

```

1
2  #include <iostream>
3  using namespace std;
4
5  // We declare the arrays
6
7  int arr[1000];
8  int temp[1000];
9
10 // The main function where the program starts
11 int main() {
12
13     // Declare variables for array size 'n' and rotations 'd'
14     int n;
15     int d;
16
17     // Read the two numbers from the user
18     cout<<"first enter no of elements ";cout<<endl;
19     cout<<"second enter no of left rotations you need";cout<<endl;
20     cin >> n >> d;
21
22     // Optimize 'd' in case it's larger than 'n'
23     d = d % n;
24
25     // Read all the numbers into the main array
26     cout<<"enter elements of array";cout<<endl;
27     for (int i = 0; i < n; i++) {
28         cin >> arr[i];
29     }
30     //displays entered array
31     cout<<"array before rotation:";
32     for (int i = 0; i < n; i++) {
33         cout << arr[i] << " ";
34     }
35     cout<<endl;
36     // 1. Copy the first 'd' elements into the temp array
37     for (int i = 0; i < d; i++) {
38         temp[i] = arr[i];
39     }
40
41     // 2. Shift the rest of the main array to the left
42     for (int i = d; i < n; i++) {
43         arr[i - d] = arr[i];
44     }
45
46     // 3. Copy the elements from 'temp' back to the end of the main array
47     for (int i = 0; i < d; i++) {
48         arr[n - d + i] = temp[i];
49     }
50
51     // This is the line you asked for
52     cout << "Array after left rotation: ";
53
54     // This loop prints all the numbers
55     for (int i = 0; i < n; i++) {
56         cout << arr[i] << " ";
57     }
58
59     // Print a newline at the end for clean formatting
60     cout << endl;
61     return 0;
62 }

```