Problem Statement

Task 1

Given a list of strings - List[String] (“alpha”, “gamma”, “omega”, “zeta”, “beta”)
- Find count of all strings with length 4.
- Convert the list of string to a list of integers, where each string is mapped to its corresponding length.
- Find count of all strings which contain alphabet ‘m’.
- Find the count of all strings which start with the alphabet ‘a’.

Task 2

Create a list of tuples, where the 1st element of the tuple is an int and the second element is a string.
Example - ((1, ‘alpha’), (2, ‘beta’), (3, ‘gamma’), (4, ‘zeta’), (5, ‘omega’))
- For the above list, print the numbers where the corresponding string length is 4.
- find the average of all numbers, where the corresponding string contains alphabet ‘m’ or alphabet ‘z’.

Task1:-

COMMANDS:-

val list1=List[String]("alpha","gamma","omega","zeta","beta")

```
(i) println(list1.count(s=>s.length==4))
```

```
(ii) val countlist1 = list1.map( (clist: String) => {clist.length})
for (clist <- countlist1) {println(clist)}
```

```
(iii) val list2=list1.filterNot
 {
  pair =>
   val xss = pair.split("m")
   list1.containsSlice(xss)
 }
var a=0
for(pair <- list2)
{
a=a+1
}
println(a)
```

```
(iv) list1.count(s=>s.startsWith("a"))
```

EXPLANATION:-

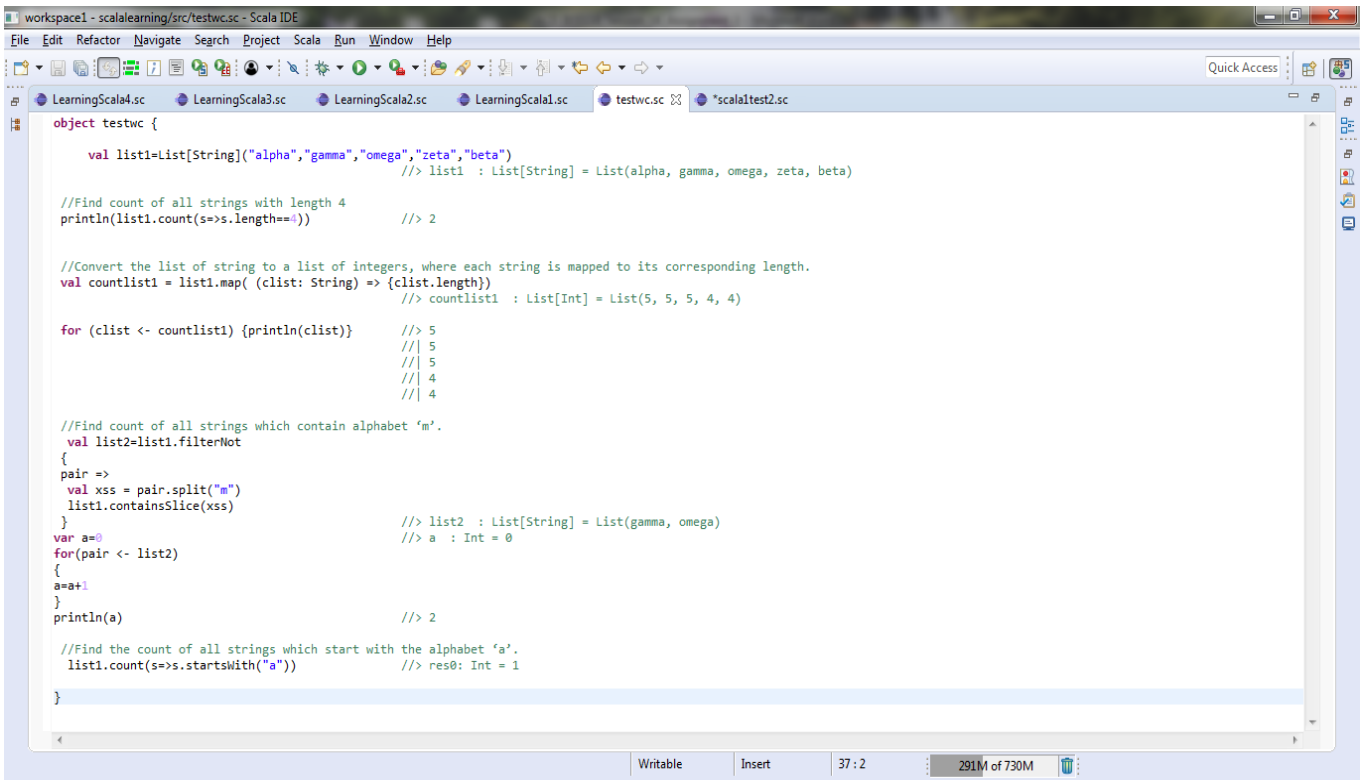
(i)This command is used to Find count of all strings with length 4.

(ii)This command is used to Convert the list of string to a list of integers, where each string is mapped to its corresponding length.

(iii)This command is used to Find count of all strings which contain alphabet ‘m’.

(iv)This command is used to Find the count of all strings which start with the alphabet ‘a’.

OUTPUT:-



Task2:-

COMMAND:-

val t = List((1, "alpha"), (2, "beta"), (3, "gamma"), (4, "zeta"), (5, "omega"))

(i) t.filter(_._2.length == 4).foreach(x => println(x._2))
t.filter(_._2.length == 4).foreach(x => println(x._1))

(ii) t.filter(_._2.matches(".*[m,z].*")).foreach(x => println(x._2))
t.filter(_._2.matches(".*[m,z].*")).foreach(x => println(x._1))

```
var a=0
var b=0
for(x <- t.filter(_._2.matches(".*[m,z].*")))
{
a+=x._1
b=b+1
}
println(a/b)
```

EXPLANATION:-
(i) For the given list, this command will print the numbers where the corresponding string length is 4.
(ii) This command will find the average of all numbers, where the corresponding string contains alphabet 'm' or alphabet 'z'.

OUTPUT:-