

Name: Dhiraj Birajdar
Batch: 1154
Homework: String

String Demonstration:

```
package stringdemo;

public class StringDemo {

    public static void main(String[] args) {

        // Creating strings using literals
        String str1 = "Hello, ";
        String str2 = "World!";

        // Creating string using new keyword
        String str3 = new String("Hello, World!");

        // Creating string using new StringBuffer, StringBuilder
        StringBuffer stringBuffer = new StringBuffer("Hello");
        StringBuilder stringBuilder = new StringBuilder("World");

        // methods of StringBuffer and StringBuilder modifies original string
        stringBuffer.append(stringBuilder);
        stringBuilder.replace(0, 5, str3);

        System.out.println(stringBuffer);
        System.out.println(stringBuilder);

        // Concatenating strings
        String result = str1 + str2;
        System.out.println("Concatenated String: " + result);
    }
}
```

```
// Finding the length of a string
int length = result.length();
System.out.println("Length of the String: " + length);

// Accessing characters in a string
char firstChar = result.charAt(0);
char lastChar = result.charAt(length - 1);
System.out.println("First character: " + firstChar);
System.out.println("Last character: " + lastChar);

// Substring extraction
String substring = result.substring(0, 5);
System.out.println("Substring: " + substring);

// String comparison
String anotherString = "Hello, World!";
boolean isEqual = result.equals(anotherString);
System.out.println("Strings are equal: " + isEqual);

// Case-insensitive comparison
boolean isEqualIgnoreCase =
result.equalsIgnoreCase(anotherString);
System.out.println("Case-insensitive comparison: " +
isEqualIgnoreCase);

// Searching for a substring
boolean contains = result.contains("World");
System.out.println("Contains 'World': " + contains);

// Replacing characters in a string
String replacedString = result.replace('o', 'X');
System.out.println("Replaced String: " + replacedString);
```

```
// Converting to uppercase and lowercase  
String upperCase = result.toUpperCase();  
String lowerCase = result.toLowerCase();  
System.out.println("Uppercase: " + upperCase);  
System.out.println("Lowercase: " + lowerCase);  
}  
}
```