

* * * *

* * * * *

* * * * *

* * * * *

#include <iostream.h>

{ int main ()

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

{ for (int j = 1; j <= 5; j++)

{ cout << "*";

cout << endl;

return 0;

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

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

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

#include <iostream.h>

{

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

{

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

{

cout << j;

}

cout << endl;

}

return 0;

}

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

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

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

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

1 2 3 4 5
6 7 8 9 10
11 12 13 14 15
16 17 18 19 20
21 22 23 24 25

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

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1 3 5 7 9
11 13 15 17 19
21 23 25 27 29
31 33 35 37 39
41 43 45 47 49

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

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2 4 6 8 10
12 14 16 18 20
22 24 26 28 30
32 34 36 38 40
42 44 46 48 50

#include <iostream.h>

int main()
{

int n = 5;

int x = 2;

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

for (int j = 1; j <= n; j++)
{

cout << x << " ";

x += 2;
}

cout << endl;
}

return 0;
}

1	2	3	4	5
2	4	6	8	10
3	6	9	12	15
4	8	12	16	20
5	10	15	20	25

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

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

```
#include <iostream.h>
int main()
{
    for (int i = 1; i <= 5; i++)
    {
        for (int j = 1; j <= 3; j++)
        {
            cout << j << " ";
        }
        cout << endl;
    }
    return 0;
}
```

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

```
#include <iostream.h>
int main()
{
    for(int i=1; i<=5; i++)
    {
        for(int j=1; j<=3; j++)
        {
            cout<<i<<" "<<j<<" ";
        }
        cout << endl;
    }
    return 0;
}
```

1	6	11	16	21
2	7	12	17	22
3	8	13	18	23
4	9	14	19	24
5	10	15	20	25

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

5	10	15	20	25
4	9	14	19	24
3	8	13	18	23
2	7	12	17	22
1	6	11	16	21

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

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

#include <iostream.h>

int main()

{

int n = 5;

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

{

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

{

cout << (i + j - 1) << " ";

}

cout << endl;

}

return 0;

}

1	3	5	7	9
3	5	7	9	11
5	7	9	11	13
7	9	11	13	15
9	11	13	15	17

#include <iostream.h>

int main()

{

int n = 5;

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

{

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

{

cout << (2 * (i + j)) - 3 << " ";

}

cout << endl;

{

return 0;

}

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

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

```
int main()
```

```
{
```

```
int n = 5;
```

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

```
{
```

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

```
{
```

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

```
}
```

```
    cout << endl;
```

```
}
```

```
return 0;
```

```
}
```

1	0	1	0	1
0	1	0	1	0
1	0	1	0	1
0	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=0; j<n; j++)
        {
            cout << ((i+j) % 2) << " ";
        }
        cout << endl;
    }
    return 0;
}
```

1	0	1	0	1
0	0	0	0	0
1	0	1	0	1
0	0	0	0	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 <= n; j++)
```

```
{
```

```
            cout << (i * j) / 2 << " ";
```

```
}
```

```
    cout << endl;
```

```
{
```

```
return 0;
```

```
{
```

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

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

```
int main()
```

{

```
int n = 5;
```

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

{

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

{

```
cout << ((i * j) / 2) << " ";
```

{

```
cout << endl;
```

{

```
return 0;
```

{

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

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

1	1	1	1	1
0	0	0	0	0
1	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=1; i<=n; i++)
```

```
{
```

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

```
{
```

```
        cout << (i-1)*2 << " ";
```

```
}
```

```
    cout << endl;
```

```
}
```

```
return 0;
```

```
}
```

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

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

2 0 1 0 1
1 0 1 0 1
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 = 1; j <=n; j++)
        {
            cout << (j%2) << " ";
        }
        cout << endl;
    }
    return 0;
}
```

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

#include <iostream.h>

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

A B C D E
A B C D E
A B C D E
A B C D E
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 <= 'E'; j++)

{

cout << char(j);

}

cout << endl;

{

return 0;

{

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

#include <iostream.h>

int main()

{

char i, j;

for (int i = 'E'; i >= 'A'; i--)

{

for (int j = 'E'; j >= 'A'; j--)

{

cout << char(i);

}

cout << endl;

}

return 0;

}

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

#include <iostream.h>

int main()

{

char i, j;

for (int i = 'E'; i >= 'A'; i--)

{

for (int j = 'E'; j >= 'A'; j--)

{

cout << char(i);

}

cout << endl;

}

return 0;

}

A B C D E
F G H I J
K L M N O
P Q R S T
U V W X Y

#include <iostream.h>

int main()

{

int n = 5;

char ch = 'A';

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

{

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

{

cout << ch << " ";

if (ch > 'Z')

ch++;

else

ch = 'A';

}

cout << endl;

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

#include <iostream.h>

```
int main()
{
```

```
    int n= 5;
```

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

```
        for (int j=0; j<n; j++)
        {
```

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

```
    cout << endl;
```

```
}
```

```
return 0;
```

```
}
```

A F K P U
B G L O V
C H M R W
D I N S X
E J O T Y

```
#include<iostream.h>
int main()
{
    int n=5;
    int x;
    for(int i=0; i<n; i++)
    {
        x=i;
        for(int j=1; j<=n; j++)
        {
            x+=n;
            cout<<(char(x-65))<<"";
        }
        cout<<endl;
    }
    return 0;
}
```

E J O T Y
D I N S X
C H M R W
B G L Q V
A F K P U

#include <iostream.h>

int main()

{

int n=5;

int x;

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

{

x = n - i;

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

{

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

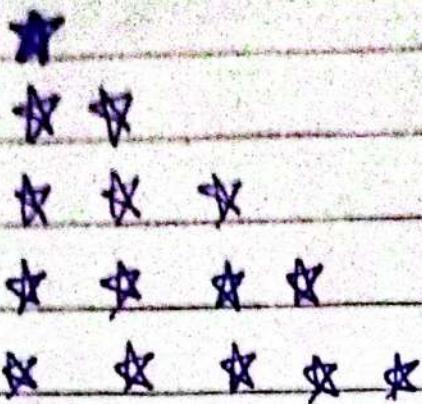
x = x + n;

}

cout << endl;

}

return 0;



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

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1

2 2

3 3 3

4 4 4 4

5 5 5 5 5

#include <iostream.h>

int main()

{

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

{

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

{

cout << i;

}

cout << endl;

}

return 0;

}

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

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

5

4 4

3 3 3

2 2 2 2

1 1 1 1 1

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

```
int main()
```

```
{
```

```
int n=5;
```

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

```
{
```

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

```
{
```

```
cout<<i<<" ";
```

```
}
```

```
cout<<endl;
```

```
}
```

```
return 0;
```

```
}
```

5

5 4

5 4 3

5 4 3 2

5 4 3 2 1

#include <iostream.h>

int main()

{

int n=5;

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

{

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

{

cout<<j<<" ";

{

cout<<endl;

{

return 0;

{

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

#include <iostream.h>

int main()

{

int n=5;

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

{

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

{

cout << j << " ";

{

cout << endl;

{

return 0;

{

2

2 4

2 4 6

2 4 6 8

2 4 6 8 10

```
#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;
```

{

1
2 3
4 5 6
7 8 9 10

```
#include <iostream.h>
int main()
{
    int i,j;
    int n=1;
    for (int i=1; i<=4; i++)
    {
        for (int j=1; j<=i; j++)
        {
            cout << n;
            n++;
        }
        cout << endl;
    }
    return 0;
}
```

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

#include <iostream.h>

int main()

{

int n=5;

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

{

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

{

cout << (i+j-1) << " ";

}

cout << endl;

}

return 0;

}

1
3 5
5 7 9
7 9 11 13
9 11 13 15 17

#include <iostream.h>

int main()

{

int i, j, t;

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

{

t = i - 1;

for (j = 2; j <= i; j++)

{

cout << t + j << " ";

t += 2;

}

cout << endl;

{

return 0;

{

1

3 5

7 9 11

13 15 17 19

21 23 25 27 29

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

```
int main()
```

{

```
int n=5, x=1;
```

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

{

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

{

```
cout << x << " ";
```

```
x+=2
```

{

```
cout << endl;
```

{

```
return 0;
```

{

2

4 6

8 10 12

14 16 18 20

22 24 26 28 30

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

```
int main()
```

{

```
int n=5, x=2;
```

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

{

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

{

```
cout << x << ":";
```

```
x + 2 = ;
```

{

```
cout << endl;
```

{

```
return 0;
```

{

1

2 4

3 6 9

4 8 12 16

5 10 15 20 25

#include<iostream.h>

int main()

{

int n = 5;

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

{

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

{

cout << (i * j) << " ";

}

cout << endl;

}

return 0;

}

1
4 9

16 25 36
49 64 81 100

#include <iostream.h>

{

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;

}

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;
```

```
{
```

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```
0  
1 1  
0 0 0  
1 1 1 1  
0 0 0 0 0  
1 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-1)*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 * 10) << " ";
        }
        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.h>

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.h>
```

```
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

#include <iostream.h>

{

char i, j;

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

{

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

{

cout << char(j);

}

cout << endl;

{

return 0;

{

* * * * *
* * * *
* * *
* *
*

#include <iostream.h>

int main()

{

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

{

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

cout << "* ";

}

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;

}

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;
}

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

#include <iostream.h>

int main()

{

int n = 5;

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

{

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

{

cout << (i - 1) * 2 << " ";

}

cout << endl;

}

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 << (j / 2) << " ";

}

cout << endl;

}

return 0;

}

1 0 1 0 1
1 0 1 0
1 0 1
1 0
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 * 1 / 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 / 1.2) << " ";
        }
        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) << " ";
        }
        cout << endl;
    }
    return 0;
}
```

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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;
}
```

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

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

E 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, ic=n; i++)
    {
        for (int j=n-i; j>=0; j--)
        {
            cout << (char)(j+65) << " ";
        }
        cout << endl;
    }
    return 0;
}
```

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

#include <iostream.h>

int main()

{

int n = 5; // size

int i, j, k;

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

{

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

{

cout << " ";

}

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

{

cout << k;

}

cout << endl;

} // main

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

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

Hello C++

```
#include <iostream.h>
void main()
{
    clrscr();
    cout << "Hello from C++ !!!";
    getch();
}
```

Number is Even Or Odd

```
#include <iostream.h>
void main()
{
    clrscr();
    int x;
    cout << "Enter an integer:";
    cin >> x;
    if (x % 2 == 0)
        cout << "Number is even";
    else
        cout << "Number is odd.";
    getch();
}
```

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Factorial

```
#include <iostream.h>
void main ()
{
    int i, n, fact = 1;
    cout << "Enter a number:";
    cin >> n;
    for (i = 1; i <= n; i++)
    {
        fact = fact * i;
    }
    cout << "Factorial of " << n << " is " << fact;
    endl;
}
```

Prime Number

```
#include <iostream.h>
void main ()
{
    int i, n;
    int count = 0;
    cout << "Enter a number:";
    cin >> n;
    for (i = 1; i <= n; i++)
}
```

```
{
    if (n / i == 0)
    {
        count++;
    }
    if (count == 2)
    {
        cout << n << " is prime number";
    }
    else
    {
        cout << n << " is not prime number";
    }
}
```

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{

if ($n - 1 \geq i = 0$)

{

Count ++;

}

}

if (count == 2)

{

cout << n << "is a prime number";

}

else

{

cout << n << "is NOT a prime
number";

}

}

Largest Among n digit

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

```
void main()
```

```
{
```

```
int max_num(int a[], int n);
```

```
int max, i, n;
```

```
int a[50];
```

```
clrscr();
```

```
cout << "Enter n number:";
```

```
cin >> n;
```

```
cout << "Enter the numbers:";
```

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

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

```
max = max_num(a, n);
```

```
cout << "The largest number is" <<
```

```
getch();
```

```
}
```

```
int max_num(int a[], int n)
```

```
{
```

```
int i, m = 0;
```

{

if ($a[i] > m$) $m = a[i];$

}

return $m;$

}

Swap Two Numbers

#include <iostream.h>

int main()

{

int x, y, temp;

cout << "Enter the value of x and y\n";

cin >> x >> y;

cout << "Before Swapping\n x = " << x << "\n y = " << y << endl;

temp = x;

x = y;

y = temp;

cout << "After Swapping\n x = " << x << "\n y = " << y << endl;

return 0;

}

Swap without using third Variable

```
#include <iostream.h>
void main()
{
    int a, b;
    clrscr();
    cout << "Enter value for A : ";
    cin >> a;
    cout << "Enter value for B. ";
    cin >> b;
    cout << "\nvalue of A and B
before swapping is A : " << a << "
B : " << b;
    a = a+b;
    b = a-b;
    a = a-b;
    cout << "\nvalue of A and B
after swapping is A : " << a << "
B : " << b;
    getch();
}
```

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Pascal triangle

#include <iostream.h>

int main ()

{

int no ;

cout << "Enter the number of rows";

cin >> no;

cout << endl;

for (int rows=0; rows<no; rows++)

{

for (int space=0; space<(no-rows);

space ++)

cout << " ";

}

int n=1;

for (int coloum=0; coloum<rows;

coloum ++)

{

cout << " ";

n = n * (rows - col) / (col + 1);

}

Leap Year

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

```
void main()
```

```
{
```

```
int Year; int Y;
```

```
cout << "Enter the Year";
```

```
cin >> Year;
```

```
if (Year % 400 == 0)
```

```
cout << "is a leap Year"
```

```
else if (Year % 100 == 0)
```

```
cout << "is not a leap Year";
```

```
else if (Year % 4 == 0)
```

```
cout << "is a leap Year."
```

```
else
```

```
cout << "is not a leap Year";
```

Perfect Number

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

```
int main()
```

```
{
```

```
int n, i = 1, sum = 0;
```

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

```
while(i<n)
{
    if (n/i == 0);
        sum = sum+i;
        i++;
}
if(sum==n)
    cout<<"is a Perfect Number";
else
    cout<<"is not a Perfect Number";
return 0;
}
```

Armstrong Numbers

```
#include<iostream.h>
int main()
{
    int i,sum=0,x;
    cout<<"Enter a number";
    cin>>x;
    while (i>0):
    {
        sum= sum+(i%10)*(i%10)*(i%10)
        i = i/10
    }
}
```

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DATE _____

it (sum == n)
 The number is Armstrong

Else
 The number is not
 Armstrong.

Neon Number

```
#include <iostream.h>
int main()
{
```

```
int n, sav, cl, h, sum = 0
cout << "Enter a Number";
```

```
cin >> n
```

```
sav = n * n
```

```
cl = n
```

```
while
```

```
{
```

```
cl = (sav != 0)
```

```
cl = sav / 10
```

```
sum = sum + cl
```

```
sav / 10;
```

```
if (sum == n)
```

```
cout << "is a neon number";
```

```
else
```

cout <<
 return
 }

Aut

#inclu

int m

{

int n

int n

long i

int r

int

int e

cout

cins>

num

sav =

t = 1

cout

<< sav

whi

{

ri = sa

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`cout << "is not a neon number";
 return 0;
 }`

Automorphic Number

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

```
int main ()  

{
```

```
    int n;
```

```
    int num;
```

```
    long int sq;
```

```
    int r;
```

```
    int t;
```

```
    int equal;
```

```
    cout << "Enter a number: ";
```

```
    cin >> n;
```

```
    num = n;
```

```
    sq = n * n;
```

```
    t = 10;
```

```
    cout << "In square of " << n << " is "
```

```
    << sq << endl;
```

```
    while (n > 0)
```

```
{
```

```
    n = n / 10;
```

```
if (num == n)  
{
```

```
    equal = 1;  
    break;  
}
```

```
n = n / 10;  
t = t * 10;
```

{

```
if (equal == 1)  
{
```

cout << num << "is an Automorphic
number";

{

else

{

cout << num << "is NOT an
Automorphic number";

{

return 0;

{

Sunny Number

```
#include <iostream.h>
int main()
{
    int num;
    double x; // sqrt(num+1)
    cout << "Enter a Number:";
    cin >> num;
    x = sqrt(num+1);
    if ((int)x == x)
    {
        cout << num << " is a SPY Number";
    }
    else
    {
        cout << num << " is NOT a SPY Number";
    }
    return 0;
}
```

Happy Number

```
#include <iostream.h>
int main()
{
    int n, digit, sum = 0;
    cout << "Enter a number:";
```

cin >> n

while (sum! = 1 && sum! = 4)
 {

sum = 0;

while (n! = 0)

{

dig = n / 10

sum = sum + dig * dig

n = n / 10

n = sum;

}

if (sum == 1)

cout << "Happy Number";

else

cout << "UnHappy Number";

return 0;

}

Pronic Number

#include <iostream>

int main()

{

int n, d, f;

cout << "Enter a number:";

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```
cin >> n;  
for (d = 1; d <= n; d++)
```

{

```
if (d * (d + 1) == n)
```

{

f = 1;

break;

}

}

```
if (f == 1)
```

cout << num << "is Pronic
Number";

else

cout << "IS NOT a Pronic
Number";

}

return 0;

}

Trimorphic Number

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

```
int main()
```

{

int n;

```
int flag=1;
long cube;
cout<<"Enter a number:";

cin>>n;
cube=n*n*n;
while(n!=0)
{
    if(n/10!=cube/10)
    {
        flag=0;
        break;
    }
    n/=10;
    cube/=10;
}
if(flag==1)
{
    cout<<"Number is a Trimorphic
    number.";;
}
else
    cout<<"Number is NOT a
    Trimorphic number.";
```

Sum of digit

```
#include <iostream.h>
void main()
{
    clrscr();
    int n, num, x, sum=0;
    cout<<"Enter a number:";
    cin>>n;
    while (n>0)
    {
        x=n%10;
        sum = sum+x;
        n=n/10;
    }
    cout<<"sum of digits of a
    Number:"<<sum;
    getch();
}
```

Celsius to Fahrenheit

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

```
void main()
```

{

```
float c,f;
```

```
clrscr();
```

```
cout << "Enter temp in
```

```
centigrade: ";
```

```
cin >> c;
```

```
f = (1.8 * c) + 32;
```

```
cout << "Temperature in
```

```
Fahrenheit = " << f;
```

```
getch();
```

}

Fahrenheit to Celsius

```
#include <iostream>
```

```
void main()
```

{

```
float c,f;
```

```
clrscr();
```

```
cout << "Enter temp in Fahrenheit: ";
```

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DAY: _____

```
cin >> f;  
c = (f - 32) / 1.8;  
cout << "Temperature in  
centigrade = " << c;  
getch();  
}
```

Area of Circle

```
#include <iostream.h>  
int main ()  
{  
    int radius;  
    float area;  
    cout << "Enter Radius of the  
Circle:";  
    cin >> radius;  
    area = 3.14 * radius * radius;  
    cout << "Area of the circle:"  
    << area;  
    return 0;  
}
```

Area of Rectangular

```
#include <iostream.h>
int main()
{
    int length, breadth, area;
    cout << "Enter the length
          of Rectangle:";
    cin >> breadth;
    area = length * breadth;
    cout << "Area of Rectangle:
          " << area;
    return 0;
}
```

Area of Square

```
#include <iostream.h>
int main()
{
    int side, area;
    cout << "Enter the length
          of side:";
    cin >> side;
}
```

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area = side * side;

cout << "In Area of square:"

<< area;

return 0;

{

Area of Hexagon

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

```
int main()
```

{

```
int side;
```

```
float area;
```

```
cout << "Enter the length  
of side:";
```

```
cin >> side;
```

```
area = (3 * sqrt(3) * side * side) / 2;
```

```
cout << "Area of Regular  
Hexagon:" << area;
```

```
return 0;
```

{

Area of Pentagon

```

#include <iostream.h>
int main()
{
    int side;
    float area;
    cout << "In Enter the length
of side:";
    cin >> side;
    area = (sqrt(5 + 2 * sqrt(5))) *
           side * side) / 4;
    cout << "In Area of
Regular Pentagon:" << area;
    return 0;
}

```

Volume of Sphere

```

#include <iostream.h>
int main()
{
    float radius;
    float volume;

```

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cout << "Enter radius of
the sphere:";

cin >> radius;

$$\text{volume} = (4 * 3.14 * \text{radius} * \\ \text{radius} * \text{radius}) / 3;$$

cout << "The volume of sphere is\\ : " << volume;

return 0;

}

Area of Octagon

#include <iostream.h>

int main()

{

int side;

float area;

cout << "Enter the length\\ of the side:";

cin >> side;

$$\text{area} = 2 * (1 + \sqrt{2}) * \\ \text{side} * \text{side};$$

cout << "The Area of Regular\\ Octagon: " << area;

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;

{

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Volume of Cone:-

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

```
int main()
```

{

```
float r, h;
```

```
float volume;
```

```
cout << "Enter radius of  
the cone:";
```

```
cin >> r;
```

```
cout << "Enter height of  
the cone:";
```

```
cin >> h;
```

```
volume = (3.14 * r * r * h) / 3;
```

```
cout << "Volume of cone"
```

```
is :" " << volume;
```

```
return 0;
```

{}

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

#include <iostream.h>

int main()

{

int i, j, k = 0;

int n = 4;

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

{

k += i;

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

{

cout << j;

{

cout << "\n";

{

{

E E E E E
D 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-i; j>=0; j--)

{

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

}

cout << endl;

}

return 0;

}

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

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