

ASSIGNMENT SCALA 1

TASK 1:

EXPLANATION: TO DO THE TASK WE NEED TO CREATE A SCALA PROJECT.

STEPS:

1) FIRST WE NEED TO OPEN THE ECLIPSE. THEN CLICK ON "FILE" AND CLICK ON "SCALA PROJECT". THEN GIVE THE "PROJECT NAME". USE THE EXECUTION ENVIRONMENT JRE AS "javaSE-1.8". THEN CLICK ON "NEXT" AND THEN "FINISH". THIS WAY YOUR SCALA PROJECT IS CREATED.

2) THEN AT LEFT CORNER YOU WILL SEE YOYR PROJECT NAME. RIGHT CLICK ON THE PROJECT NAME THEN CLICK ON "CREATE PACKAGE" AND GIVE THE NAME FOR IT THEN CLICK FINISH.

3) NOW YOU WILL SEE INSIDE YOUR PROJECT NAME "src". RIGHT CLICK ON IT AND CLICK ON THE OPTION "SCALA PACKAGE OBJECT" AND THEN GIVE A NAME TO IT. THEN CLICK FINISH.

EXPLANATION : THUS IN THIS WAY WE CREATED OUR SCALA PACKAGE AND THEN WE CAN START WITH THE CODE

EXPLANATION: NOW WE NEED TO DEFINE THE MAIN CLASS WITHOUT IT THE CODE WILL NOT WORK.

```
COMMAND:  def main(args: Array[String]): Unit = {
```

EXPLANATION: NOW NEXT WE CREATED A LIST WITH THE PARAMETERS GIVEN AND THEN STORED IN A VARAIBALE "a". "val" INDICATES THAT THE LIST IN IMMUTABLE MEANS THE VALUES INSIDE THE LIST CANNOT BE CHNAGED.

```
COMMAND:  val a = List ("alpha","gamma","omega","zeta","beta")
```

EXPLANATION: NOW NEXT HERE DID THE COUNT OPERATION FOR THE STRINGS HAVING LENGHT = 4 AND STORED THE VALUE INSIDE A VARIABLE "b". "var" MEANS THAT THE VALUE CAN BE CHANGED THAT IS IT IS MUTABLE. THEN USED PRINT FUNCTION TO GIVE THE OUTPUT.

```
COMMAND:  var b = a.count(s=>s.length == 4)
          println("count of strings with length equal to 4 =",b)
```

EXPLANATION: NOW NEXT DID THE COUNT OPERATION FOR THE STRINGS HAVING STARTING CHARACTER AS "a" AND STORED THE VALUE INSIDE A VARIABLE "d". "var" MEANS THAT THE VALUE CAN BE CHANGED THAT IS IT IS MUTABLE. THEN USED PRINT FUNCTION TO GIVE THE OUTPUT.

```
COMMAND:  var d = a.count(s=> s.startsWith("a"))
          println("count strings starting with alphabet ='a'",d)
```

EXPLANATION: NOW NEXT DID THE COUNT OPERATION FOR THE STRINGS HAVING LETTER

= "m" AND STORED THE VALUE INSIDE A VARIABLE "e". "var" MEANS THAT THE VALUE CAN BE CHANGED THAT IS IT IS MUTABLE. THEN USED PRINT FUNCTION TO GIVE THE OUTPUT.

```
COMMAND: var e = a.count(s=> s.contains("m"))
        println("count of strings containing alphabet ='m'",e)
```

SOLUTION:

```
package acadgild_scala

object sct {
  def main(args: Array[String]): Unit = {

//task 1
//creating a list with values

    val a = List ("alpha","gamma","omega","zeta","beta")

//for count operation with strings having length = 4

    var b = a.count(s=>s.length == 4)
    println("count of strings with length equal to 4 =",b)

//count operation of strings starting with alphabet = 'a'

    var d = a.count(s=> s.startsWith("a"))
    println("count strings starting with alphabet ='a'",d)

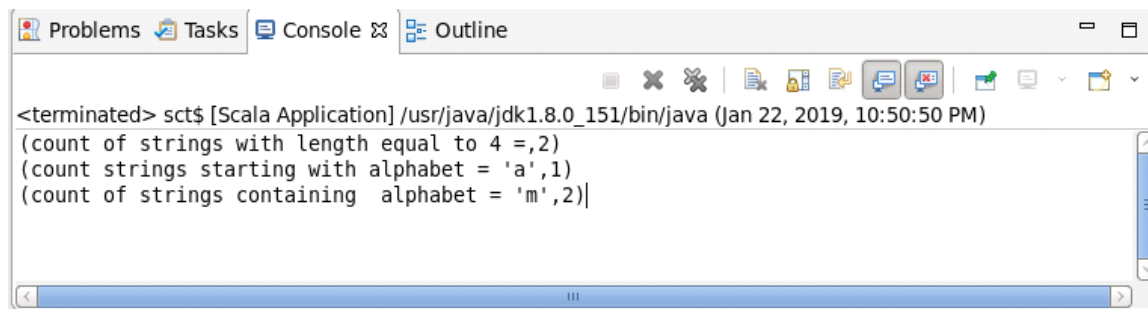
//count of strings containing  alphabet = 'm'

    var e = a.count(s=> s.contains("m"))
    println("count of strings containing alphabet ='m'",e)

  }

}
```

OUTPUT:



The screenshot shows an IDE window with four tabs: Problems, Tasks, Console, and Outline. The Console tab is active, displaying the output of a Scala application. The output text is as follows:

```
<terminated> sct$ [Scala Application] /usr/java/jdk1.8.0_151/bin/java (Jan 22, 2019, 10:50:50 PM)
(count of strings with length equal to 4 =,2)
(count strings starting with alphabet = 'a',1)
(count of strings containing  alphabet = 'm',2)|
```

The console window includes a toolbar with icons for running, debugging, and other IDE functions. A vertical scrollbar is visible on the right side of the console area.