EULER METHOD

The given differential equation : dy/dx = 2\*(x^2+y)

The actual Equation y = 1.5\*exp(2\*x)-x^2-x-0.5

x ycomputed yactual Abs.error

0.000000 1.200000 1.000000 0.200000

0.100000 1.442000 1.222104 0.219896

0.200000 1.738400 1.497737 0.240663

0.300000 2.104080 1.843178 0.260902

0.400000 2.556896 2.278311 0.278584

0.500000 3.118275 2.827423 0.290852

0.600000 3.813930 3.520176 0.293755

0.700000 4.674716 4.392800 0.281916

0.800000 5.737660 5.489550 0.248110

0.900000 7.047192 6.864473 0.182719

1.000000 8.656631 8.583587 0.073044