Strings in Java Assignment-14

1. What is Mutable String in java? Explain with an Examples..

Ans: The String is immutable, so its value cannot be changed. If the String doesn't remain immutable, any hacker can cause a security issue in the application by changing the reference value. The String is safe for multithreading because of its immutableness. Different threads can access a single "String instance".

What is an example of mutable String?

StringBuilder is an example of a mutable type. It has methods to delete parts of the string, insert or replace characters, etc. By contrast, StringBuilder objects are mutable.

2.WAP to reverse a String..

Input:"PWSKILLS"

Output:"SLLIKSPW

Ans:

```
package Assignment_Of_Mutable_String_in_Java;
import java.util.Scanner;
public class Reverse_a_String {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the value of String:");
        String s2=sc.nextLine();
        StringBuffer s1=new StringBuffer(s2);
        s1.reverse();
        System.out.println(s1);
    }
}
```

Output:

Enter the value of String:

PWSKILLS

SLLIKSWP

Process finished with exit code 0

3.WAP to reverse a sentence while preserving the position.

Input: Think Twice

Output:kniht eciwt

Ans:

```
package Assignment_Of_Mutable_String_in_Java;
import java.util.Scanner;

public class Reverse_String_while_preserving_position {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a sentence: ");
        String s1 = scanner.nextLine();
        String[] arrs1 = s1.split(""");
        StringBuffer s2 = new StringBuffer();
        for (int i = 0; i < arrs1.length; i++) {
            String s3 = arrs1[i];
            StringBuffer s4 = new StringBuffer(s3).reverse();
            s2.append(s4).append(" ");
        }
        System.out.println("Reversed sentence: " +
s2.toString().trim());
    }
}</pre>
```

Output:

Enter a sentence: Think Twice

Reversed sentence: knihT eciwT Process finished with exit code 0

4. WAP to sort a String Alphabetically?

Ans:

```
package Assignment_Of_Mutable_String_in_Java;
import java.util.Arrays;
import java.util.Scanner;

public class Sort_character_Alphabetically {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the sentence:");
        String sl=sc.nextLine();
        char arrs1[]=sl.toCharArray();
        Arrays.sort(arrs1);
        System.out.println(arrs1);
    }
}
```

Output:

Enter the sentence:

bhuwan chaudhary

aaabcdhhnruuwy

Process finished with exit code 0