

“JP Practical 7: Write a program in Java to demonstrate various operations on string functions”

A] Code:

```
package command.line.apps;

public class G_StringFunctions {
    public static void main(String[] args) {
        // Initialization of strings
        String str1 = "Hello, ";
        String str2 = "Java!";
        String str3 = "java";
        String str4 = "  Trim me!  ";
        String str5 = "Programming is fun.";

        // Concatenation
        String resultConcat = str1.concat(str2);
        System.out.println("Concatenation Result: " + resultConcat);

        // Length
        int length = str1.length();
        System.out.println("Length of str1: " + length);

        // Character at index
        char charAtIndex = str2.charAt(3);
        System.out.println("Character at index 3 in str2: " + charAtIndex);

        // Substring
        String substring = str5.substring(0, 11);
        System.out.println("Substring of str5 (0-10): " + substring);

        // Uppercase and lowercase
        String uppercase = str3.toUpperCase();
        System.out.println("Uppercase of str3: " + uppercase);

        String lowercase = str2.toLowerCase();
        System.out.println("Lowercase of str2: " + lowercase);

        // Replace
        String replacedString = str5.replace("fun", "awesome");
        System.out.println("After replacement: " + replacedString);
    }
}
```

```
// Trim
String trimmedString = str4.trim();
System.out.println("After trimming str4: '" + trimmedString + "'");

// Checking equality
boolean isEqual = str3.equals(str2);
System.out.println("Are str3 and str2 equal? " + isEqual);

// Comparison
int comparison = str3.compareTo(str2);
System.out.println("Comparison result (str3 vs. str2): " + comparison);
}
}
```

B] O/P:

```
Concatenation Result: Hello, Java!
Length of str1: 7
Character at index 3 in str2: a
Substring of str5 (0-10): Programming
Uppercase of str3: JAVA
Lowercase of str2: java!
After replacement: Programming is awesome.
After trimming str4: 'Trim me!'
Are str3 and str2 equal? false
Comparison result (str3 vs. str2): 32
```