

```
1  #include <iostream>
2  #include<array>
3  using namespace std;
4  int main () {
5      // an array with 5 rows and 2 columns.
6      int array[3][3];
7      int big1 = 1;
8      int k;
9      cin>>k;
10     array[0][0]=k;
11     cin>>k;
12     array[0][1]=k;
13     cin>>k;
14     array[0][2]=k;
15     cin>>k;
16     array[1][0]=k;
17     cin>>k;
18     array[1][1]=k;
19     cin>>k;
20     array[1][2]=k;
21     cin>>k;
22     array[2][0]=k;
23     cin>>k;
24     array[2][1]=k;
25     cin>>k;
26     array[2][2]=k;
27     // output each array element's value
28     for ( int row = 0; row < 3; row++ )
29         for ( int col = 0; col < 3; col++ ) {
30
31             cout << "array[" << row << "][" << col << "]: ";
32             cout << array[row][col]<< endl;
33         }
34     cout<<"\nValues of Array\n"<<endl;
35     for(int row=0;row<3;row++)
36     {
37         for (int col=0;col<3;col++)
38         {
39             cout<<array[row][col]<<" ";
40
41         }
42         cout<<" "<<endl;
43     }
44 }
45
46
47 int max = array[0][0];
48 for(int row=0; row<3; row++)
```

```

    }
    cout<<" "<<endl;

}

int max = array[0][0];
for(int row=0; row<3; row++)
{
    for(int col=0; col<3; col++)
    {
        if(array[row][col]>max)
            max = array[row][col];
    }
}

int min = array[0][0];
for(int row=0; row<3; row++)
{
    for(int col=0; col<3; col++)
    {
        if(array[row][col]<min)
            min = array[row][col];
    }
}

cout<<"Maximum number is = "<<max<<endl;
cout<<"Minimum number is = "<<min<<endl;

return 0;
}

```



output

```
kashiii@kashiii-Latitude-E7450:~/Documents$ cd "/home/kashiii/Documents"
kashiii@kashiii-Latitude-E7450:~/Documents$ ./"array"
```

```
1
2
3
4
5
6
7
8
9
array[0][0]: 1
array[0][1]: 2
array[0][2]: 3
array[1][0]: 4
array[1][1]: 5
array[1][2]: 6
array[2][0]: 7
array[2][1]: 8
array[2][2]: 9
```

Values of Array

```
1 2 3
4 5 6
7 8 9
Maximum number is = 9
Minimum number is = 1
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```

```
kashiii@kashiii-Latitude-E7450:~/Documents$ cd "/home/kashiii/Documents"
kashiii@kashiii-Latitude-E7450:~/Documents$ ./"array"
```

```
99
77
55
44
999
0
8
7
6
array[0][0]: 99
array[0][1]: 77
array[0][2]: 55
array[1][0]: 44
array[1][1]: 999
array[1][2]: 0
array[2][0]: 8
array[2][1]: 7
array[2][2]: 6
```

Values of Array

```
99 77 55
44 999 0
8 7 6
Maximum number is = 999
Minimum number is = 0
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```

2Darrayaddition.cpp > main()

```
1  #include <iostream>
2  using namespace std;
3
4  int main()
5  {
6      int r=3, c=3, a[100][100], b[100][100], sum[100][100], i, j;
7
8      cout << endl << "Enter elements of 1st matrix: " << endl;
9
10     for(i = 0; i < r; ++i)
11         for(j = 0; j < c; ++j)
12         {
13             cout << "Enter element a" << i + 1 << j + 1 << " : ";
14             cin >> a[i][j];
15         }
16
17     // Storing elements of second matrix entered by user.
18     cout << endl << "Enter elements of 2nd matrix: " << endl;
19     for(i = 0; i < r; ++i)
20         for(j = 0; j < c; ++j)
21         {
22             cout << "Enter element b" << i + 1 << j + 1 << " : ";
23             cin >> b[i][j];
24         }
25
26     // Adding Two matrices
27     for(i = 0; i < r; ++i)
28         for(j = 0; j < c; ++j)
29             sum[i][j] = a[i][j] + b[i][j];
30
31     // Displaying the resultant sum matrix.
32     cout << endl << "Sum of two matrix is: " << endl;
33     for(i = 0; i < r; ++i)
34         for(j = 0; j < c; ++j)
35         {
36             cout << sum[i][j] << " ";
37             if(j == c - 1)
38                 cout << endl;
39         }
40
41     return 0;
42 }
43
```

output

```
kashiii@kashiii-Latitude-E7450:~/Documents$ cd "/home/kashiii/Documents"
kashiii@kashiii-Latitude-E7450:~/Documents$ ./"2Darrayaddition"
```

Enter elements of 1st matrix:

```
Enter element a11 : 11
Enter element a12 : 22
Enter element a13 : 33
Enter element a21 : 44
Enter element a22 : 55
Enter element a23 : 66
Enter element a31 : 77
Enter element a32 : 88
Enter element a33 : 99
```

Enter elements of 2nd matrix:

```
Enter element b11 : 1
Enter element b12 : 2
Enter element b13 : 3
Enter element b21 : 4
Enter element b22 : 5
Enter element b23 : 6
Enter element b31 : 7
Enter element b32 : 8
Enter element b33 : 9
```

Sum of two matrix is:

```
12 24 36
48 60 72
84 96 108
```

```
kashiii@kashiii-Latitude-E7450:~/Documents$ █
```

```
kashiii@kashiii-Latitude-E7450:~/Documents$ cd "/home/kashiii/Documents"
kashiii@kashiii-Latitude-E7450:~/Documents$ ./"2Darrayaddition"
```

Enter elements of 1st matrix:

```
Enter element a11 : 22
Enter element a12 : 11
Enter element a13 : 00
Enter element a21 : 99
Enter element a22 : 8
Enter element a23 : 7
Enter element a31 : 6
Enter element a32 : 5
Enter element a33 : 4
```

Enter elements of 2nd matrix:

```
Enter element b11 : 9
Enter element b12 : 8
Enter element b13 : 7
Enter element b21 : 6
Enter element b22 : 5
Enter element b23 : 4
Enter element b31 : 3
Enter element b32 : 2
Enter element b33 : 1
```

Sum of two matrix is:

```
31 19 7
105 13 11
9 7 5
```

```
kashiii@kashiii-Latitude-E7450:~/Documents$ █
```