

## Assignment-10

**Problem-1:** Estimate the integral of  $f(x) = 0.2 + 25x - 200x^2 + 675x^3 - 900x^4 + 400x^5$  using simple Trapezoidal rule and multiple application Trapezoidal rule from  $a=0$  to  $b=0.8$ .(Chapra and Canale example:21.2).

Also estimate the integration using sample mean method with random numbers. For this calculation, generate a set of random numbers using the modulo generator. Compare your result by using random numbers generated using random number generators of your computer.