

```

1 // 8.1
2 #include <stdio.h>
3
4 #define MX 101
5
6 int main(void)
7 {
8     int n;
9     int x[MX], y[MX];
10    int i, total_x, total_y, total_xy, total_x2;
11    int m, c;
12
13    printf("Enter n : " );
14    scanf("%d", &n);
15
16    printf("Enter x_i y_i from 1 to n:\n");
17    for(i=1; i <= n; ++i) scanf(" %d %d", &x[i], &y[i] );
18
19    total_x = total_y = total_xy = total_x2 = 0;
20    for(i=1; i <= n; ++i){
21
22        total_xy += x[i]*y[i];
23
24        total_x += x[i];
25        total_y += y[i];
26
27        total_x2 += x[i]*x[i]; // x_i^2
28    }
29
30    m = ( n*total_xy - total_x*total_y ) / ( n*total_x2 - (total_x*total_x) ) ;
31    c = (total_y - m*total_x) / n;
32
33    printf("m = %d\nc = %d\n", m, c);
34
35    return 0;
36 }
37

```