

## Topics to discuss

- Print star Patterns

Top 20 star Pattern  
with code

Right Half Pyramid

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

3. Left Half Pyramid

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

4. Pyramid

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

5. Reverse Right Half Pyramid

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

6. Reverse Left Half Pyramid

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

Inverted Pyramid

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

9. Diamond Pattern

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

10. Hour Glass

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

11. Left Pascal Triangle

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

12. Right Pascal Triangle

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

Mountain Pattern

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

15. Butterfly Pattern

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

16. Hollow Square

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

Pyramid

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

19. Reverse Hollow Triangle

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

20. Hollow Diamond

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

# ① Square Pattern

```
static void pattern(int row, int column){  
    for (int i=1; i<=row; i++){  
        for (int j=1; j<=col; j++){  
            System.out.print("*");  
        }  
        System.out.println();  
    }  
}
```

I/p: rows = 5

columns = 5

O/p:

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

r = 3 , c = 3

i=1 j=1 2 3 4 x

i=2 j=1 2 3 4 x

i=3 j=1 2 3 4 x

i=4 x

j=1 j=2 j=3

i=1 \* \* \*

i=2 \* \* \*

i=3 \* \* \*

Outer for loop → No. of rows

Inner for loop → No. of columns.

## ② Right Half Pyramid

```
static void pattern2 (int row) {  
    for (int i = 1 ; i <= row ; i++) {  
        for (int j = 1 ; j <= i ; j++) {  
            System.out.print ("* ")  
        }  
        System.out.print ( "\n" );  
    }  
}
```

I/p : rows = 5

O/p :

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

$r = 3$

$i = 1 \quad j = 1 \quad 2 \times$   
 $i = 2 \quad j = 1 \quad 2 \quad 3 \times$   
 $i = 3 \quad j = 1 \quad 2 \quad 3 \quad 4 \times$   
 $i = 4 \times$

```
*  
* *  
* * *  
.
```

## 16. Hollow Square

```
static void pattern (int row, int col) {  
    for (int i = 1; i <= row; i++) {  
        for (int j = 1; j <= col; j++) {  
            if (i == 1 || j == 1 || i == row || j == col) {  
                System.out.print ("*");  
            }  
            else System.out.print (" ");  
        }  
        System.out.println();  
    }  
}
```

I/p : rows = 5  
columns = 5

O/p :

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

## 18. Hollow Pyramid

```
static void pattern18 (int row){
    for (int i=1 ; i<=row ; i++){
        for (int j=row-1 ; j>=i ; j--){
            System.out.print(" ");
        }
        for (int j=1 ; j<=(2*i)-1 ; j++){
            if (i==1 || j==1 || i==row || j==(2*i)-1)
                System.out.print("*");
            else System.out.print(" ");
        }
        System.out.println();
    }
}
```

I/p: row: 5

O/p:

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

$j = (2 \times i) - 1$

$i=1, j=1$

$i=2, j=3$

$i=3, j=5$

Follow Now



Start Practicing



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Arfin Parween



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