Lagrange Interpolation Method

Algorithm

1. Start

2. Read number of data (n)

3. Read data Xi and Yi for i=1 ton n

4. Read value of independent variables say xp whose corresponding value of dependent say yp is to be determined.

5. Initialize: yp = 0

6. For i = 1 to n

Set p = 1

For j =1 to n

If i ≠ j then

Calculate p = p \* (xp - Xj)/(Xi - Xj)

End If

Next j

Calculate yp = yp + p \* Yi

Next i

6. Display value of yp as interpolated value.

7. Stop