**Lab Task 5**

**Numerical Computing Lab(105127)**

**Ali Afzal(63961)**

Q1:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S#** | **Functions** | **Starting Interval** | **Tolerance** | **No. Of Iterations** | **Root** |
| 1 | Cos(x)-1.3x = 0 | 3 | 0.01 | 4 | 0.624466 |
| 3 | 0.001 | 4 | 0.624466 |
| 3 | 0.0001 | 5 | 0.624185 |
| 2 | xCos(x)-2x2+3x-1=0 | 2.1 | 0.01 | 3 | 1.258466 |
| 2.1 | 0.001 | 4 | 1.256627 |
| 2.1 | 0.0001 | 4 | 1.256627 |
| 3 | 2xCos(2x)-(x+1)2=0 | 4 | 0.01 | 9 | -3.527625 |
| 4 | 0.001 | 9 | -3.527625 |
| 4 | 0.0001 | 10 | -3.527590 |