**CSE330 - Numerical**

**Home work**

**HOME TASK 01:**

*Convert temperature:*

Write a function that outputs a table showing Celsius temperature and their corresponding Fahrenheit temperature.

The input of the function should be two variables ti & tf, specifying the lower & the upper range of the table in Celsius.

The output should be a two column matrix; the 1st column showing the temperature in Celsius from ti to tf in the increments of 1o*C* and the 2nd column showing and the corresponding temperatures in Fahrenheit.

**HOME TASK 02:**

*Bisection method:*

The Bisection method is another widely used root determining method.

Write a function named ‘bisect’ which uses Bisection method to find the root of a function.

The input should be the function whose root will be determined, two variables xi & xf, specifying the lower & the upper guesses, desired relative error and maximum allowable iteration number.

The output will consist of three variables; real root, approximate relative error and number of iteration.

The 1st line of the function can be formed this way function

**[root, ea, iter] = bisect (func, xi, xf, es, maxit)**