

```

public class starPattern(){
    public static void main(String args[]){
        //int a = 5;

        for( int i=1; i<=5; i++){
            for(int j = 1; j<=i ; j++){
                System.out.println("* ");
            }
            System.out.println();

        }
    }
}

```

```

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

```

```

int a = 5;
for(int i = 1; i<= 5; i++){
    for(int j = 1 ; j<= i; j++) {
        System.out.println(j + " ");
    }
    System.out.println();
}

```

```

1

```

```

1 2

```

1 2 3

1 2 3 4

1 2 3 4 5

*

int row =5;

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

//print spaces

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

System.out.print(" "); // double space for alignment

}

//print stars

for(int k =1;k<=(2*i-1) ; k++){

System.out.println("* ");

}

System.out.println(); //next row

}

*

```
int rows = 5;

for(int i = rows; i >= 1; i--){

    // Print spaces

    for(int j = 1; j <= rows - i; j++){

        System.out.print(" "); // two spaces for alignment

    }

    // Print stars

    for(int k = 1; k <= (2*i - 1); k++){

        System.out.print("* ");

    }

    System.out.println(); // move to next row

}
```

//outer loop --> i = rows to 1 (reverse)

// spaces --> rows-i;

// Stars --> (2* i -1)

// System.out.println(--same line)

// System.out.println(same line)

Right angle tringle

*

**

```
for( i=1 ; i<= 5; i++){  
    for(j =1 ; j<=i ; j++){  
        System.out.println("* ");  
    }  
    System.out.println();  
}
```

1
12
123
1234
12345

```
for( i=1 ; i<= 5; i++){  
    for(j =1 ; j<=i ; j++){  
        System.out.println( j + " ");  
    }  
    System.out.println();  
}
```

*

* * *

* * * * *

* * * * * * *

* * * * * * * * *

```

int rows = 5;

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

for ( int j = 1; j <= rows-i; j++){

System.out.println( " ");

}

for( int k =1; k<= (2*i-1); k++)

{

System.out.println("* ");

}

System.out.println();

}

```

*

```

int rows = 5;

for(int i= 1;i>=rows; i++){

for ( int j = 1; j <= rows-i; j++){

System.out.println( " ");

}

for( int k =1; k<= (2*i-1); k++)

{

System.out.println("* ");

}

```

```
}
```

```
System.out.println();
```

```
}
```

```
//print even no. from 2 to 20 using a loop
```

```
public class EvenNumbers {
```

```
    public static void main(String[] args) {
```

```
        for(int i = 2; i <= 20; i++) { // start from 2
```

```
            if(i % 2 == 0) {
```

```
                System.out.println(i); // print the current even number
```

```
            }
```

```
        }
```

```
    }
```

```
}
```

```
//print sum of first 5 numbers
```

```
1 2 3 4 5
```

```
int sum =0;
```

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

```
    sum += i;
```

```
}
```

```
System.out.println("Sum =" + sum);
```

```
//output =15
```

```
// print " Java " 10 times
```

```
for(int i = 1 ; i<= 10; i++){  
System.out.println("Java");  
}
```

```
//print odd number from 1 to 15
```

```
for(int i=1; i<=15;i++){  
if(i%2 != 0){  
System.out.println(i);  
}  
}
```

```
// factorial of 5
```

1 2 3 4 5

$5*4*3*2*1=$

$5*4=20$

$20*3= 60$

$60* 2 = 120$

$120*1 = 120$

```
// so factorial is 120
```

```
int factorial = 1 ;
```

```
for(int i=1 ; i<=5; i++){  
  
factorial *= i;  
  
}  
  
System.out.println("Factorial =" + factorial );
```

```
// output is 120
```

```
//Write a program to reverse a no.
```

```
int num =123;  
  
int rev = 0;  
  
while(num != 0){  
  
int digit = num % 10;  
  
rev = rev*10+digit;  
  
num /= 10;  
  
}  
  
System.out.println("reverse no =" + rev);
```

```
// output = 321
```

```
//check prime no
```

```
int n = 17 ;
```

```

boolean isPrime = true;

for( int = 2 ; i<= n/2 ; i++){

if(n% i == 0){

isPrime = false;

break;


}

}

if(isPrime)

System.out.println(n + " is prime ");

else

System.out.println( n + " is not prime no ");

public class starPattern(){

public static void main(String args[]){

//int a = 5;

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

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

System.out.println("* ");

}

System.out.println();

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1 2

1 2 3

1 2 3 4

1 2 3 4 5

*

```
int row =5;

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

    //print spaces

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

        System.out.print(" "); // double space for alignment
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}

//print stars

for(int k =1;k<=(2*i-1) ; k++){

System.out.println("* ");

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System.out.println(); //next row

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```

*****

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```

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```

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*****

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```
//outer loop --> i = rows to 1 (reverse)
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```
// spaces --> rows-i;
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// Stars --> (2* i -1)
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```
// System.out.println(--same line)
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// System.out.println(same line)
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Right angle tringle

*

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```
for( i=1 ; i<= 5; i++){
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```
for(j =1 ; j<=i ; j++){
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```
System.out.println("* ");
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```
}
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System.out.println();
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123

1234

12345

```

for( i=1 ; i<= 5; i++){
for(j =1 ; j<=i ; j++){
System.out.println( j + " ");
}
System.out.println();
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```

```

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

```

```

int rows = 5;
for(int i= 1;i<=rows; i++){
for ( int j = 1; j <= rows-i; j++){
System.out.println( " ");
}
for( int k =1; k<= (2*i-1); k++)
{
System.out.println("* ");

}
System.out.println();

}

```

```

* * * * * * *

```

* * * * *

* * * * *

* * *

*

```
int rows = 5;
```

```
for(int i= 1;i<=rows; i++){
```

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

```
System.out.println(" ");
```

```
}
```

```
for( int k =1; k<= (2*i-1); k++)
```

```
{
```

```
System.out.println("* ");
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System.out.println();
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```
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public class EvenNumbers {
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public static void main(String[] args) {
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```
if(i % 2 == 0) {
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```
    System.out.println(i); // print the current even number
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//print sum of first 5 numbers
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sum += i;
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```

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for(int i=1; i<=15;i++){
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```

```
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```

```
}
```

```
}
```

```
// factorial of 5
```

```
1 2 3 4 5
```

```
5*4*3*2*1=
```

```
5*4=20
```

```
20*3= 60
```

```
60* 2 = 120
```

```
120*1 = 120
```

```
// so factorial is 120
```

```
int factorial = 1 ;
```

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

```
factorial *= i;
```

```
}
```

```
System.out.println("Factorial =" + factorial );
```

```
// output is 120
```

```
//Write a program to reverse a no.
```

```
int num =123;
```

```
int rev = 0;
```

```
while(num != 0){
```

```
int digit = num % 10;
```

```
rev = rev*10+digit;

num /= 10;

}

System.out.println("reverse no =" + rev);


// output = 321


//check prime no


int n = 17 ;


boolean isPrime = true;

for( int = 2 ; i<= n/2 ; i++){

if(n% i == 0){

isPrime = false;

break;

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if(isPrime)

System.out.println(n + " is prime ");

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