

7.1 Write a C Program to find out the value of $f(2.35)$ using Newton's Forward Interpolation Formula from the following table.

x:	2.00	2.25	2.50	2.75	3.00
f(x):	9.00	10.06	11.25	12.56	14.00

7.2 Write a C Program to find out the value of $f(4.25)$ using Newton's Backward Interpolation Formula from the following table.

x:	2.5	3.0	3.5	4.0	4.5
f(x):	9.75	12.75	15.70	19.52	23.75

Write a C Program to find out the value of $f(4.25)$ using Newton's Divide Difference Interpolation Formula from the following table.

x:	2.5	3.0	4.5	4.75	6.0
f(x):	8.85	11.45	20.66	22.85	38.60

7 Write a C Program to evaluate $\int_2^1 1/(1+x^2) dx$ using Trapezoidal rule with 6 intervals.

Write a C Program to evaluate $\int_0^1 x/(1+x) dx$ using Simpson's 1/3rd Rule with 6 intervals.

Write a C program to find the root of the equation $x^3 + x^2 + x + 7 = 0$ using Bisection Method.

Write a C program to find the root of the equation $x^3 - x - 3 = 0$ using Newton Raphson Method.