

5
6 4
12 7 3
13 11 8 2
15 14 10 9 1

```
#include <iostream>

int main()
{
    int n = 5;
    int x = 1, y = n;
    int t1, t2;
    int s1, s2;
    for (int i = n; i >= 1; i--)
    {
        t1 = x;
        t2 = y;
        r1 = i;
        s2 = i + 1;
        for (int j = n; j >= i; j--)
        {
            if ((i + j) % 2 == 1)
                s
```

```
Cout<<L1<<"";
```

```
{  
} else  
{
```

```
Cout<<L2<<"";
```

```
{  
t1 = t1 - 81++;
```

```
t2 = t2 - 82++;
```

```
{  
y = y + i - 1;
```

```
x = x + i;
```

```
Cout<<endl;
```

```
{  
return 0;  
}
```

15

14 13

12 11 10

9 8 7 6

5 4 3 2 1

```
#include <iostream.h>
```

```
int main()
```

```
{  
int n = 5;
```

```
int x = (n * (n + 1) / 2);
```

```
for (int i = n; i >= 1; i--)
```

```
{
```

```
for (int j = n; j >= i; j--)
```

```
{  
cout << x << " ";  
}  
cout << endl;  
};  
return 0;  
}
```

5

9 4
12 8 3
14 11 7 2
15 13 10 6 1

```
# include <iostream>
```

```
int main()
```

{

```
int n = 5;
```

```
int x = n, y, t;
```

```
For (int i = n; i >= 1; i--)
```

{

```
t = x;
```

```
y = i + 1;
```

```
For (int j = n; j >= i; j--)
```

{

```
cout << t << " ";
```

```
t = t - y;
```

```
y++;
```

}

| x = x + i - 1;

| cout << endl;

| }
| return 0;

1
1 1
1 2 1
1 3 3 1
1 4 6 4 1

#include <iostream>

int main()

{

int n=5;

int px;

for (int i=1; i<=n; i++)

{

px=1;

for (int j=1; j<=i; j++)

{

cout << px << " ";

px = px * (i-j) / j;

}

cout << endl;

}

return 0;

}

1
1 2
2 3 4
4 5 6 7
7 8 9 10 11

// include <iostream.h>

```
int main()
{
    int n = 5;
    int x = 1;
    for (int i = 0; i <= n; i++)
    {
        for (int j = 0; j <= i; j++)
        {
            cout << (x - i) << " ";
            x++;
        }
        cout << endl;
    }
    return 0;
}
```

1
4 9
16 25 36
49 64 81 100

```
#include <iostream.h>

int main()
{
    int n = 4;
    int x = 1;
    for (int i = 1; i <= n; i++)
    {
        for (int j = 1; j <= i; j++)
        {
            cout << (x * x) << " ";
            x++;
        }
        cout << endl;
    }
    system("pause");
}
```

1
2 6
3 7 10
4 8 11 13
5 9 12 14 15

#include <iostream.h>

int main()

{

int n = 15; // size

for (int i = 1, k = n; i <= k; i++)

{

k = i;

for (int j = 1; j <= i; j++)

{

cout << k << " ";

k = k + (n - j);

}

cout << endl;

}

return 0;

}

(Fibonacci Series)

1
1 2
3 5 8
13 21 34 55
89 144 233 377 610

#include <iostream.h>

int main()

{

int i, j;

int n1 = 0, n2 = 1, x = n1 + n2;

For (int i = 1; i <= 5; i++)

{

For (int j = 1; j <= i; j++)

{

cout << x << " ";

x = n1 + n2;

n1 = n2;

n2 = x;

}

cout << endl;

}

return 0;

0
0 1
0 0 1 1
0 1 1 2 3

(fibonacci pyramid)

```
#include <iostream.h>
#include <math.h>
int main()
{
    int FirstNum=0, SecondNum=1, result=0;
    int n=5; //Size, increase it to create Series
    for (int i=1; i<=n; i++)
    {
        for (int j=1; j<=i; j++)
        {
            FirstNum = SecondNum;
            SecondNum = result;
            cout<<result<<" ";
            result = FirstNum + SecondNum;
        }
        FirstNum = 0;
        SecondNum = 1;
    }
}
```

```
xresult = 0;  
cout << endl;  
}
```

```
return 0;  
}
```

```
1  
0 0  
1 1 1  
0 0 0 0  
1 1 1 1 1
```

```
#include <iostream.h>
```

```
int main()
```

```
{
```

```
int n=5;
```

```
for (int i=1; i<=n; i++)
```

```
{
```

```
for (int j=1; j<=i; j++)
```

```
{
```

```
cout << (i%2) << " ";
```

```
}
```

```
cout << endl;
```

```
}
```

```
return 0;
```

```
}
```

0
1 1
0 0 0
1 1 1 1
0 0 0 0 0
1 1 1 1 1

```
#include <iostream.h>
int main()
{
    int n=5;
    for(int i=0; i<n; i++)
    {
        for(int j=0; j<=i; j++)
        {
            cout<<(i%2)<<" ";
        }
        cout<<endl;
    }
    return 0;
}
```

1
1 0
1 0 1
1 0 1 0
1 0 1 0 1

```
#include <iostream.h>
int main()
{
    int n=5;
    for (int i=1; i<=n; i++)
    {
        for (int j=1; j<=i; j++)
        {
            cout << (j%2) << " ";
        }
        cout << endl;
    }
    return 0;
}
```

0
0 1
0 1 0
0 1 0 1
0 1 0 1 0
0 1 0 1 0 1

```
#include <iostream.h>
```

```
int main()
```

```
{
```

```
int n=5;
```

```
For (int i=0; i<n; i++)
```

```
{
```

```
For (int j=0; j<=i; j++)
```

```
{
```

```
Cout<<(j%2)<<" ";
```

```
}
```

```
Cout<<endl;
```

```
}
```

```
return 0;
```

```
}
```

0
1 0
0 1 0
1 0 1 0
0 1 0 1 0

```
#include <iostream>
int main()
{
    int n = 5;
    for (int i = 1; i <= n; i++)
    {
        for (int j = 1; j <= i; j++)
        {
            cout << ((i + j) % 2) << " ";
        }
        cout << endl;
    }
    return 0;
}
```

```
1  
0 1  
1 0 1  
0 1 0 1  
1 0 1 0 1
```

```
#include <iostream.h>
```

```
int main()
```

```
{
```

```
int n=5;
```

```
For (int i=1; i<=n; i++)
```

```
{
```

```
For (int j=0; j<i; j++)
```

```
{
```

```
cout << (i+j)%2 << " ";
```

```
}
```

```
cout << endl;
```

```
}
```

```
return 0;
```

```
}
```

A
B B
C C C
D D D D
E E E E E

#include <iostream>

int main()

{

char i, j;

for (int i = 'A'; i <= 'E'; i++)

{

 for (int j = 'A'; j <= i; j++)

{

 cout << char(i);

}

 cout << endl;

}

return 0;

}



A
A B
A B C
A B C D
A B C D E

If we code it just `cout << j;`

int main()

{

char b; j;

for (int i = 'A'; i <= 'E'; i++)

{

for (int j = 'A'; j <= i; j++)

{

cout << char(j);

}

cout << endl;

}

return 0;

}

E
E D
E D C
E D C B
E D C B A

#include <iostream>

int main()

{

int n = 5;

for (int i = n - 1; i >= 0; i--)

{

for (int j = n - 1; j >= i; j--)

{

cout << (char)(j + 65) < " ";

}

cout << endl;

}

return 0;

}

E
D D
C C C
B B B B
A A A A A

#include <iostream.h>

int main()

{

int n = 5;

for (int i = n - 1; i >= 0; i--)

{

for (int j = n - 1; j >= i; j--)

{

cout << (char)(i + 65) << " ;

}

cout << endl;

}

return 0;

}

A
B A
C B A
D C B A
E D C B A

```
#include <iostream.h>
```

```
int main()
```

```
{
```

```
int n=5;
```

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

```
{
```

```
for (int j=i; j>=0; j-- )
```

```
{
```

```
cout << (char)(j+65) << " ";
```

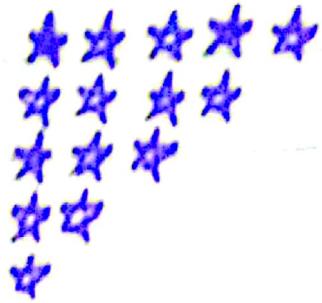
```
}
```

```
cout << endl;
```

```
}
```

```
return 0;
```

```
}
```



```
#include <iostream.h>
int main()
{
    For (int i=1; i<=5; i++)
    {
        For (int j=5; j>=i; j--)
        {
            cout << "*"; //any character or symbol "#"
            etc
        }
        cout << endl;
    }
    return 0;
}
```

1 1 1 2 -
2 2 2 2
3 3 3
4 4
5

```
#include <iostream.h>  
int main()  
{  
    for (int i = 1; i <= 5; i++)  
    {  
        for (int j = 5; j >= i; j--)  
        {  
            cout << i; // any character or symbol '#'  
            etc  
        }  
        cout << endl;  
    }  
    return 0;  
}
```

1 2 3 4 5
1 2 3 4
1 2 3
1 2
1

#include <iostream.h>

int main()

{

for (int i=5; i>=1; i--)

{

for (int j=1; j<=i; j++)

{

cout << j;

}

cout << endl;

}

return 0;

}

5 5 5 5 5
4 4 4 4
3 3 3
2 2
1

```
#include <iostream.h>
int main()
{
    For (int i=5; i>=1; i--)
    {
        For (int j=1; j<=i; j++)
        {
            cout << i;
        }
        cout << endl;
    }
    return 0;
}
```

5 4 3 2 1
5 4 3 2
5 4 3
5 4
5

#include <iostream.h>

int main()

{

for (int i=1; i<=5; i++)

{

for (int j=5; j>=i; j--)

{

cout << j;

}

cout << endl;

}

return 0;

}

5 4 3 2 1
6 5 4 3
7 6 5
8 7
9

```
#include <iostream.h>
int main()
{
    int n=5;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n-i+1; j++)
        {
            cout<<(n-j+i)<<" ";
        }
        cout<<endl;
    }
    return 0;
}
```

5 6 7 8 9
4 5 6 7
3 4 5
2 3
1

#include <iostream.h>

int main()

{

int n = 5;

For (int i = 1; i <= n; i++)

{

For (int j = 1; j <= n - i + 1; j++)

{

Cout << (n - i + j) << " ";

}

Cout << endl;

}

return 0;

}

1 2 3 4 5
6 7 8 9
10 11 12
13 14
15

#include <iostream.h>

int main()

{

int n = 5;

int k = 1;

for (int i = n; i >= 1; i--)

{

for (int j = 1; j <= i; j++)

{

cout << k++ << " ";

}

cout << endl;

}

return 0;

}

15 14 13 12 11
10 9 8 7
6 5 4
3 2
1

#include <iostream.h>

int main()

{

int n=5;

int x=(n*(n+1))/2;

For (int i=1; i<=n; i++)

{

For (int j=n; j>=i; j--)

{

Cout<<x--<<" ";

}

Cout<<endl;

}

return 0;

}

17 18 19 20
14 15 16
12 13
11

#include <iostream.h>

int main()

{

int d1 = 1; // For pointing

int n = 4; // size

int d2 = (n * n) + 1;

For (int i = n; i >= 1; i--)

{

/* For 2nd Part */

For (int k = 1; k <= i; k++)

{

cout << d2 << " ";

d2++;

}

d2--; // decrement to get last
printed value

d2 = d2 - ((i - 1) * 2); // used to set
next point value

```
Cout << endl;
```

```
}
```

```
return 0;
```

```
}
```

```
5 9 12 14 15  
4 8 11 13  
3 7 10  
2 6  
1
```

```
# include <iostream.h>
```

```
int main()
```

```
{
```

```
int n=10; // size
```

```
int k;
```

```
For (int i=n; i>=1; i--)
```

```
{
```

```
k=i;
```

```
For (int j=1; j<=i; j++)
```

```
{
```

```
Cout << k << " ";
```

```
k=k+(n-j);
```

```
}
```

```
Cout << endl;
```

```
return 0;
```

```
}
```

1 1 1 1
0 0 0 0
1 1 1
0 0
1

Ende Lösungskz

$r = \text{rand}()$

{

$\text{if } r = 5,$

Schleife; $i = 1; i \leq n; i++$)

{

$\text{Schleife; } j = r; j >= i; j--$)

{

Catch (19.2) 11";

}

End Lenz;

{

return 0;

}

```
0 0 0 0 0  
1 1 1 1  
0 0 0  
1 1  
0
```

```
# include <iostream.h>
```

```
int main()
```

```
{
```

```
int n = 5;
```

```
For (int i = 0; i < n; i++)
```

```
{
```

```
For (int j = n; j > i; j--)
```

```
{
```

```
Cout << (i % 2) << " ";
```

```
}
```

```
Cout << endl;
```

```
}
```

```
return 0;
```

```
}
```

10101
1010
101
10
1

```
#include <iostream.h>
int main()
{
    int n = 5;
    for (int i = n; i >= 1; i--)
    {
        for (int j = 1; j <= i; j++)
        {
            cout << (j % 2) << " ";
        }
        cout << endl;
    }
    return 0;
}
```

0 1 0 1 0
0 1 0 1
0 1 0
0 1
0

```
#include <iostream.h>

int main()
{
    int n=5;
    For (int i=n; i>=1; i--)
    {
        For (int j=0; j< i; j++)
        {
            cout << (j%2) << " ";
        }
        cout << endl;
    }
    return 0;
}
```

0 1 0 1 0
1 0 1 0
0 1 0
1 0
0

#include <iostream.h>

int main()

{

int n=5;

For (int i=n; i>=1; i--)

{

For (int j=1; j<=i; j++)

{

cout<<(i+j)%2<<" ";

}

return 0;

}

1 0 1 0 1
0 1 0 1
1 0 1
0 1
1

#include <iostream.h>

int main()

{

int n = 5;

for (int i = n; i >= 1; i--)

{

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

{

cout << (i + j) % 2) << " "

}

cout << endl;

}

return 0;

}

A A A A
B B B B
C C C
D D
E

#include <iostream.h>

int main()

{

int i, j;

for (int i = 0; i <= 4; i++)

{

for (int j = 4; j >= i; j--)

{

cout << (char) (i + 65);

}

cout << endl;

}

return 0;

}

A B C D E
A B C D
A B C
A B
A

#include <iostream.h>

int main()

{

int i, j;

For (int i=4; i>=0; i--)

{

For (int j=0; j<=i; j++)

{

Cout << (char)(j+65);

}

Cout << endl;

}

return 0;

}

E E E E
D D D D
C C C
B B
A

#include <iostream.h>

int main()

{

int i, j;

for (int i=4; i>=0; i--)

{

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

{

cout << (char)(i+65);

} }

cout << endl;

}

return 0;

}

E D C B A
E D C B
E D C
E D
E

#include <iostream.h>

int main()

{

int i, j;

For (int i=0; i<=4; i++)

{

For (int j=4; j>=i; j--)

{

Cout << (char)(j+65);

}

Cout << endl;

{

return 0;

{

E D C B A
D C B A
C B A
B A
A

```
#include <iostream.h>
```

```
int main()
```

```
{
```

```
int n=5;
```

```
For (int i=1; i<=n; i++)
```

```
{
```

```
For (int j=n-1; j>=0; j--)
```

```
{
```

```
Cout << (char)(j+65) << " ";
```

```
}
```

```
Cout << endl;
```

```
}
```

```
return 0;
```

```
}
```

E D C B A
F E D C
G F E
H G
I

#include <iostream.h>

int main()

{

int n=5;

For (i=1; i<=n; i++)

{

For (int j=1; j<=n-i+1; j++)

{

Cout << (char)(n-j+i+64) << " ";

}

Cout << endl;

}

return 0;

}

A
A B
A B C
A B C D
A B C D E

#include <iostream.h>

```
int main()
{
    char i, j;
    for (int i = 'A'; i <= 'E'; i++)
    {
        for (int j = 'A'; j <= i; j++)
            cout << char(j);
        cout << endl;
    }
    return 0;
}
```

E
ED
EDC
EDCB
EDCBA

#include <iostream.h>

int main()

{

int n = 5;

for (int i = n - 1; i >= 0; i--)

{

for (int j = n - 1; j >= i; j--)

{

cout << (char)(j + 65) << " ";

}

cout << endl;

}

return 0;

}

E
D D
C C C
B B B B
A A A A A

#include <iostream.h>

int main()

{

int n = 5;

For (int i = n - 1; i >= 0; i--)

{

For (int j = n - 1; j >= i; j--)

{

Cout << (char)(i + 65) << " ;

}

Cout << endl;

}

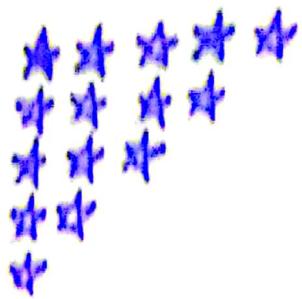
return 0;

}

A
B A
C B A
D C B A
E D C B A

```
#include <iostream.h>  
int main()  
{  
    int n=5;  
    for(int i=0; i<n; i++)  
    {  
        for(int j=i; j>=0; j--)  
        {  
            cout << (char)(j+65) << " ";  
        }  
        cout << endl;  
    }  
    return 0;  
}
```





```
#include <iostream.h>
int main()
{
    for (int i = 1; i <= 5; i++)
    {
        for (int j = 5; j >= i; j--)
        {
            cout << "*"; // any character or symbol '#'
            etc
        }
        cout << endl;
    }
    return 0;
}
```

1 1 1 1 1
2 2 2 2
3 3 3
4 4
5

#include <iostream.h>

int main()

{

for (int i = 1; i <= 5; i++)

{

for (int j = 5; j >= i; j--)

{

cout << i; // any character or symbol '#'

etc

}

cout << endl;

}

return 0;

}

1 2 3 4 5
1 2 3 4
1 2 3
1 2
1

#include <iostream.h>

int main()

{

For (int i=5; i>=1; i--)

{

For (int j=1; j<=i; j++)

{

cout << j;

}

cout << endl;

{

return 0;

}