Assignment – 12th (Strings in Java)

1. Write a simple String program to take input from user.

Ans: - Here is a simple program in Java that takes input from the user and stores it as a string:

```java
import java.util.Scanner;

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

        Scanner scanner = new Scanner(System.in);
        System.out.print("Please enter your name: ");

        String name = scanner.nextLine();
        System.out.println("Hello, " + name + "!");
    }
}
```

OUTPUT

```
Please enter your name: Rahul Kumar
Hello, Rahul Kumar!


...Program finished with exit code 0
Press ENTER to exit console.
```

2. How do you concatenate two strings in Java, Give an example?

Ans: - Concatenate two strings by using the ***`+`*** operator & ***`concat`*** method. Here's an example:

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

        String fname = "Rahul";
        String lname = " Kumar";

        // String result = fname + lname;
        String result = fname.concat(lname);
        System.out.println(result);

    }
}
```

OUTPUT

```
Rahul Kumar


...Program finished with exit code 0
Press ENTER to exit console.
```

3. How do you find the length of a string in Java, Explain with an example.

Ans: - We can find the length of a string using the ***`length()`*** method of the String class. The ***`length()`*** method returns the number of characters in the string.

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

        String str = "Rahul Kumar!";
        int length = str.length();

        System.out.println("String is: " + length);
    }
}
```

OUTPUT

```
The length of the string is: 12


...Program finished with exit code 0
Press ENTER to exit console.
```

4. How do you compare two strings in Java, Give an example?

Ans: - We can compare two strings using the ***`equals()`*** method of the ***`String`*** class or the ***`equalsIgnoreCase()`*** method to compare strings without considering case sensitivity. Here's an example:

```java
public class Main {
    public static void main(Strng[] args) {

        String str1 = "Hello";
        String str2 = "Hello";

        // Using the equals() method

        if (str1.equals(str2)) {
            System.out.println("The strings are equal.");
        }
        else {
            System.out.println("The strings are not equal.");
        }

        // Using the equalsIgnoreCase() method:

        // if (str1.equalsIgnoreCase(str2)) {
        //     System.out.println("The strings are equal.");
        // }
        // else {
        //     System.out.println("The strings are not equal.");
        // }
    }
}
```

OUTPUT

```
The strings are equal.


...Program finished with exit code 0
Press ENTER to exit console.
```

5. Write a program to find the length of the string “refrigerator”.

Ans: - Here is a program in Java to find the length of the string "refrigerator":

```
public class Main {
  public static void main(String[] args) {
    String string = "refrigerator";
    int length = string.length();
    System.out.println("The length of the string is: " + length);
  }
}
```

OUTPUT

```
The length of the string is: 12


...Program finished with exit code 0
Press ENTER to exit console.
```

6. Write a program to check if the letter ‘e’ is present in the word “Umbrella”.

Ans: - Here's a Java program to check if the letter 'e' is present in the word "Umbrella":

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

        String word = "Umbrella";
        boolean isPresent = word.contains("e");

        if (isPresent) {
            System.out.println("The letter 'e' is present in the word
'" + word + "'.");
        }
        else {
            System.out.println("The letter 'e' is not present in the
word '" + word + "'.");
        }
    }
}
```

OUTPUT

```
The letter 'e' is present in the word Umbrella.


...Program finished with exit code 0
Press ENTER to exit console.
```

7. Write a program to delete all consonants from the string ”Hello, have a good day”

Ans: - Here's a Java program to delete all consonants from the string "Hello, have a good day":

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

        String str = "Hello, have a good day";
        String vowels = "aeiouAEIOU";
        StringBuilder sb = new StringBuilder();

        for (int i = 0; i < str.length(); i++) {
            char c = str.charAt(i);

            if (vowels.indexOf(c) != -1){
                sb.append(c);
            }
        }
        System.out.println("Resultant string after deleting
consonants: " + sb.toString());
    }
}
```

OUTPUT

```
Resultant string after deleting consonants: eoaeaooa


...Program finished with exit code 0
Press ENTER to exit console.
```