sum is: 5.235988e-01
For term = 2, the sum is: 7.853982e-01
For term = 3, the sum is: 8.305621e-01
For term = 4, the sum is: 8.461489e-01
For term = 5, the sum is: 8.533255e-01
For term = 6, the sum is: 8.572139e-01
For term = 7, the sum is: 8.595552e-01
For term = 8, the sum is: 8.610734e-01
For term = 9, the sum is: 8.621136e-01
For term = 10, the sum is: 8.628574e-01

Simpson's 1/3 Rule:
For term = 1, the sum is: 3.490659e-01
For term = 2, the sum is: 8.726646e-01
For term = 3, the sum is: 9.102414e-01
For term = 4, the sum is: 8.663992e-01
For term = 5, the sum is: 9.102875e-01
For term = 6, the sum is: 8.660979e-01
For term = 7, the sum is: 9.029125e-01
For term = 8, the sum is: 8.660482e-01
For term = 9, the sum is: 8.969727e-01
For term = 10, the sum is: 8.660347e-01

Simpson's 3/8 Rule:
For term = 1, the sum is: 3.926991e-01
For term = 2, the sum is: 7.853982e-01
For term = 3, the sum is: 8.689326e-01
For term = 4, the sum is: 9.028302e-01
For term = 5, the sum is: 8.721810e-01
For term = 6, the sum is: 8.661909e-01
For term = 7, the sum is: 8.939610e-01
For term = 8, the sum is: 8.747438e-01
For term = 9, the sum is: 8.660576e-01
For term = 10, the sum is: 8.875396e-01>>
```