1) write a simple String program to take input from the user.

```
Ans:
```

```
import java.util.Scanner;

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

        // Create a Scanner object to read user input
        Scanner scanner = new Scanner(System.in);

        // Prompt the user for input
        System.out.print("Enter a string: ");

        // Read the user's input
        String userInput = scanner.nextLine();

        // Print the user's input
        System.out.println("You entered: " + userInput);

        // Close the scanner
        scanner.close();
    }
}
```

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

Ans:

We can concatenate two strings using the `+` operator or the `concat()` method. An example of both approaches:

```
String str1 = "Hello";
String str2 = "World";
String result = str1 + " " + str2;
System.out.println(result);
```

i) Using the `+` Operator:

```
Output:

""

Hello World

""

ii) Using the `concat()` Method:

String str1 = "Hello";

String str2 = "World";

String result = str1.concat(" ").concat(str2);

System.out.println(result);

Output:

""

Hello World
```

3) How do you find the length of string in Java with the help of an example?

Ans:

To find the length of a string in Java, we can use the `length()` method. This method allows us to determine how many characters are present in a given string.

Example:

Let's say we have a string variable called `str` with the value "Hello, World!". To find its length, we can call the `length()` method on the string variable like this:

```
String str = "Hello, World!";
int length = str.length(); // it will give length = 13
```

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

Ans:

To compare two strings in Java, we can use of the `equals()` method or the `compareTo()` method.

Example:

```
i) Using the 'equals()' method:
String str1 = "Hello";
String str2 = "World";
boolean isEqual = str1.equals(str2);
System.out.println("Are the strings equal? " + isEqual);
ii) Using the `compareTo()` method:
String str1 = "Hello";
String str2 = "World";
int result = str1.compareTo(str2);
System.out.println("Comparison result: " + result);
5) Write a program to find the length of String "refrigerator".
Ans:
public class StringLengthProgram {
  public static void main(String[] args) {
     String str = "refrigerator";
     int length = str.length();
     System.out.println("The length of the string is: " + length);
  }
}
6) Write a program to check if the letter 'e' is present in the word
'Umbrella'.
Ans:
public class LetterCheckProgram {
  public static void main(String[] args) {
     String word = "Umbrella";
     boolean isPresent = false;
```

for (int i = 0; i < word.length(); i++) {

```
if (word.charAt(i) == 'e') {
    isPresent = true;
    break;
}

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

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

Ans:

```
public class ConsonantRemovalProgram {
  public static void main(String[] args) {
     String str = "Hello, have a good day";
     String result = "";
     for (int i = 0; i < str.length(); i++) {
        char ch = str.charAt(i);
        // Check if the character is a consonant (not a, e, i, o, u or their uppercase equivalents)
        if (!(ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u' ||
              ch == 'A' || ch == 'E' || ch == 'I' || ch == 'O' || ch == 'U')) {
           result += ch;
        }
     }
     str = result;
     System.out.println( str);
  }
}
```