```
% 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 = ');
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>>
```