**Lab 7**

# Code:

X = [];

Y = [];

n = input('Enter degree of polynomial ');

for i= 1:n+1

x = input('Enter x ');

y = input('Enter y ');

X = [X;x];

Y = [Y;y];

end

P = 0;

L = 1;

syms x

for j = 1:n+1

for i = 1:n+1

if j~=i

L= L \*((x-X(i))/(X(j)-X(i)));

end

end

P = P + L.\*Y(j);

L=1;

end

P

x = input('Enter value of x');

P = eval(P);

P

# Output:



