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

for i = 1:1:n

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

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

X(i) = log(x(i));

Y(i) = log(y(i));

end

Sx = 0;

Sy = 0;

Sxx = 0;

Sxy = 0;

for i=1:1:n

Sx = Sx + X(i);

Sy = Sy + Y(i);

Sxx = Sxx + X(i)\*X(i);

Sxy = Sxy + X(i)\*Y(i);

end

A = (n\*Sxy-Sx\*Sy)/(n\*Sxx-Sx^2);

B = (Sy-A\*Sx)/n;

a = exp(B);

b = A;

fprintf('y = (%f) \* x ^ (%f)',a,b)

%OUTPUT

Enter the value of n = 5

Enter the value of x = 0.5

Enter the value of y = 0.7425

Enter the value of x = 1.5

Enter the value of y = 3.8578

Enter the value of x = 2

Enter the value of y = 5.9397

Enter the value of x = 2.5

Enter the value of y = 8.301

Enter the value of x = 3

Enter the value of y = 10.912

y = (2.100036) \* x ^ (1.499974)>>