# AP Tutorials

*Java Programming classes under Aryan Singh*

## Week 6 Assignment

1.

```
     1
    2 2
   3 3 3
  4 4 4 4
 5 5 5 5 5
6 6 6 6 6 6
```

2.

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

3.

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

## 1. Number-increasing Pyramid Pattern

```java
import java.util.*;

public class GeeksForGeeks {
    // Function to demonstrate pattern
    public static void printPattern(int n)
    {
        int i, j;
        // outer loop to handle number of rows
        for (i = 1; i <= n; i++) {
            // inner loop to handle number of columns
            for (j = 1; j <= i; j++) {
                // printing column values upto the row
                // value.
```

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

            // print new line for each row
            System.out.println();
        }
    }

    // Driver Function
    public static void main(String args[])
    {
        int n = 6;
        printPattern(n);
    }
}
```

## 2. Reverse Left Half Pyramid

```
import java.util.*;

public class GeeksForGeeks {
    // Function to demonstrate pattern
    public static void printPattern(int n)
    {
        int i, j;

        // calculating number of spaces
        int num = 2 * n - 2;

        // outer loop to handle rows
        for (i = n; i > 0; i--) {
            // inner loop to print spaces.
            for (j = 0; j < n - i; j++) {
                System.out.print(" ");
            }
            // Decrementing value of num after each loop
            num = num - 2;
            // inner loop to print stars.
            for (j = 0; j < i; j++) {
                System.out.print("*");
            }

            // printing new line for each row
            System.out.println();
        }
    }
```

```
    // Driver Function
    public static void main(String args[])
    {
        int n = 6;
        printPattern(n);
    }
}
```

### 3. Reverse number triangle

```
import java.util.*;

public class GeeksForGeeks {

    // Function to demonstrate pattern
    public static void printPattern(int n)
    {
        int i, j;
        // outer loop to handle rows
        for (i = 1; i <= n; i++) {

            // inner loop to print spaces.
            for (j = 1; j < i; j++) {
                System.out.print(" ");
            }

            // inner loop to print value of j.
            for (j = i; j <= n; j++) {
                System.out.print(j + " ");
            }

            // printing new line for each row
            System.out.println();
        }
    }

    // Driver Function
    public static void main(String args[])
    {
        int n = 6;
        printPattern(n);
    }
}
```