

```
% Name- kiran patil
% roll no- 207
n=input('Enter the number of equation= ');
for i=1:1:n
    x(i)= input ('enter the value of x=');
    y(i) = input ('enter the value of y=');
end
yg= input('enter the value of yg=');
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('x(%d)=%f',xg);

% OUTPUT
% lagrange_inverse_interpolation
% Enter the number of equation= 4
% enter the value of x=1
% enter the value of y=1
% enter the value of x=1.2
% enter the value of y=1.09
% enter the value of x=1.3
% enter the value of y=1.14
% enter the value of x=1.5
% enter the value of y=1.22
% enter the value of yg=1.1
% x(1.219647e+00)=>>
```