

Assignment #3
Newton-Raphson, Secant and Modified Secant Method

Determine the real root of equation $0.5^x + 1 = (x - 2)^2$. Tollerans (eps) is 10^{-15} . Maximum number of iterations is 100.

- ✓ Graphically
- ✓ Using Newton-Raphson method
- ✓ Using Secant method
- ✓ Using Modified Secant method
- ✓ Compute the approximate percent relative errors for your solutions.
- ✓ Calculate the total number of iterations for all methods.
- ✓ Print the results for all methods.
- ✓ Check the results for all methods.
- ✓ Plot the obtained roots on the same graph.