

Experiment - 5

Demonstrating string manipulation in Java.

Write a Java program that demonstrates various string manipulation techniques. The program should include string concatenation, conversion to uppercase/lower case, and extraction of substring. It should then display the results of these operations.

Aim:-

To demonstrate various string manipulation techniques in Java, such as concatenation, conversion to upper/lower case and substring extraction.

Objective:-

To understand basic string operations and how to manipulate strings efficiently in Java.

Program:-

```
public class StringManipEx {  
    public static void main (String [] args) {  
        String str = "Hello, Java Programming!";  
        String concat = str + " Welcome to Java!";  
        int length = str.length();  
    }  
}
```

```

String upperCase = str.toUpperCase();
String lowerCase = str.toLowerCase();
String subString = str.substring(7, 12);
System.out.println("Concatenated string: " + concat);
System.out.println("Length of string: " + string);
System.out.println("Uppercase: " + upperCase);
System.out.println("Lowercase: " + lowerCase);
System.out.println("SubString (7, 12): " + subString);
}
}

```

Test case:

Test case: 1

- Test Name: String concatenation
- Input: "Hello, Java Programming"
- Expected result: "Hello, Java programming!
Welcome to Java"
- Actual result: "Hello, Java programming!
Welcome to Java"
- Pass/Fail: Pass.

Test case: 2

- Test Name: Upper case conversion
- Input: "Hello, Java programming"
- Expected result: "HELLO, JAVA PROGRAMMING!"
- Actual result: "HELLO, JAVA PROGRAMMING!"
- Pass/Fail: Pass.

Test case :-3

- Test Name :- Substring Extraction.
- Input :- "Hello, Java programming"
- Expected result :- "Java"
- Actual result :- "Java"
- Pass/Fail :- Pass.

Conclusion :-

This program demonstrates basic string operations in Java, including string concatenation, conversion to uppercase & lowercase & substring extraction. It helps in understanding how to perform common string manipulation effectively.

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