

```

import java.util.Scanner;
public class Operation{
    public static void main(String[] args){
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter the first string:");
        String str1=scanner.nextLine();
        System.out.print("Enter the second string:");
        String str2=scanner.nextLine();
        System.out.println("choose a string operation:");
        System.out.println("1.find length");
        System.out.println("2.convert to uppercase");
        System.out.println("3.convert to lowercase");
        System.out.println("4.concatenate strings");
        System.out.println("5.check if substring exists");
        System.out.println("6.check if string is empty");
        System.out.println("7.exit");

        while (true){
            System.out.println("\n Enter your choice:");
            int choice=scanner.nextInt();
            scanner.nextLine();
            switch (choice){
                case 1:
                    System.out.println("1.length of first string:"+str1.length());
                    System.out.println("1.length of second string:"+str2.length());
                    break;
                case 2:
                    System.out.println("2.first string in uppercase:"+str1.toUpperCase());
                    System.out.println("2.second string in uppercase:"+str2.toUpperCase());
                    break;
                case 3:
                    System.out.println("3.first string in LowerCase:"+str1.toLowerCase());
                    System.out.println("3.second string in LowerCase:"+str2.toLowerCase());
                    break;
                case 4:
                    System.out.println("4. Concatenated string: " + str1.concat(str2));
                    break;
                case 5:
                    System.out.print("5. Enter a substring to check in the first string:");
                    String substring = scanner.nextLine();
                    if (str1.contains(substring)) {
                        System.out.println("5. Substring exists in the first string.");
                    } else {
                        System.out.println("5. Substring does not exist in the first string.");
                    }
                    break;
            }
        }
    }
}

```

Enter the first string:HELLO WOLRD
Enter the second string:JAVA PROGRAMMING
choose a string operation:
1.find length
2.convert to uppercase
3.convert to lowercase
4.concatenate strings
5.check if substring exists
6.check if string is empty
7.exit

Enter your choice:
1
1.length of first string:11
1.length of second string:16

Enter your choice:
2
2.first string in uppercase:HELLO WOLRD
2.second string in uppercase:JAVA PROGRAMMING

Enter your choice:
3
3.first string in LowerCase:hello wolrd
3.second string in LowerCase:hello wolrd

Enter your choice:
4
4. Concatenated string: HELLO WOLRDJAVA PROGRAMMING

Enter your choice:
5
5. Enter a substring to check in the first string:6
5. Substring does not exist in the first string.

Enter your choice:
6
6. Is the first string empty? false
6. Is the second string empty? false

Enter your choice:
7
7. Exiting the program !

- Enter your choice:

```
1
    case 6:
        System.out.println("6. Is the first string empty? " + str1.isEmpty());
        System.out.println("6. Is the second string empty? " + str2.isEmpty());break;

    case 7:
        System.out.println("7. Exiting the program !");
        break;
    default:
        System.out.println("Invalid choice. Please try again.");
        return;
}
}
```