

Strings in Java Part-4

Assignment Questions

1->What is Mutable String in java explain with an example ?

Mutable strings are those whose content can be changed without creating new objects. They are called mutable strings.

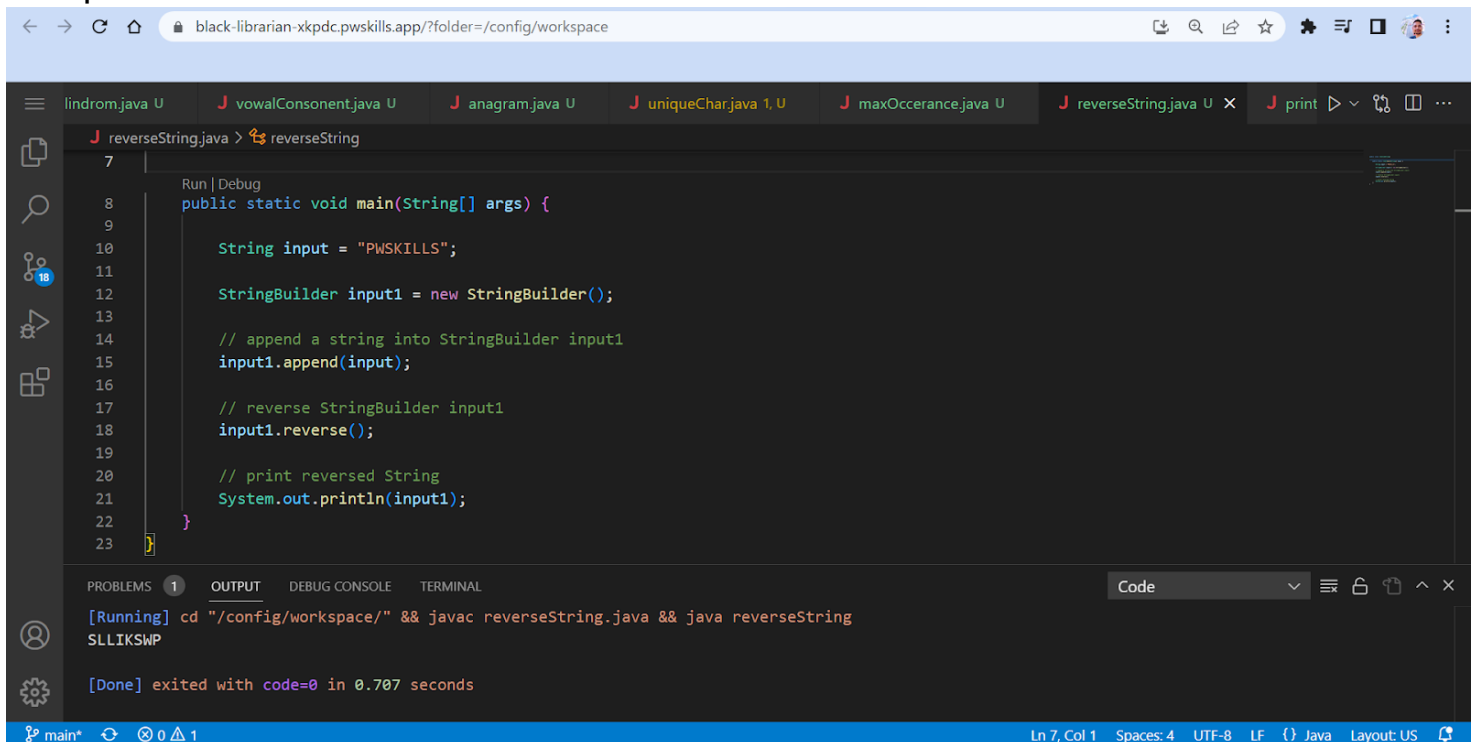
A> StringBuilder

B> StringBuffer

2->WAP to reverse a string ?

Input : "PWSKILLS"

Output : "SLLIKSPW"



The screenshot shows an IDE window with a Java file named `reverseString.java`. The code defines a `main` method that takes an array of strings as input. It creates a `StringBuilder` object, appends the input string "PWSKILLS", reverses it using the `reverse()` method, and prints the result. The output of the program is shown in the terminal as "SLLIKSWP".

```
Run | Debug
public static void main(String[] args) {
    String input = "PWSKILLS";
    StringBuilder input1 = new StringBuilder();
    // append a string into StringBuilder input1
    input1.append(input);
    // reverse StringBuilder input1
    input1.reverse();
    // print reversed String
    System.out.println(input1);
}
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL

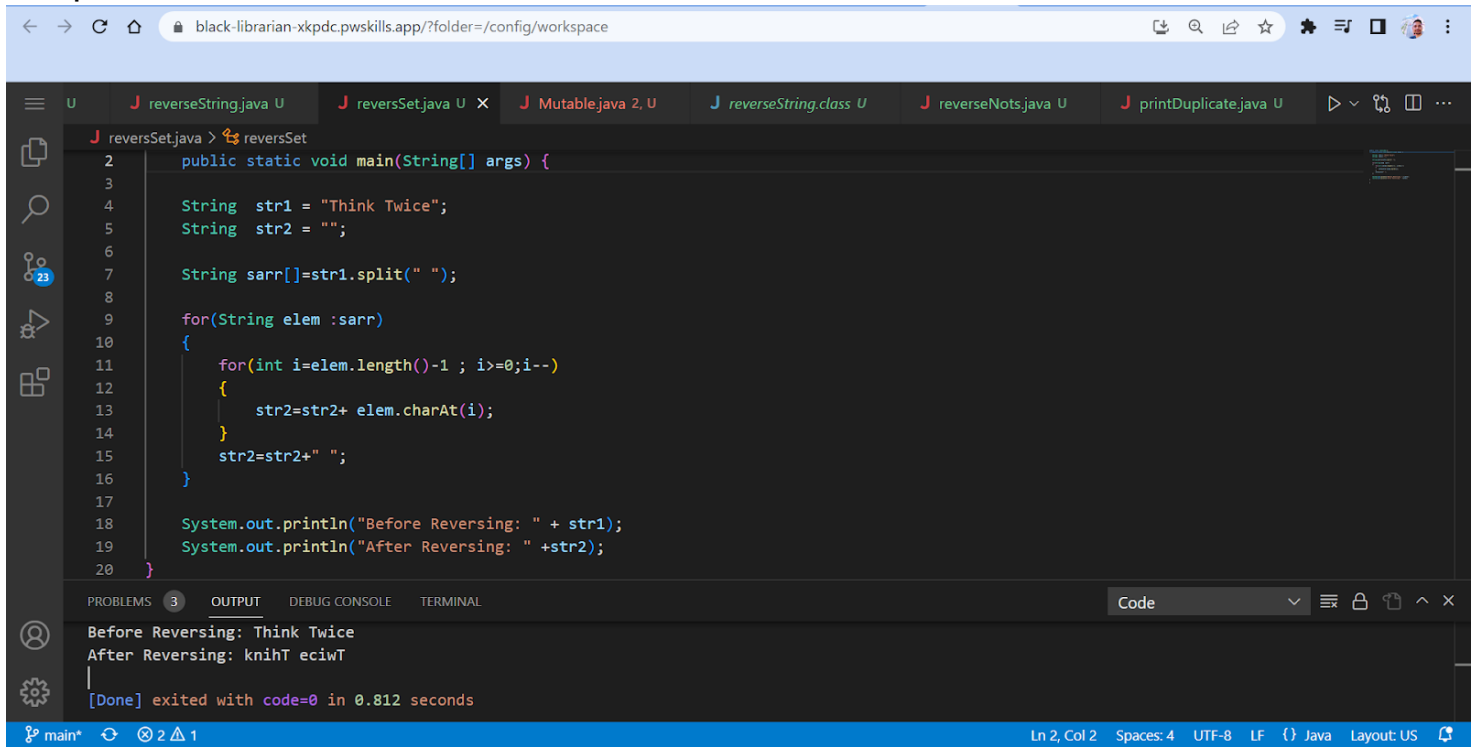
[Running] cd "/config/workspace/" && javac reverseString.java && java reverseString
SLLIKSWP

[Done] exited with code=0 in 0.707 seconds

3->WAP to reverse a sentence while preserving the position?

Input : "Think Twice"

Output : "kniht eciwt"



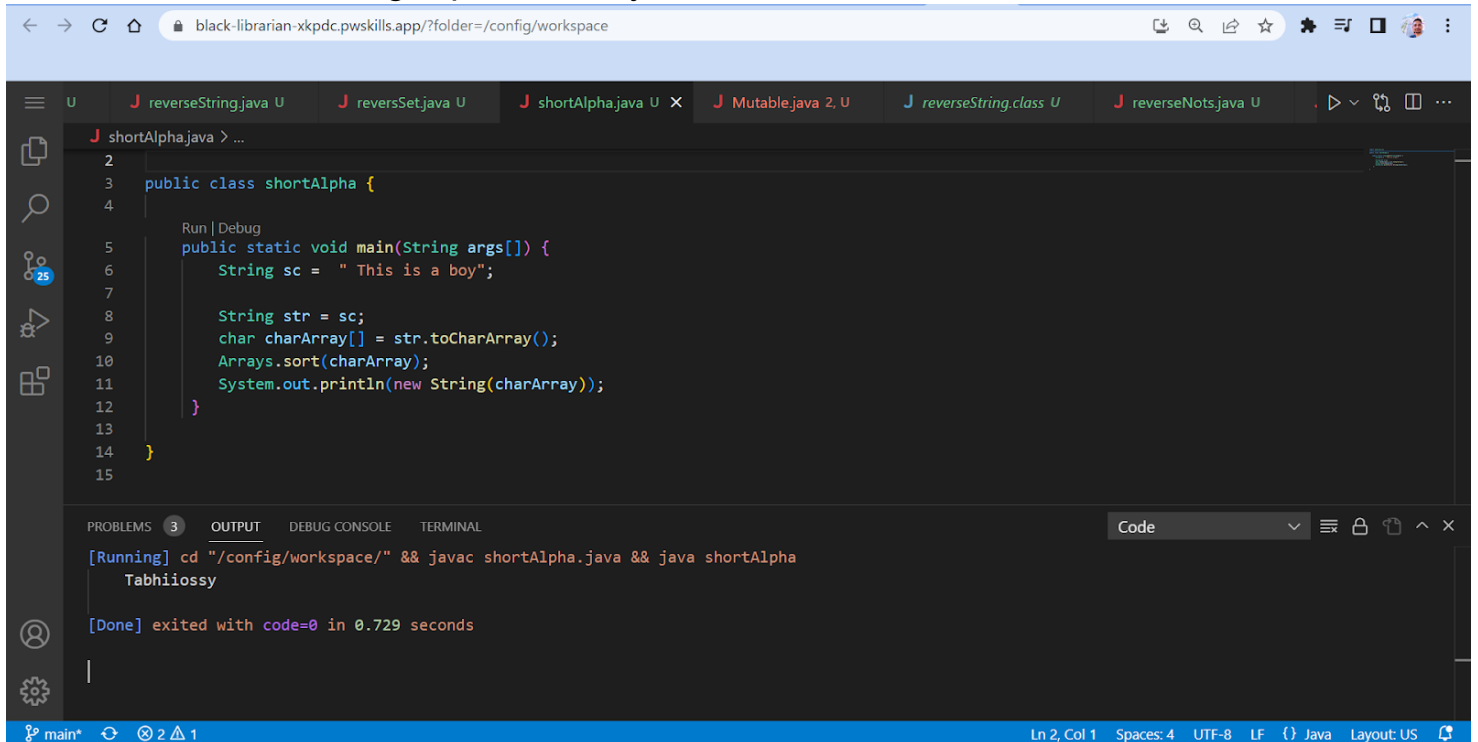
The screenshot shows an IDE with a Java file named `reversSet.java`. The code implements a method to reverse a sentence while preserving the position of each word. It splits the input string "Think Twice" into an array of words, reverses each word individually, and then concatenates them back together. The output shows "Before Reversing: Think Twice" and "After Reversing: kniht eciwt".

```
1 reversSet.java > reversSet
2 public static void main(String[] args) {
3
4     String str1 = "Think Twice";
5     String str2 = "";
6
7     String sarr[]=str1.split(" ");
8
9     for(String elem :sarr)
10    {
11        for(int i=elem.length()-1 ; i>=0;i--)
12        {
13            str2=str2+ elem.charAt(i);
14        }
15        str2=str2+" ";
16    }
17
18    System.out.println("Before Reversing: " + str1);
19    System.out.println("After Reversing: " +str2);
20 }
```

OUTPUT

```
Before Reversing: Think Twice
After Reversing: kniht eciwt
[Done] exited with code=0 in 0.812 seconds
```

4->WPA to short a string Alphabetically ?



The screenshot shows an IDE with a Java file named `shortAlpha.java`. The code implements a method to sort a string alphabetically. It converts the input string "This is a boy" into a character array, sorts the array, and then prints the result. The output shows "Running cd "/config/workspace/" && javac shortAlpha.java && java shortAlpha Tabhiiossy".

```
1 shortAlpha.java > ...
2
3 public class shortAlpha {
4
5     Run | Debug
6     public static void main(String args[]) {
7         String sc = " This is a boy";
8
9         String str = sc;
10        char charArray[] = str.toCharArray();
11        Arrays.sort(charArray);
12        System.out.println(new String(charArray));
13    }
14 }
15
```

OUTPUT

```
[Running] cd "/config/workspace/" && javac shortAlpha.java && java shortAlpha
Tabhiiossy
[Done] exited with code=0 in 0.729 seconds
```

Note:-Please create a Google Document and write your answers and upload the shareable link of the Google Document with view access during the submission of the assignment.