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 = ');

end

Sx = 0;

Sx2 = 0;

Sx3 = 0;

Sx4 = 0;

Sy = 0;

Sxy = 0;

Sx2y = 0;

for i = 1:1:n

Sx = Sx + x(i);

Sx2 = Sx2 + x(i)\*x(i);

Sx3 = Sx3 + x(i)^3;

Sx4 = Sx4 + x(i)^4;

Sy = Sy + y(i);

Sxy = Sxy + x(i)\*y(i);

Sx2y = Sx2y + x(i)\*x(i)\*y(i);

end

A = [Sx4 Sx3 Sx2; Sx3 Sx2 Sx; Sx2 Sx n];

B = [Sx2y; Sxy; Sy];

x = linsolve(A,B);

a = x(1);

b = x(2);

c = x(3);

fprintf('y = (%f)\*x^2 + (%f)\*x + %f',a,b,c)

%OUTPUT

Enter the value of n = 7

Enter the value of x = 1

Enter the value of y = -5

Enter the value of x = 2

Enter the value of y = -2

Enter the value of x = 3

Enter the value of y = 5

Enter the value of x = 4

Enter the value of y = 16

Enter the value of x = 5

Enter the value of y = 31

Enter the value of x = 6

Enter the value of y = 50

Enter the value of x = 7

Enter the value of y = 73

y = (2.000000)\*x^2 + (-3.000000)\*x + -4.000000>>