

```
% Shriman Zunjarrao Patil
% TYMEB209
% B4
```

```
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)>>
```