

task 1:

```
#include<iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int a[10][10] ,lar=0,min=99999999;
```

```
    for(int i=0;i<10;i++)
```

```
    {
```

```
        for(int j=0;j<10;j++)
```

```
        {
```

```
            cout<<"enter number";
```

```
            cin>>a[i][j];
```

```
        }
```

```
    }
```

```
    for(int i=0;i<10;i++)
```

```
    {
```

```
        for(int j=0;j<10;j++)
```

```
        {
```

```
            if(a[i][j]>lar)
```

```
            {
```

```
                lar=a[i][j];
```

```
            }
```

```
            if(a[i][j]<min)
```

```
            {
```

```
                min=a[i][j];
```

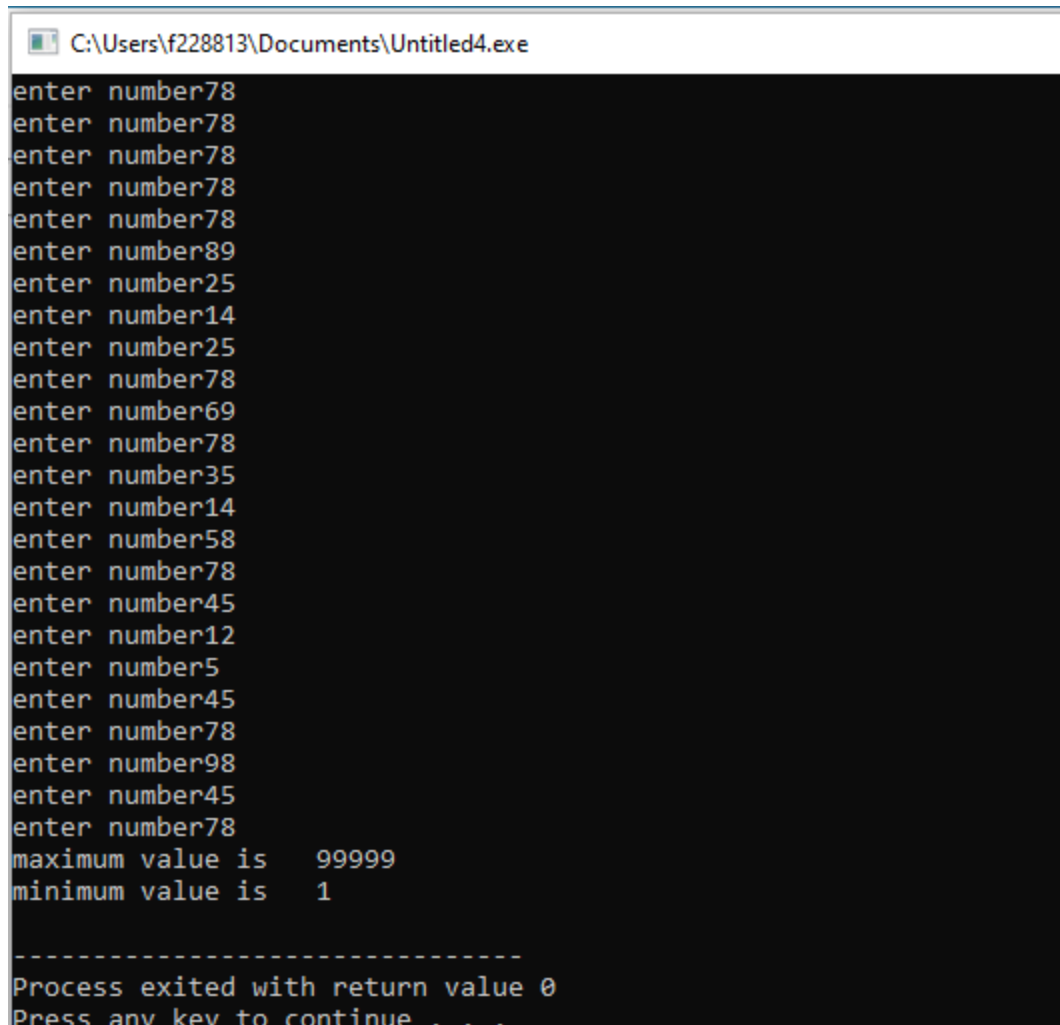
```
            }
```

```
        }
```

```
    }cout<<"maximum value is  "<<lar<<endl;
```

```
    cout<<"minimum value is  "<<min<<endl;
```

}



```
C:\Users\f228813\Documents\Untitled4.exe
enter number78
enter number78
enter number78
enter number78
enter number78
enter number89
enter number25
enter number14
enter number25
enter number78
enter number69
enter number78
enter number35
enter number14
enter number58
enter number78
enter number45
enter number12
enter number5
enter number45
enter number78
enter number98
enter number45
enter number78
maximum value is 99999
minimum value is 1
-----
Process exited with return value 0
Press any key to continue...
```

Task 2:

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int a[7][7], transpose[7][7], col, i, row, j;
```

```
    cout << "Enter rows and cols of matrix: ";
```

```
    cin >> row >> col;
```

```
for (int i = 0; i < row; ++i)
{
    for (int j = 0; j < col; ++j)
    {
        cout << "Enter number";
        cin >> a[i][j];
    }
}
```

```
for (int i = 0; i < col; ++i)
    for (int j = 0; j < row; ++j)
    {
        cout << " " << transpose[i][j];
        if (j == row - 1)
            cout << endl << endl;
    }
```

```
for (int i = 0; i < row; ++i)
    for (int j = 0; j < col; ++j)
    {
        transpose[j][i] = a[i][j];
    }
```

```
for (int i = 0; i < row; ++i)
{
    for (int j = 0; j < col; ++j)
    {
        cout << " " << a[i][j];
        if (j == col - 1)
            cout << endl << endl;
    }
}
```

```
}  
}
```

```
for (int i = 0; i < row; ++i)  
    for (int j = 0; j < col; ++j)  
        {  
            transpose[j][i] = a[i][j];  
        }
```

```
return 0;
```

```
C:\Users\f228813\Documents\Untitled1.exe
15 26 78 45 4 52 45
586 456 87 45 45 21 45
78 54 87 69 258 47 58
14 25 75 48 98 78 45
4 525 8 569 78 45 12

Transpose of Matrix:
1 8 15 586 78 14 4
2 9 26 456 54 25 525
3 10 78 87 87 75 8
4 11 45 45 69 48 569
5 12 4 45 258 98 78
6 13 52 21 47 78 45
7 14 45 45 58 45 12

-----
Process exited with return value 0
Press any key to continue . . .
```

task 3:

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int a[8][8],sl=0, sr = 0;
```

```
    cout << "Enter number";
```

```
    for(int i=0; i<8 ; i++)
```

```
    {
```

```
        for(int j=0; j<8; j++)
```

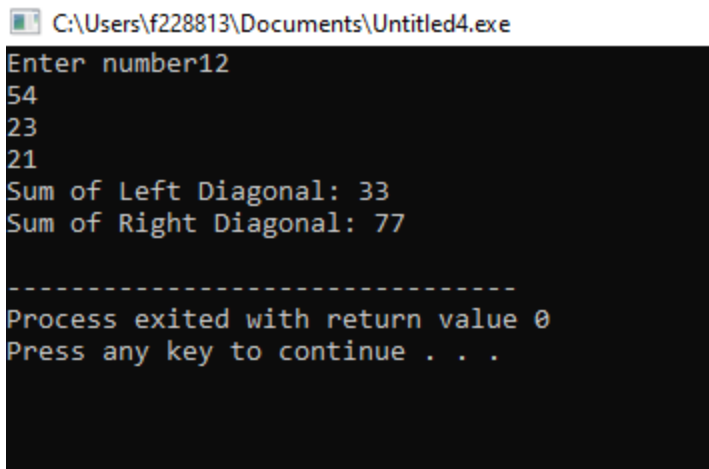
```

        {
        cin >> a[i][j];
        if(i==j)
            sl += a[i][j];
        if((i+j) == 8-1)
            sr += a[i][j];
        }
    }

    cout << "Sum of Left Diagonal: " << sl << endl;
    cout << "Sum of Right Diagonal: " << sr << endl;

    return 0;
}

```



```

C:\Users\228813\Documents\Untitled4.exe
Enter number12
54
23
21
Sum of Left Diagonal: 33
Sum of Right Diagonal: 77

-----
Process exited with return value 0
Press any key to continue . . .

```

Task 3 another with diagonal interchange:

```

#include <iostream>

using namespace std;

int main()
{
    int a[8][8], sl = 0, sr = 0, sa[8][8], b[8], ab[8], i;

    cout << "Enter number";
}

```

```

for(int i=0; i<8 ; i++)
{
    for(int j=0; j<8; j++)
        {
            cin >> a[i][j];
            if(i==j)
                sl += a[i][j];
            if((i+j) == 8-1)
                sr += a[i][j];
        }
}

```

```

cout << "Sum of Left Diagonal: "<< sl << endl;
cout << "Sum of Right Diagonal: "<< sr << endl;

```

```

for (int i = 0; i < 8; i++)
{
    for (int j = 0; j < 8; j++)
    {
        sa[i][j] = a[i][j];
        if (i == j)
        {
            sa[i][j] = b[i];
        }
    }
}

for (int i = 0, j = 7; i < 8 && j >= 0; i++, j--)
{

```

```

        sa[i][j] = ab[i];
    }

    for (int i = 0; i < 8; i++)
    {
        for (int j = 0; j < 8; j++)
        {
            cout << sa[i][j] << "\t";

        }
        cout << endl;
    }

    return 0;
}

```

Task 4:

```
#include <iostream>
```

```
#include <iomanip>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int i, j, row_num, col_num, row, seat;
```

```
    char seat_resvr, availability[13][6], A[13][6], reserved[2], tic_type, seats;
```



```
cout << "enter the desired seat\n";
```

```
for (int i = 0; i < 13; i++)
```

```
{
```

```
    for (int j = 0; j < 6; j++)
```

```
    {
```

```
        A[i][j] = '*';
```

```
    }
```

```
}
```

```
cin >> row >> seat;
```

```
A[row - 1][seat - 1] = 'X';
```

```
cout << " A B C D E F" << endl;
```

```
for (int i = 0; i < 13; i++)
```

```
{
```

```
cout << "Row" << setw(3) << i + 1 << " ";
```

```
for (int j = 0; j < 6; j++)
```

```
{
```

```
    cout << A[i][j] << ' ';
```

```
}
```

```
cout << endl;
```

```
}
```

```
}
```

```
C:\Users\Dell\OneDrive\Deskt  ×  +  v

enter the desired seat
12
3
  A B C D E F
Row 1 * * * * *
Row 2 * * * * *
Row 3 * * * * *
Row 4 * * * * *
Row 5 * * * * *
Row 6 * * * * *
Row 7 * * * * *
Row 8 * * * * *
Row 9 * * * * *
Row 10 * * * * *
Row 11 * * * * *
Row 12 * * X * *
Row 13 * * * * *

-----
Process exited after 4.701 seconds with return value 0
Press any key to continue . . .
```

Task 5:

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int a[5],i,j,n,b[5];
```

```
    cout<<"enter 1st digit ";
```

```
    cin>>a[0];

    n=a[0];

    for (int i=0;i<n;i++)
{
    for (int i=0;i<n;i++)

    {

        cin>>a[i];

    }

    cout<<endl;

    for (int i=0;i<n;i++)

    {

        cin>>b[i];

    }

    cout<<endl;

    if(a[i]!=b[i])

        cout<<"not same";

    else

        cout<<"same and code is error free";

}

}
```

```
C:\Users\Devl\OneDrive\Deskt  X  +  
enter 1st digit 5  
1  
2  
3  
4  
5  
  
3  
2  
1  
5  
4  
  
not same|
```