

day-017-string-assignment

GitHub Link:

<https://github.com/irahuldutta02/pw-skills-jdsd-assignments/tree/main/day-017-string-assignment/codes>

1. What is Mutable String in Java Explain with an example

Mutable means changing over time or that can be changed. In a mutable string, we can change the value of the string and JVM doesn't create a new object. In a mutable string, we can change the value of the string in the same object. To create a mutable string in java, Java has two classes StringBuffer and StringBuilder where the String class is used for the immutable string.

```
public class MutableString
{
    public static void main (String[] args)
    {
        StringBuffer str1 = new StringBuffer("JavaGoal");
        StringBuilder str2 = new StringBuilder("Learning");

        System.out.println("Value of str1 before change : " +
str1);
        System.out.println("Value of str2 before change : " +
str2);

        str1.append(".com");
        str2.append(" website");

        System.out.println("Value of str1 after change : " +
str1);
        System.out.println("Value of str2 after change : " +
str2);
    }
}
```

2. WAP to reverse a String

Input: "PWSKILLS"

Output: "SLLIKSPW"

Question_02.java

```
// 2. WAP to reverse a String
// Input: "PWSKILLS"
// Output: "SLLIKSPW"
```

```

class Question_02 {

    static String revString(String str) {
        String nstr = "";
        for (int i = 0; i < str.length(); i++) {
            nstr = str.charAt(i) + nstr;
        }
        return nstr;
    }

    public static void main(String[] args) {
        String str = "PWSKILLS";

        String s1 = str.substring(0, 2);
        String s2 = str.substring(2, 8);

        System.out.println("Old String : " + str);

        String nstr = revString(s2) + s1;

        System.out.println("New String : " + nstr);
    }
}

```

Output :

```

Old String : PWSKILLS
New String : SLLIKSPW

```

3. WAP to reverse a sentence while preserving the position

Input: Think Twice

Output: "kniht eciwt"

Question_03.java

```

// 3. WAP to reverse a sentence while preserving the position
// Input: Think Twice
// Output: "kniht eciwt"

public class Question_03 {

    static String revString(String str) {
        String nstr = "";
        for (int i = 0; i < str.length(); i++) {
            nstr = str.charAt(i) + nstr;
        }
        return nstr;
    }
}

```

```

public static void main(String[] args) {
    String str = "Think Twice", nstr = "";
    str = str.toLowerCase();
    String[] sArr = str.split(" ");

    System.out.println("Original String : " + str);

    for (int i = 0; i < sArr.length; i++) {
        nstr = nstr + " " + revString(sArr[i]);
    }
    System.out.println("Reversed wString : " + nstr);
}
}

```

Output :

```

Original String : think twice
Reversed wString : kniht eciwt

```

4. WAP to sort a String Alphabetically

Question_04.java

```

// WAP to sort a String Alphabetically

import java.util.Arrays;
public class Question_04 {
    public static void main(String args[]) {
        String str = "Rahul";
        str = str.toLowerCase();
        char charArray[] = str.toCharArray();
        Arrays.sort(charArray);
        System.out.println(new String(charArray));
    }
}

```

Output :

```

ahlr

```