Q1. Read a string, and count the number of alphabets, digits, symbols, space characters, words present in a string.

In the same program, accept a string and check whether it is present in the main string or not.

Input: Java18 is a robust language.

Count: 28
Alphabets:?
Digits:?
Symbols:?
Words:?
Enter a substring: robust

Searching substring is present in your string

```
package Strings;
import java.util.*;
public class String_Manipulation {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.println("enter a String");

        String str = sc.nextLine();

        char ch;
        int alpha, digit, symbol, space, word;

        alpha=digit=symbol=space=word=0;

        for(int i=0;i<str.length();i++)
        {
            ch=str.charAt(i);
```

```
            if(Character.isAlphabetic(ch))
                alpha++;
            else if(Character.isDigit(ch))
                digit++;
            else if(Character.isWhitespace(ch))
                space++;
            else
                symbol++;
        }

        word=space+1;

System.out.println("No.of alphabets" + alpha);
System.out.println("No.of digits" + digit);
System.out.println("No.of spaces" + space);
System.out.println("No.of symbols" + symbol);
System.out.println("No.of words" + word);

System.out.println("Enter a substring");

String str1=sc.nextLine();

    if(str.contains(str1))
          System.out.println("Substring present
in main string");
    else
          System.out.println("Substring is not
present in main string");

    }

}
```

Output:

```
enter a String
java18 is a robust language.
No.of alphabets 21
No.of digits 2
```

```
No.of spaces 4
No.of symbols 1
No.of words  5
Enter a substring
language
Substring present in main string
```

(or)

```
enter a String
java18 is a robust language.
No.of alphabets 21
No.of digits 2
No.of spaces 4
No.of symbols 1
No.of words 5
Enter a substring
jav18
Substring is not present in main string
```

Q2. Read userid, password and compare with predefined string constants. (use equal Ignore case method)

Eg: uid:AF0123 PWD:stu@123

```
package Strings;
import java.util.*;
public class Login {

  public static void main(String[] args) {

     String uid, pwd;

     String uname= "AF0311774";
     String pword= "ram@123";

     Scanner key = new Scanner(System.in);

     System.out.println("Enter username ");
     uid = key.next();

     System.out.println("Enter Password ");
     pwd = key.next();

     if(uid.equalsIgnoreCase(uname) &
pwd.equalsIgnoreCase(pword))
        System.out.println("valid username and
password");
     else
        System.out.println("Invalid username
and password!!!");


    }

}
```

Output:

```
Enter username
AF0311774
Enter Password
ram@123
valid username and password
```

(or)

```
Enter username
AF0311774
Enter Password
ram123
Invalid username and password!!!
```