

```
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

\*

\*\*\*

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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

}

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\*\*\*

\*

```
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 triangle

\*

\*\*

\*\*\*

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\*\*\*\*\*

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```
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();  
}
```

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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("*");
    }
    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 i = 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.print("* ");
            }
            System.out.println();
        }
    }
}

*
```

\*\*\*

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```
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
```

\*

\*\*\*

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\*\*\*\*\*

```
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

}
```

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\*

```
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 triangle

```
*  
**  
***  
****  
*****
```

```
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();  
}  
  
}
```

\*

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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("\*");

}

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
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```
5*4*3*2*1=
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```
5*4=20
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```
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 i = 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 ");
```