

Number pattern :

Pattern 1

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

Pattern 2

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

Pattern 3

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

Pattern 4

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

Pattern 5

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

Pattern 6

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

Pattern 7

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

Pattern 8

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

Pattern 9

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

Pattern 10

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

Pattern 11

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

Pattern 12

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

Pattern 13

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

Pattern 14

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

Pattern 15

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

Pattern 16

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

Pattern 17

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

Pattern 18

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

Star pattern :

Pattern 1

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

Pattern 2

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

Pattern 3

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

Pattern 4

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

Pattern 5

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

Pattern 6

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

Pattern 7

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

Pattern 8

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

Pattern 9

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

Pattern 10

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

Pattern 11

Pattern 12

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

Pattern 13

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

Pattern 14

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

Pattern 15

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

Pattern 16

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

Number pattern: 1

```
class p1{  
    public static void main(String args[]){  
        for(int i=1;i<=5;++i) {  
            for(int j=1;j<=i;++j)    {  
                System.out.print(" "+j );  
            }  
            System.out.println();  
        }  
    }  
}
```

Output:

```
C:\cdac>java p1  
1  
1 2  
1 2 3  
1 2 3 4  
1 2 3 4 5
```

Number pattern: 2

```
class p2 {  
    public static void main(String arg[]) {  
        for(char i='A';i<='E';i++) {  
            for (char j='A';j<=i;j++) {  
                System.out.print(" "+j); }  
            System.out.println(); }  
    } }
```

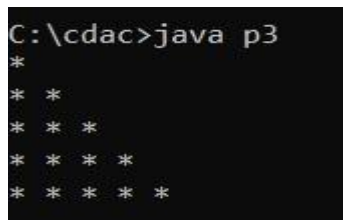
Output:

```
C:\cdac>java p2  
A  
A B  
A B C  
A B C D  
A B C D E
```

Number pattern: 3

```
class p3 {  
    public static void main(String args[]){  
        for(int i=1;i<=5;++i) {  
            for(int j=1;j<=i;++j) {  
                System.out.print("* ");  
            }  
            System.out.println();  
        }  
    }  
}
```

Output:

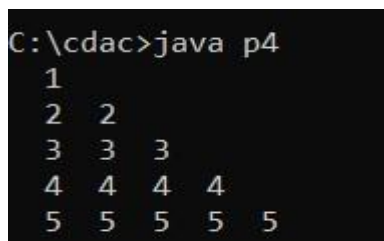


```
C:\cdac>java p3  
*  
* *  
* * *  
* * * *  
* * * * *
```

Number pattern: 4

```
class p4 {  
    public static void main(String args[]){  
        for(int i=1;i<=5;++i) {  
            for(int j=1;j<=i;++j) {  
                System.out.print(" "+i);  
            }  
            System.out.println();  
        }  
    }  
}
```

Output:



```
C:\cdac>java p4  
1  
2 2  
3 3 3  
4 4 4 4  
5 5 5 5 5
```

Number pattern: 5

```
class p5 {  
    public static void main(String arg[]) {  
        for(char i='A';i<='E';i++) {  
            for(char j='A';j<=i;j++) {  
                System.out.print(" "+i); }  
            System.out.println(); }  
    } }
```

Output:

```
C:\cdac>java p5  
A  
B B  
C C C  
D D D D  
E E E E E
```

Number pattern: 6

```
class p6 {  
    public static void main(String args[]) {  
        for(int i=1;i<=5;++i) {  
            for(int j=(5-i);j>=1;--j) {  
                System.out.print(" "); }  
            for(int j=1;j<=i;++j) {  
                System.out.print(" *"); }  
            System.out.println(); }  
    } }
```

Output:

```
C:\cdac>java p6  
      *  
     * *  
    * * *  
   * * * *  
  * * * * *  
 * * * * *
```

Number pattern: 7

```
class p7 {  
    public static void main(String args[]){  
        for(int i=1;i<=5;++i)    {  
            for(int j=(5-i);j>=1;--j)    {  
                System.out.print(" "); }  
            for(int j=1;j<=i;++j) {  
                System.out.print(" "+j); }  
            System.out.println(); }  
    } }
```

Output:

```
C:\cdac>java p7  
    1  
   1 2  
  1 2 3  
 1 2 3 4  
1 2 3 4 5
```

Number pattern: 8

```
class p8 {  
    public static void main(String args[]){  
        for(int i=5;i>=1;--i)    {  
            for(int j=1;j<=(i-1);++j) {  
                System.out.print(" "); }  
            for(int j=i;j<=5;++j)    {  
                System.out.print(" "+j); }  
            System.out.println(); }  
    } }
```

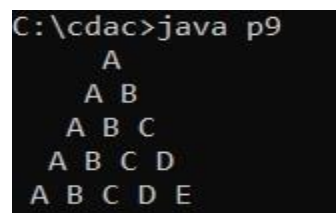
Output:

```
C:\cdac>java p8  
    5  
   4 5  
  3 4 5  
 2 3 4 5  
1 2 3 4 5
```

Number pattern: 9

```
class p9{
public static void main(String[] args){
    for(char i='A';i<='E';++i) {
        for(int j='E';j>=i;--j) {
            System.out.print(" "); }
        for(char j='A';j<=i;++j) {
            System.out.print(j+" "); }
        System.out.println(); }
    } }
```

Output:

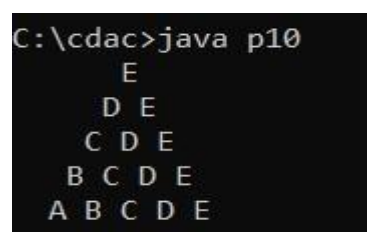


```
C:\cdac>java p9
  A
 A B
A B C
A B C D
A B C D E
```

Number pattern: 10

```
class p10{
public static void main(String agrs[]){
    for(char i='E';i>='A';--i) {
        for(char j=i;j>='A';--j) {
            System.out.print(" "); }
        for(char j=i;j<='E';++j) {
            System.out.print(" "+j); }
        System.out.println(); }
    } }
```

Output:

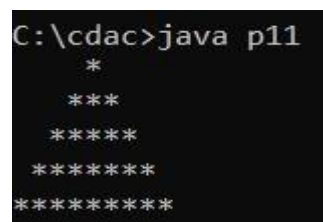


```
C:\cdac>java p10
  E
 D E
C D E
B C D E
A B C D E
```

Number pattern: 11

```
class p11{
public static void main(String args[]){
    for(int i=1;i<=5;++i)  {
        for(int j=(5-i);j>=1;--j) {
            System.out.print(" "); }
        for(int j=1;j<=i;++j)  {
            System.out.print("*"); }
        for(int j=2;j<=i;++j) {
            System.out.print("*"); }
        System.out.println(); }
    } }
```

Output:

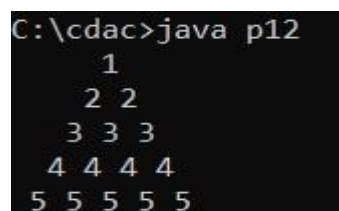


A screenshot of a terminal window showing the output of the Java program p11. The command 'C:\cdac>java p11' is entered at the prompt. The output is a number pattern consisting of five lines. The first line has one space followed by one asterisk. The second line has three spaces followed by three asterisks. The third line has five spaces followed by five asterisks. The fourth line has seven spaces followed by seven asterisks. The fifth line has nine spaces followed by nine asterisks.

Number pattern: 12

```
class p12{
public static void main(String args[]){
    for(int i=1;i<=5;++i)  {
        for(int j=(5-i);j>=1;--j) {
            System.out.print(" "); }
        for(int j=1;j<=i;++j) {
            System.out.print(" "+i); }
        System.out.println(); }    } }
```

Output:

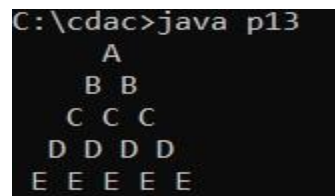


A screenshot of a terminal window showing the output of the Java program p12. The command 'C:\cdac>java p12' is entered at the prompt. The output is a number pattern consisting of five lines. The first line has one space followed by the number 1. The second line has two spaces followed by the number 2 twice. The third line has three spaces followed by the number 3 three times. The fourth line has four spaces followed by the number 4 four times. The fifth line has five spaces followed by the number 5 five times.

Number pattern: 13

```
class p13 {  
    public static void main(String[] args){  
        for(char i='A';i<='E';++i) {  
            for(int j='E';j>=i;--j) {  
                System.out.print(" "); }  
                for(char j='A';j<=i;++j) {  
                    System.out.print(i+" "); }  
                System.out.println(); }  
        } }  
}
```

Output:



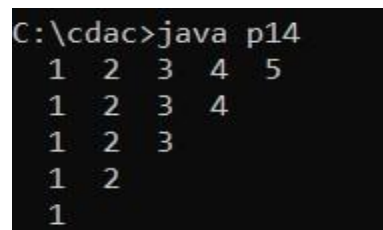
A screenshot of a terminal window showing the command 'C:\cdac>java p13' and its output. The output is a number pattern where each row starts with a space and is followed by a sequence of characters. The first row has one 'A', the second has two 'B's, the third has three 'C's, the fourth has four 'D's, and the fifth has five 'E's.

```
C:\cdac>java p13  
  A  
 B B  
C C C  
D D D D  
E E E E E
```

Number pattern: 14

```
class p14 {  
    public static void main(String args[])  
    {  
        for(int i=5;i>=1;--i) {  
            for(int j=1;j<=i;++j) {  
                System.out.print(" " +j ); }  
                System.out.println(); }  
        }  
    }  
}
```

Output:



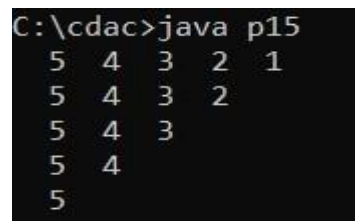
A screenshot of a terminal window showing the command 'C:\cdac>java p14' and its output. The output is a number pattern where each row starts with a space and is followed by a sequence of numbers. The first row has five numbers (1-5), the second has four (1-4), the third has three (1-3), the fourth has two (1-2), and the fifth has one (1).

```
C:\cdac>java p14  
 1 2 3 4 5  
 1 2 3 4  
 1 2 3  
 1 2  
 1
```


Number pattern: 15

```
class p15 {  
    public static void main(String args[]) {  
        for(int i=1;i<=5;++i) {  
            for(int j=5;j>=i;--j) {  
                System.out.print(" "+j);    }  
            System.out.println(); }  
    }  
}
```

Output:



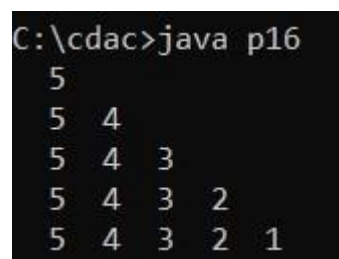
A screenshot of a terminal window showing the execution of a Java program. The command 'C:\cdac>java p15' is entered. The output is a right-angled triangle of numbers: 5 4 3 2 1 on the first line, 5 4 3 2 on the second, 5 4 3 on the third, 5 4 on the fourth, and 5 on the fifth.

```
C:\cdac>java p15  
5 4 3 2 1  
5 4 3 2  
5 4 3  
5 4  
5
```

Number pattern: 16

```
class p16 {  
    public static void main(String args[])  
    {  
        for(int i=5;i>=1;--i) {  
            for(int j=5;j>=i;--j) {  
                System.out.print(" "+j);    }  
            System.out.println(); }  
    }  
}
```

Output:



A screenshot of a terminal window showing the execution of a Java program. The command 'C:\cdac>java p16' is entered. The output is a right-angled triangle of numbers: 5 on the first line, 5 4 on the second, 5 4 3 on the third, 5 4 3 2 on the fourth, and 5 4 3 2 1 on the fifth.

```
C:\cdac>java p16  
5  
5 4  
5 4 3  
5 4 3 2  
5 4 3 2 1
```

Number pattern: 17

```
class p17{  
    public static void main(String args[]){  
        int k=1;  
        for(int i=1;i<=5;++i) {  
            for(int j=1;j<=i;++j) {  
                System.out.print(" "+ k );  
                ++k;    }  
            System.out.println(); }  
        } }  
}
```

Output:

```
C:\cdac>java p17  
1  
2 3  
4 5 6  
7 8 9 10  
11 12 13 14 15
```

Number pattern: 18

```
class p18 {  
    public static void main(String args[]) {  
        for(char i='E';i>='A';--i) {  
            for(char j='A';j<=i;++j) {  
                System.out.print(" "+j);    }  
            System.out.println();    }  
        }  
    }  
}
```

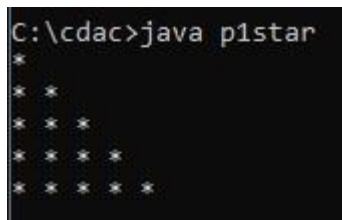
Output:

```
C:\cdac>java p18  
A B C D E  
A B C D  
A B C  
A B  
A
```

Star pattern: 1

```
class p1star{
public static void main(String args[]){
    for(int i=1;i<=5;i++) {
        for(int j=1;j<=i;j++) {
            System.out.print("* ");
        }
        System.out.println();
    }
}
```

Output:

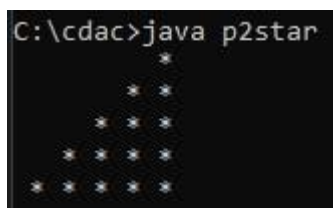


```
C:\cdac>java p1star
*
* *
* * *
* * * *
* * * * *
```

Star pattern: 2

```
class p2star{
public static void main(String args[]){
    for(int i=1;i<=5;++i) {
        for(int j=(5-i);j>=1;--j) {
            System.out.print(" ");
        }
        for(int j=1;j<=i;++j) {
            System.out.print(" *");
        }
        System.out.println();
    }
}
```

Output:

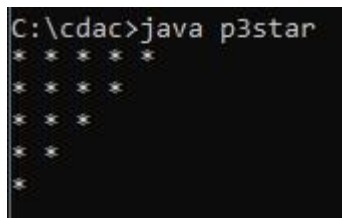


```
C:\cdac>java p2star
*
 *
* *
* * *
* * * *
```

Star pattern: 3

```
class p3star{
public static void main(String args[]){
    for (int i = 5; i >= 1; --i) {
        for (int j = 1; j <= i; ++j) {
            System.out.print("* ");
        }
        System.out.println();
    }
}
```

Output:



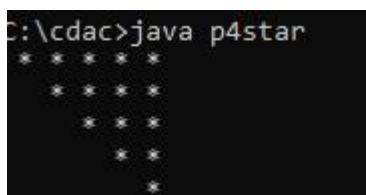
```
C:\cdac>java p3star
* * * * *
* * * *
* * *
* *
*

```

Star pattern: 4

```
class p4star {
    public static void main(String[] args)
    {
        for (int i = 1; i <= 5; i++) {
            for (int j = 1; j < i; j++) {
                System.out.print(" ");
            }
            for (int j = i; j <= 5; j++) {
                System.out.print("*");
            }
            System.out.println();
        }
    }
}
```

Output:



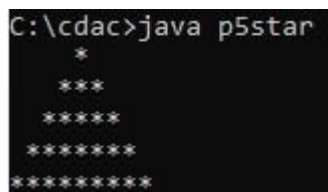
```
C:\cdac>java p4star
* * * * *
 * * * *
  * * *
   * *
    *

```

Star pattern: 5

```
class p5star{
public static void main(String args[])
{
    for(int i=1;i<=5;i++)    {
        for(int j=i;j<=5;j++)
            System.out.print(" ");
        for(int j=2;j<=2*i;j++)    {
            System.out.print("*");    }
        System.out.print("\n"); }
        System.out.println(); }
    } }
```

Output:

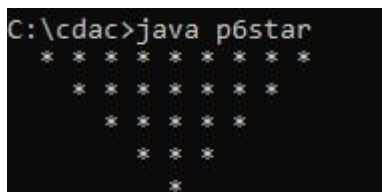
A screenshot of a terminal window showing the execution of a Java program. The command 'C:\cdac>java p5star' is entered. The output is a star pattern consisting of five rows. The first row has one star, the second has three, the third has five, the fourth has seven, and the fifth has nine stars. The stars are aligned to the left, creating a right-angled triangular shape.

```
C:\cdac>java p5star
*
***
*****
*****
*****
```

Star pattern: 6

```
class p6star {
public static void main(String args[]) {
for(int i=5;i>=1;i--)    {
    for(int j=i;j<=5;j++)
        System.out.print(" ");
    for(int j=2*i;j>1;j--)    {
        System.out.print("* ");    }
    System.out.println();    }
} }
```

Output:

A screenshot of a terminal window showing the execution of a Java program. The command 'C:\cdac>java p6star' is entered. The output is a star pattern consisting of five rows. The first row has 16 stars, the second has 12, the third has 8, the fourth has 4, and the fifth has 1 star. The stars are centered, creating a symmetrical, inverted triangular shape.

```
C:\cdac>java p6star
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

Star pattern: 7

```
class p7star {
public static void main(String args[])
{
    for(int i=1;i<=5;++i)
    {
        for(int j=(5-i);j>=1;--j) {
            System.out.print(" "); }
        for(int j=1;j<=i;++j) {
            System.out.print("*"); }
        for(int j=2;j<=i;++j) {
            System.out.print("*"); }
        System.out.println(); }
    for(int i=4;i>=1;i--)
    {
        for(int j=i;j<=4;j++){
            System.out.print(" "); }
        for(int j=2*i;j>1;j--) {
            System.out.print("*"); }
        System.out.println();
    }
}
```

Output:



```
C:\cdac>java p7star
  *
 ***
*****
*****
*****
*****
  *
 ***
  *
```

Star pattern: 8

```
class p8star{
public static void main(String args[])
{
    for(int i=1;i<=5;i++)
    {
        for(int j=1;j<=i;j++)
        {
            System.out.print("* ");
        }
        System.out.println();
    }
    for (int i = 4; i >= 1; --i) {
    for (int j = 1; j <= i; ++j) {
        System.out.print("* ");
    }
        System.out.println();
    }
}
}
```

Output:

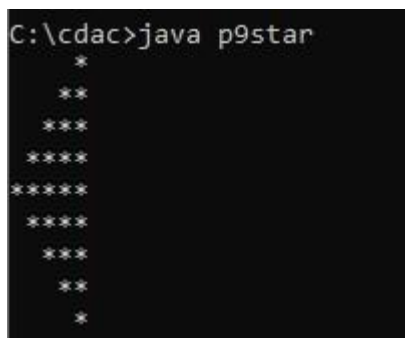


```
C:\cdac>java p8star
*
* *
* * *
* * * *
* * * * *
* * * *
* * *
* *
*
```

Star pattern: 9

```
class p9star{
public static void main(String[] args)
{
    for (int i= 1; i<= 5 ; i++)
    {
        for (int j=i; j <5 ;j++)    {
            System.out.print(" ");  }
        for (int j=1; j<=i;j++) {
            System.out.print("*");
        }
        System.out.println("");
    }
    for (int i=5; i>=1; i--) {
        for(int j=i; j<=5;j++) {
            System.out.print(" ");
        }
        for(int j=1; j<i ;j++) {
            System.out.print("*");
        }
        System.out.println("");
    }
}
```

Output:



```
C:\cdac>java p9star
*
**
***
****
*****
****
***
**
*
```


Star pattern: 10

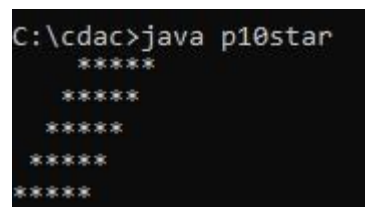
```
class p10star
{
    public static void main(String args[])
    {

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

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

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

Output:



```
C:\cdac>java p10star
    *****
   *****
  *****
 *****
*****
```

Star pattern: 11

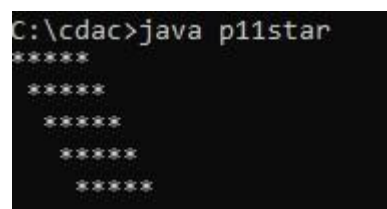
```
class p11star
{
    public static void main(String args[])
    {

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

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

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

Output:

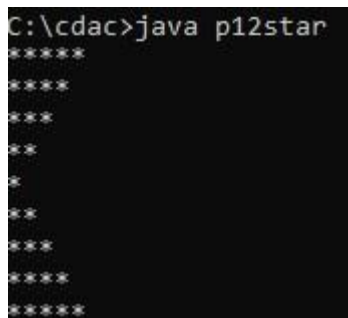


```
C:\cdac>java p11star
*****
 *****
  *****
   *****
    *****
```

Star pattern: 12

```
class p12star
{ public static void main(String[] args)
{
for (int i = 5; i >= 1; i--) {
for (int j = 1; j <= i; j++) {
System.out.print("*");
}
System.out.println();
}
for (int i = 2; i <= 5; i++)
{
for (int j = 1; j <= i; j++)
{
System.out.print("*");
}
System.out.println();
}
}
}
```

Output:

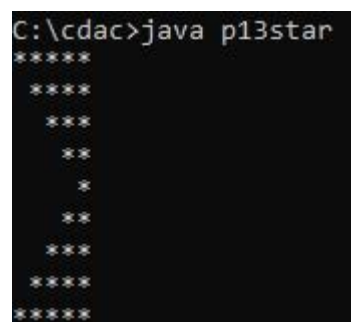


```
C:\cdac>java p12star
*****
****
***
**
*
**
***
****
*****
```

Star pattern: 13

```
class p13star {
    public static void main(String args[])
    {
        for(int i=1; i<=5; i++) {
            for(int j=1; j<=(i-1); j++) {
                System.out.print(" ");
            }
            for(int j=i; j<=5; j++) {
                System.out.print("*");
            }
            System.out.println();
        }
        for(int i=1; i<=4; i++) {
            for(int j=(i); j<=(3); j++) {
                System.out.print(" ");
            }
            for(int j=1; j<=(i+1); j++) {
                System.out.print("*");
            }
            System.out.println();
        }
    }
}
```

Output:



```
C:\cdac>java p13star
*****
****
***
**
*
**
***
****
*****
****
***
**
*
```

Star pattern: 14

```
class p14star
{
    public static void main(String args[])
    {
        for (int i= 1; i<=4 ; i++)    {
            for (int j=1; j<=(i); j++)    {
                System.out.print(" ");
            }
            for (int j=1; j<=(6-i); j++)    {
                System.out.print("* ");
            }
            System.out.println();
        }

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

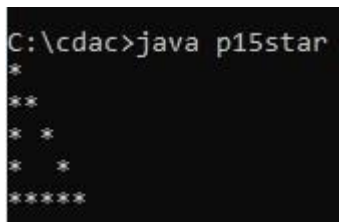
Output:

```
C:\cdac>java p14star
* * * * *
 * * * *
  * * *
   * *
    *
   * *
  * * *
 * * * *
* * * * *
 * * * *
  * * *
   * *
    *
   * *
  * * *
 * * * *
* * * * *
```

Star pattern: 15

```
class p15star
{
public static void main(String args[])
{
for (int i=1; i<= 5 ; i++)
    {
        for (int k = 1; k <= (i) ;k++)
        {
            if( k==1 || i == 5 || k==(i))
            {
                System.out.print("*");
            }
            else {
                System.out.print(" ");
            }
        }
        System.out.println("");
    }
}
```

Output:



```
C:\cdac>java p15star
*
**
* *
*  *
*****
```

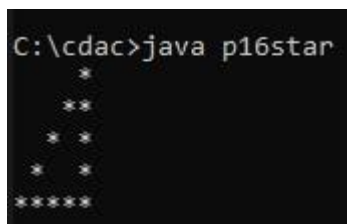
Star pattern: 16

```
class p16star
{

public static void main(String args[])
{
for (int i=1; i<= 5 ; i++)
    {
        for (int j = i; j < 5 ; j++) {
            System.out.print(" ");}

        for (int k = 1; k <= (i) ;k++) {
            if( k==1 || i == 5 || k==(i)) {
                System.out.print("*");
            }
            else {
                System.out.print(" ");
            }
        }
        System.out.println("");
    }
}
}
```

Output:



```
C:\cdac>java p16star
*
**
***
****
*****
```

```

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

```

Pyramid Pattern-1

```

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

```

Pyramid Pattern-2

```

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

```

Pyramid Pattern-3

```

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

```

Pyramid Pattern-4

```

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

```

Pyramid Pattern-5

```

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

```

Inverted Pyramid Pattern-6

```

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

```

Inverted Pyramid Pattern-7

JournalDev

Pyramid pattern: 1

```

class pp1{
public static void main(String args[]){
for (int i = 1; i <= 9; i++) {
    for (int j = 1; j <= 9-i; j++) {
        System.out.print(" ");
    }
    for (int j = 1; j <= i; j++) {
        System.out.print(" "+i);
    }
    System.out.println();
}
}
}

```


Output:

```
C:\cdac>java pp1
  1
 2 2
3 3 3
4 4 4 4
5 5 5 5 5
6 6 6 6 6 6
7 7 7 7 7 7 7
8 8 8 8 8 8 8 8
9 9 9 9 9 9 9 9 9
```

Pyramid pattern: 2

```
class pp3{
public static void main(String args[]){
for (int i = 1; i <= 9; i++) {
    for (int j = 1; j <= 9-i; j++) {
        System.out.print(" ");
    }
    for (int j = 1; j <= i; j++) {
        System.out.print(" "+j);
    }
    System.out.println();
}
}
```

Output:

```
C:\cdac>java pp2
  1
 1 2
1 2 3
1 2 3 4
1 2 3 4 5
1 2 3 4 5 6
1 2 3 4 5 6 7
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9
```

Pyramid pattern: 3

```
class pp3
{
public static void main(String args[])
{
for (int i = 1; i <= 9; i++) {
    for (int j = 1; j <= 9-i; j++) {
        System.out.print(" ");
    }
    for (int j = 1; j <= i; j++) {
        System.out.print("* ");
    }
    System.out.println();
}
}
```

Output:



```
C:\cdac>java pp3
  *
 * *
* * *
* * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

Pyramid pattern: 4

```
class pp4{

    public static void main(String args[]){

        for (int i = 1; i <= 9; i++) {

            for (int j = 1; j <= (9-i)*2; j++) {

                System.out.print(" ");

            }

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

                System.out.print(" "+j);

            }

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

                System.out.print(" "+j);

            }

            System.out.println("");

        }

    }

}
```

Output:

```
C:\cdac>java pp4

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

Pyramid pattern: 5

```
class pp5{

public static void main(String args[]){

for (int i = 9; i>=1; i--) {
    for (int j =(2*i); j>=1; j--) {
        System.out.print(" ");
    }

    for (int j = i; j<=9 ; j++) {
        System.out.print(" "+j);
    }
    for (int j =(8); j >=i; j--) {
        System.out.print(" "+j);
    }
    System.out.println("");
}
}
```

Output:

```
C:\cdac>java pp5
      9
    8 9 8
  7 8 9 8 7
6 7 8 9 8 7 6
5 6 7 8 9 8 7 6 5
4 5 6 7 8 9 8 7 6 5 4
3 4 5 6 7 8 9 8 7 6 5 4 3
2 3 4 5 6 7 8 9 8 7 6 5 4 3 2
1 2 3 4 5 6 7 8 9 8 7 6 5 4 3 2 1
```

Pyramid pattern: 6

```
class pp6
{

    public static void main(String args[])
    {

        for (int i = 9; i>=1; i--) {
            for (int j =(9-i); j>=1; j--) {
                System.out.print(" ");
            }
            for (int j = i; j>=1 ; j--) {
                System.out.print("* ");
            }
            System.out.println();
        }
    }
}
```

Output:



```
C:\cdac>java pp6
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

Pyramid pattern: 7

```
class pp7
{

    public static void main(String args[])
    {

        for (int i = 9; i>=1; i--) {
            for (int j =(9-i); j>=1; j--) {
                System.out.print(" ");
            }

            for (int j = i; j>=1 ; j--) {
                System.out.print(" "+i);
            }

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

Output:

```
C:\cdac>java pp7
9 9 9 9 9 9 9 9 9
 8 8 8 8 8 8 8 8
 7 7 7 7 7 7 7
 6 6 6 6 6 6
 5 5 5 5 5
 4 4 4 4
 3 3 3
 2 2
 1
```