```matlab
%Name - Shriman Zunjarrao Patil
% Roll No. - TYMEB209
% Batch - B4

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>>
```