MA 473: Computational Finance
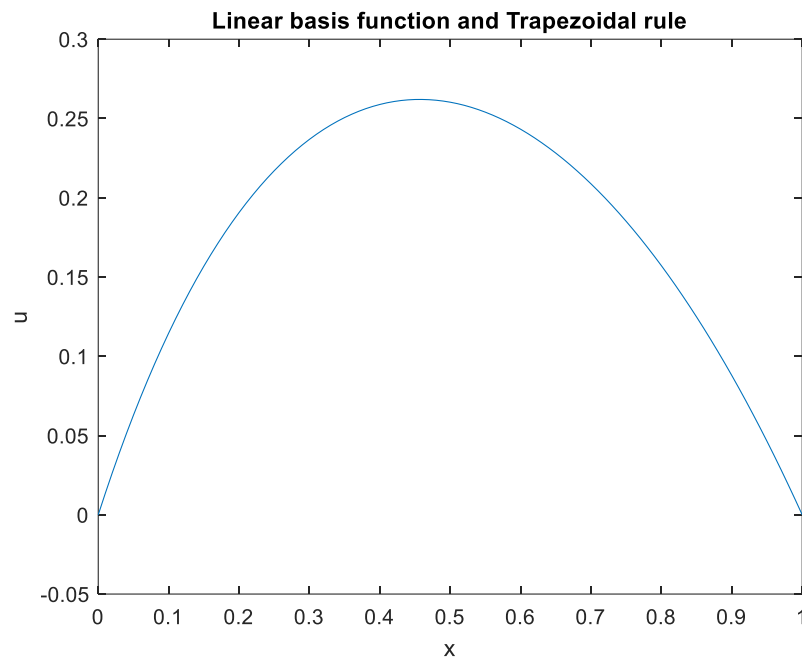
Lab – 8

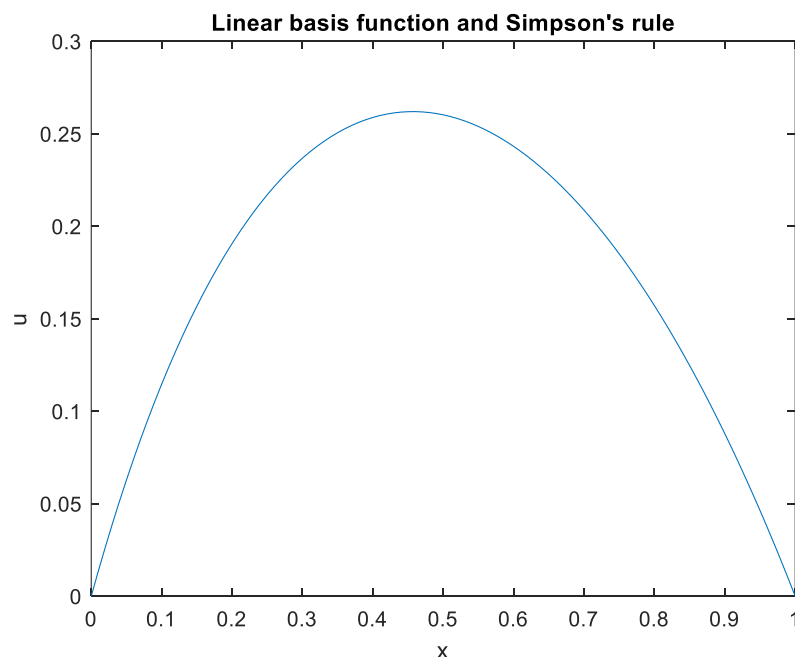**Name** - Vishisht Priyadarshi   **Roll No** - 180123053
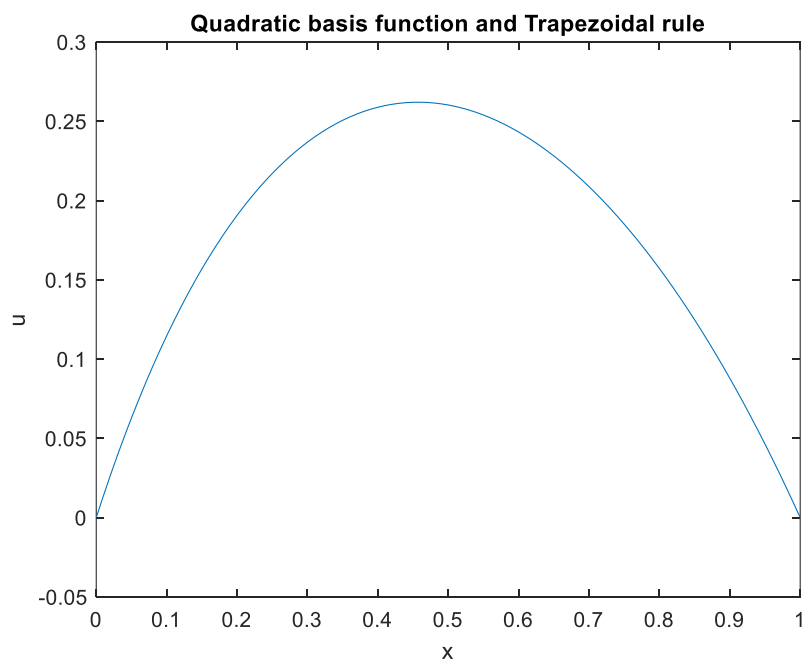
1   QUESTION - 1:

a) The plot for the BVP using piecewise linear basis functions and trapezoidal rule for the quadrature is:
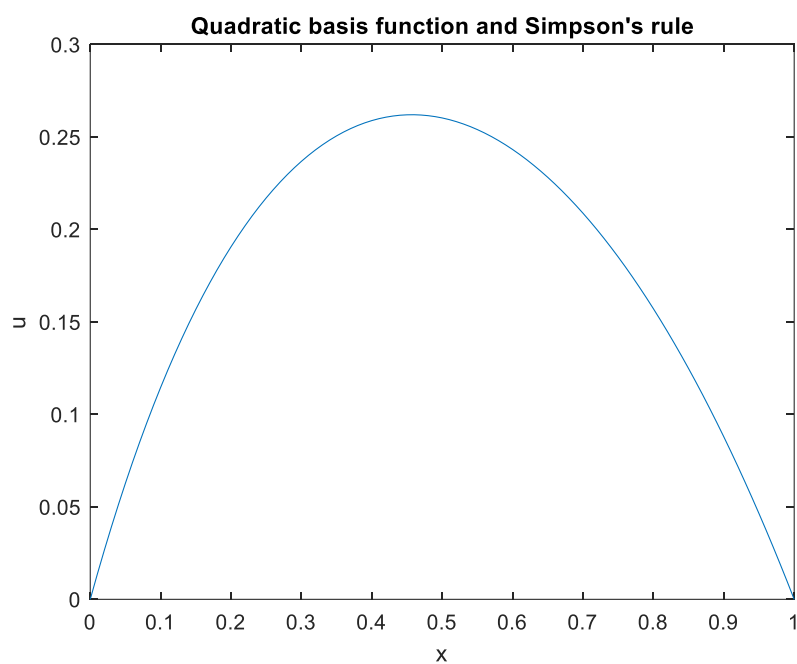

b) The plot for the BVP using piecewise linear basis functions and Simpson's rule for the quadrature is:

c) The plot for the BVP using piecewise quadratic basis functions and trapezoidal rule for the quadrature is:

Quadratic basis function and Trapezoidal rule

d) The plot for the BVP using piecewise quadratic basis functions and Simpson's rule for the quadrature is:

Quadratic basis function and Simpson's rule

2 QUESTION - 2:

a) The plot for the BVP using piecewise linear basis functions and trapezoidal rule for the quadrature is:

b) The plot for the BVP using piecewise linear basis functions and Simpson's rule for the quadrature is:

c) The plot for the BVP using piecewise quadratic basis functions and trapezoidal rule for the quadrature is:
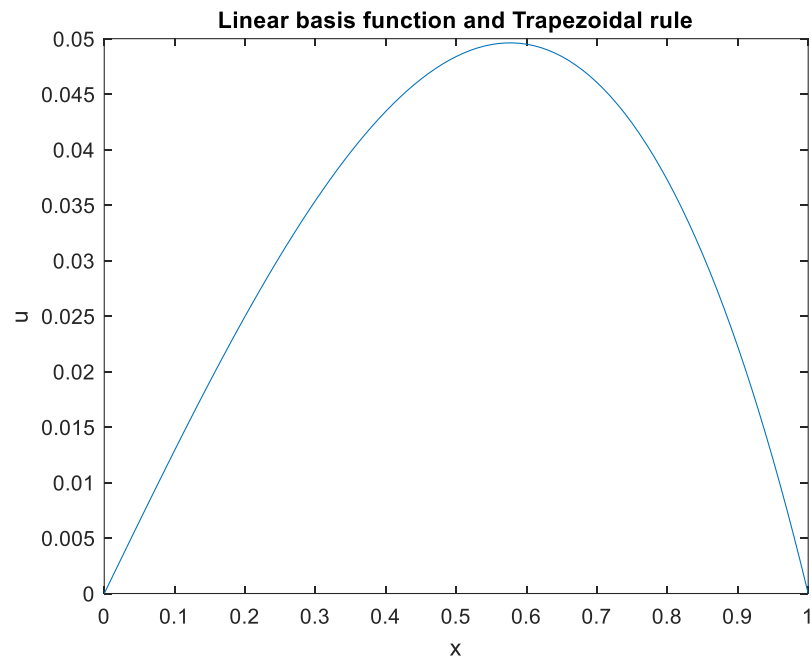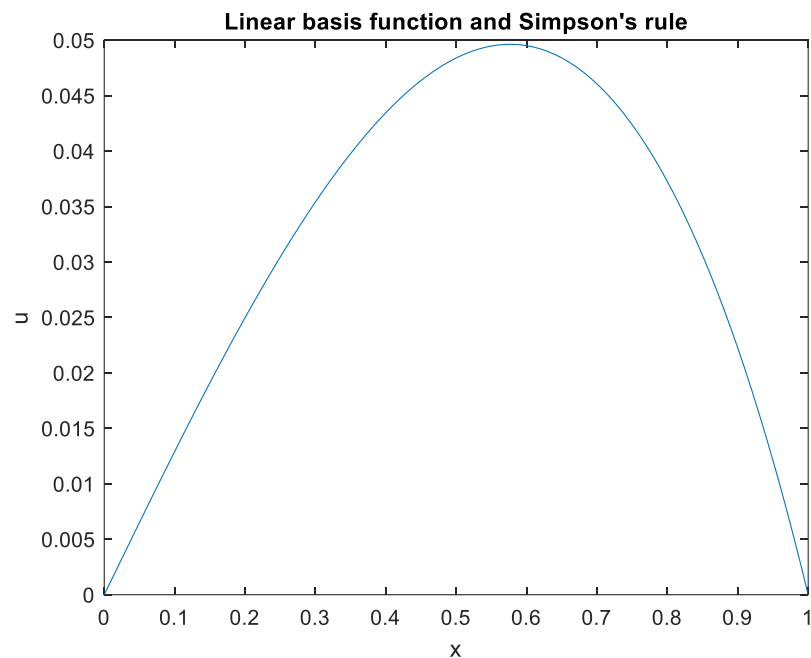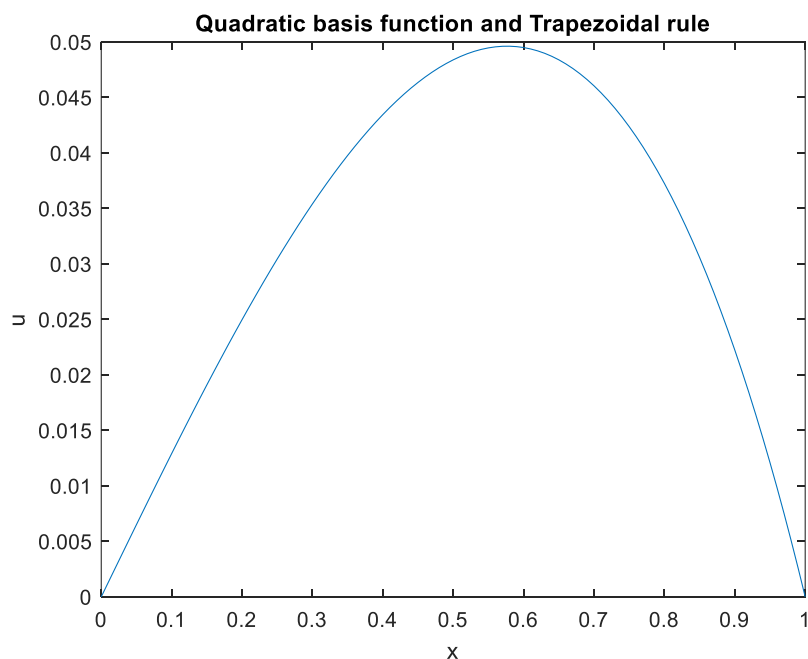

Quadratic basis function and Trapezoidal rule

d) The plot for the BVP using piecewise quadratic basis functions and Simpson's rule for the quadrature is:

Quadratic basis function and Simpson's rule