n = input('Enter the value of n = ');

Yg = input('Enter the Value of Yg = ');

for i = 1:1:n

X(i) = input('Enter the value of x = ');

Y(i) = input('Enter the value of y = ');

end

Xg = 0;

for i = 1:1:n

term = X(i);

for j = 1:1:n

if i~=j

term = term\*(Yg-Y(j))/(Y(i)-Y(j));

end

end

Xg = Xg + term;

end

fprintf('The value of Xg is = %f\*Degree Celsius',Xg);

%OUTPUT

Enter the value of n = 3

Enter the Value of Yg = 16

Enter the value of x = -12

Enter the value of y = 50.1

Enter the value of x = 10

Enter the value of y = 10

Enter the value of x = 38

Enter the value of y = 4.9

The value of Xg is = -15.660017\*Degree Celsius>>