FULL STACK DEVELOPMENT- WORKSHEET – 1

1.Printing pattern

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

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

2.Swap 2 numbers

```
public class Swap
{
   public static void main(String[] args)
   {
      int x = 10;
      int y = 20;
      int temp;

      System.out.println("before swapping : x = " + x + " y = " + y);

      temp = x;
      x = y;
      y = temp;

      System.out.println("after swapping : x = " + x + " y = " + y);
   }
}
```

3. Sum of fibonacci series numbers

```
import java.util.Scanner;
public class FibonacciSeriesSum
{
   public static void main(String[] args)
```

```
    {
        int len;
        Scanner se = new Scanner(System.in);
        System.out.println("enter length: ");
        len = se.nextInt();

        int sum=1;
        int fib =0;
        int a,b;
        if(len ==1)
            sum= 0;
        if(len == 2)
            sum = 1;

        if(len >= 3)
        {
            a=0;
            b=1;
            for(int i = 3; i <= len; i++)
            {
                fib = a+b;
                sum = sum + fib;
                a = b;
                b = fib;
            }
        }
        System.out.println("sum is: "+sum);
    }
}
```

4. Largest element in array

```
public class LargestElement
{
    public static void main(String[] args)
    {
        int[] arr = {3,7,2,5,1,49};
        int len = arr.length;
        int largest = arr[0];
        for(int i=1; i<len; i++)
        {
            if(arr[i] > largest)
                largest = arr[i];
        }
        System.out.println("largest element: " + largest);
    }
}
```

5.Finding duplicates in array

```
import java.util.*;

public class RemoveDuplicates
{
    public static void main(String[] args)
    {
        int[] arr = {1,2,2,3,3,3,4,5};
        int len = arr.length;
        Set<Integer> set = new HashSet<Integer>();

        int j = 0;

        for(int i=1; i<len; i++)
        {
            set.add(arr[i]);
        }


        System.out.println(set);

    }
}
```