String Lab

```
public class Test001 {
	public static void main (String[]args){
	   System.out.print("String : ");
//	     Scanner scan = new Scanner(System.in);
	   String str = "noor";

	   String result = getSwapString(str);
	   System.out.println(result);

	}
   static String getSwapString(String x){
	   String y = "";

	   int k = x.length()/2;
	   String p = x.substring(0, k);
	   String q = x.substring(x.length()/2);
	   y = q.concat(p);
	   return y;
   }
}
```

output :
orno----------

```
package Lab_05_04_18;

import java.io.FileNotFoundException;
import java.io.IOException;

public class Test002 {
   public static void main(String[] args) throws FileNotFoundException, IOException {

	//How to reverse String in Java using Iteration and Recursion?

	String str = "Welcome to Quantum Foundation";
	System.out.println("Original String: " + str);

	String reverseStr = new StringBuffer(str).reverse().toString();
	System.out.println("Reverse StringBuffer: " + reverseStr);

	reverseStr = reverse(str);
	System.out.println("Reverse Iteration: " + reverseStr);

	reverseStr = reverseRecursively(str);
	System.out.println("Reverse Recursion: " + reverseStr);
   }

   public static String reverse(String str) {
	StringBuilder strBuilder = new StringBuilder();
	char[] strChars = str.toCharArray();
```

```
      for (int i = strChars.length; i >= 0; i--) {
         strBuilder.append(strChars[i]);
      }

      return strBuilder.toString();
   }

   public static String reverseRecursively(String str) {

      //base case to handle one char string and empty string
      if (str.length() < 2) {
         return str;
      }
      return reverseRecursively(str.substring(1)) + str.charAt(0);

   }
}
```

What is output

```
---------------------------------------------------------------------------------------------------------
public class TestString {
    public static void main(String args[]){
        String s = 50+40+"Sakil"+ 50+50;
        System.out.println(s); // 5040Sakil5050
        s.concat("Thong");
        System.out.println(s); // 5040Sakil5050Thong
        byte [] b = {104, 105, 107, 106};
        String s2 = new String (b); // hikj
        s2.concat("Mohsena");
        System.out.println(s2); // hikjMohsena
    }
}
---------------------------------------------------------------------------------------------------------
public class SbCapacity {
    public static void main(String args[]){
        StringBuffer sb=new StringBuffer();
        System.out.println(sb.capacity()); // 16
        sb.append("Hello");
        System.out.println(sb.capacity()); // 16
        sb.append("java is my favourite language");
        System.out.println(sb.capacity()); // 70
        sb.ensureCapacity(10);
        System.out.println(sb.capacity()); // 70
        sb.ensureCapacity(50);
        System.out.println(sb.capacity()); // 70
    }
}

-------------------------------------------------------------------------------
-
 class Lab3 {
    private String apple ;
    public String getApple() {
        return apple;
    }
    public void setApple(String apple) {
        String s2 = new String("prasad");
```

```
        this.apple = s2;
    }
    public Lab3(String apple) {
        this.apple = apple;
    }
    public Lab3() {
    }
}
public class Lab1 extends Lab2 {
    private String apple ;
    public String getApple() {
        return apple;
    }
    public void setApple(String apple) {
        this.apple = apple;
    }
    public Lab1() {
    }
    public Lab1(String apple) {
        this.apple = apple;
    }
    public static void main(String[] args) {
        Lab1 obj = new Lab1("Apple");
        Lab3 obj3 = new Lab3("Apple");
        String s = "prasad";
        String s2 = "Apple";
        System.out.println(s2.equals(obj3.getApple()));
        System.out.println(s2.equals(s));
        System.out.println(s2 == obj3.getApple());
    }
}
```

```
import java.util.Scanner;
/**
 *
 *
 * @Question: Given a string separate the number and letter.
 *
 * @Hints:
 *
 * input
 * ---------
 * abcd1234
 * ASDFG3456
 * QWERT67890
 *
 * Output
 * ----------
 * abcd         1234
 * ASDFG        3456
 * QWERT        67890
 */
public class Problem1 {
    public static void main(String[] args){
        System.out.println(" Input : ");
        Scanner scan = new Scanner(System.in);
        String x = scan.nextLine();
//        String[] f = x.split("0-9", " ");
    }
}
```