Java Programming

Assignment 07

Create a project called Assignment07. Create a Java class, also called Assignment067 and copy this code into your IDE:

Assignment07.java

```
public class Assignment07
{
  public static void main(String args[]){

    System.out.println("Greetings: this program is written by Matt Weisfeld");

    String reverseStr;

    // create object instance
    MyStringClass myStrObject = new MyStringClass();

    // get string from console
    String str = myStrObject.getString();
    System.out.println("You entered this string: " + str);

    // reverse string
    reverseStr = myStrObject.reverseString(str);

    // print out reversed string
    System.out.println("The string reversed is: " + reverseStr);

  }
}
```

First, change the greetings to indicate that you wrote the program - not me ☺.

Next, create a class called *MyStringClass.java* that will provide methods to process strings. This assignment focuses on code to reverse a string. The first part of the assignment implements code using the library class called StringBuilder - which I provide. Please study this and get it running.

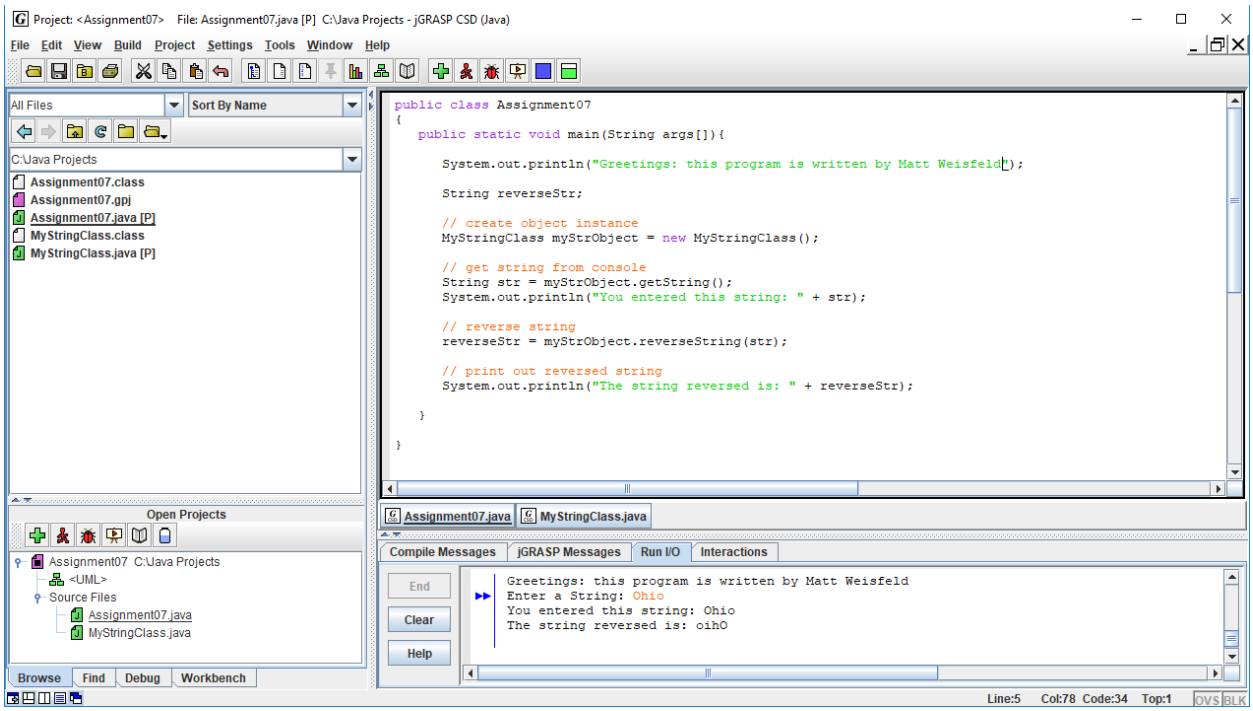
Class StringBuilder

https://docs.oracle.com/javase/7/docs/api/java/lang/StringBuilder.html

MyStringClass.java

```
import java.util.Scanner;
public class MyStringClass
{

  public String reverseString (String myStr){

    StringBuilder str = new StringBuilder(myStr);
    StringBuilder strReverse;

    // reverse characters of the StringBuilder and print it
    strReverse = str.reverse();

    return strReverse.toString();

  }

  public String getString() {
    // Get console String input
    System.out.print("Enter a String: ");
    Scanner in = new Scanner(System.in);
    String str = in.nextLine();
    return (str);
  }
}
```

In jGrasp (the IDE that I am using) the screen will look like this after a successful compile and execution.



This is a working application – when I enter "Ohio" the return argument is "oihO".

Note that the implementation here uses the `StringBuilder` library class.

All that you need to do (and I don't say that in a trivial manner) is to replace the implementation with the `StringBuilder` library class and write your own code from scratch to accomplish the same thing.

In short, you need to keep the same interface:

```
public String reverseString (String myStr){


}
```

And then write the code to reverse the string without using the `StringBuilder` library class. In essence, you are writing the `StringBuilder` library class.

What to Turn In

All you need to turn in is the completed MyStringClass class – in a file called MyStringClass.java - with your original code implementing the string reversal.

So please upload the file MyStringClass.java to Blackboard. I don't need the entire project. I will simply add the file you submit to my project and test it.