**Assignment - 14**

**(Mutable Strings In Java)**

1. **What is Mutable String in Java? Explain with example?**

Ans: If we create a String, on that particular String if we try to perform any operation and if those changes gets reflected to the same String object then such Strings are called Mutable String.

We can create such Strings with the help of:

a). StringBuilder class

b). StringBuffer class

ex: StringBuilder s = new StringBuilder("Anurag");

System.*out*.println(s);

s.append("verma");

System.*out*.println(s); // AnuragVerma as Output

**2. Write a program to reverse a String?**

**// Input: PWSKILLS**

**// Output: SLLIKSPW**

Ans:

public class Q2 {

public static void main(String [] args) {

String s1 = "PWSKILLS";

String[] arr = s1.split("PW");

String s2 = "";

for (String n : arr) {

for (int i = n.length() - 1; i >= 0; i--) {

s2 = s2 + n.charAt(i);

}

}

s2 = s2.concat("PW");

System.*out*.println(s2);

}

}

**3. Write a program to reverse a String while preserving the position?**

**// Input: Think Twice**

**//Output: kniht eciwt**

Ans:

public class Q3 {

public static void main(String [] args){

String s1 = "Think Twice";

s1 = s1.toLowerCase();

String [] arr = s1.split(" ");

String s2 = "";

for(String n: arr){

for(int i = n.length()-1; i >= 0; i--){

s2 = s2 + n.charAt(i);

}

s2 = s2 + " ";

}

System.*out*.println(s2);

}

}

**4. Write a program to Sort a String Alphabetically?**

Ans:

public class Q4 {

public static void main(String [] args){

String s1 = "Anurag Verma";

System.*out*.println("Unsorted String: "+s1);

s1 = s1.toLowerCase().replace(" ", "");

char [] arr = s1.toCharArray();

char temp = '0';

for(int i = 0; i <= arr.length-1; i++){

for(int j = i+1; j <= arr.length-1; j++){

if(arr[j] < arr[i]){

temp = arr[i];

arr[i] = arr[j];

arr[j] = temp;

}

}

}

String s2 = "";

for(int i = 0; i <= arr.length-1; i++){

s2 = s2 + arr[i];

}

System.*out*.println("String Sorted Alphabetically: "+s2);

}

}