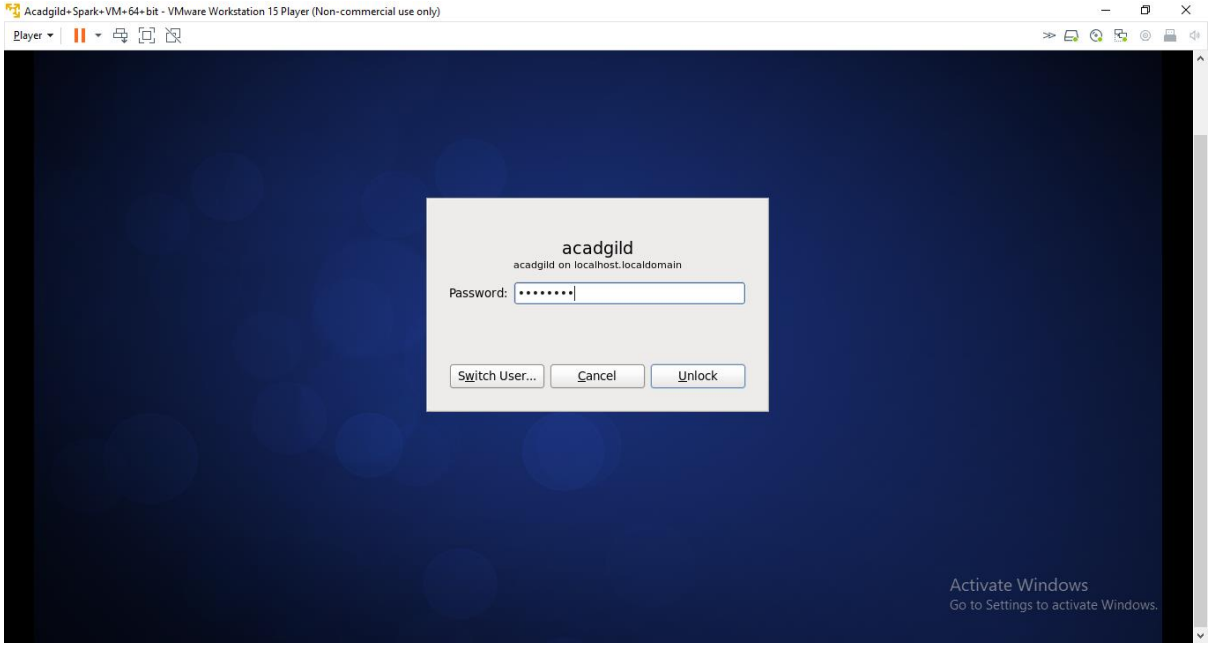
Acadgild-Assignement-43:

Problem Statement:

Task 1

Follow the below link document steps to download and import Acadgild Spark VM in the Oracle Virtual Box.

Answer: - Done and attached screen-shot the VM.

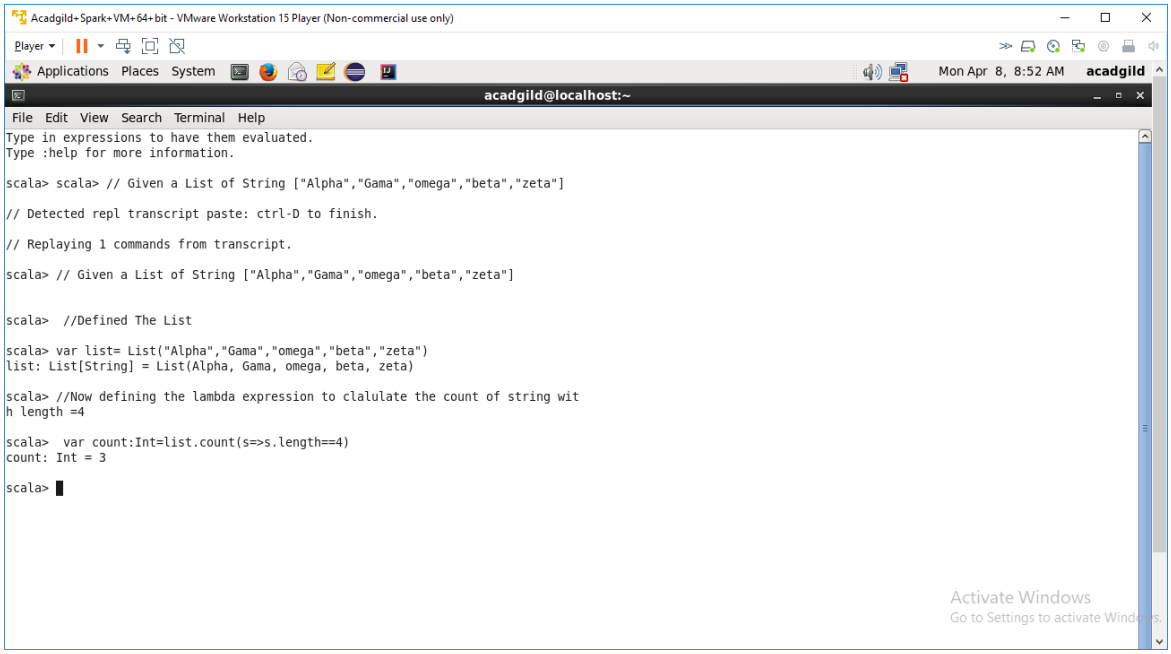


Task 2

Given a list of strings - List[String] (“alpha”, “gamma”, “omega”, “zeta”, “beta”)

Q 2.1: find count of all strings with length 4.

Answer: - Here I have used the lambda function that evaluate the given condition, then list.count method count the total number of cases that are true.



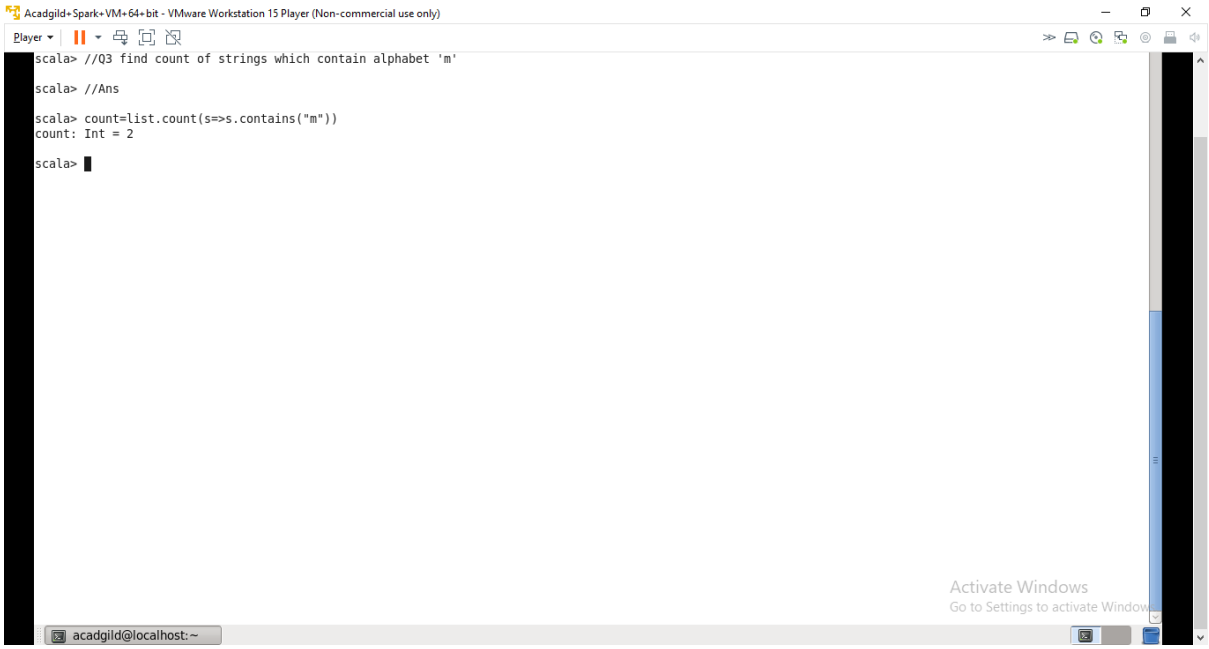
Q2.2:- Convert the list of string to a list of integers, where each string is mapped to its Corresponding length.

Answer: - Here I have used the lambda function that count the length of each string in list which is then mapped by its length using the list.map method.

```
scala> //Q2

scala> //Convert the list of String into list of integer ,where each string is mapped to its corresponding length

scala> var intlist=list.map(s=>s.length)
intlist: List[Int] = List(5, 4, 5, 4, 4)

scala>
```

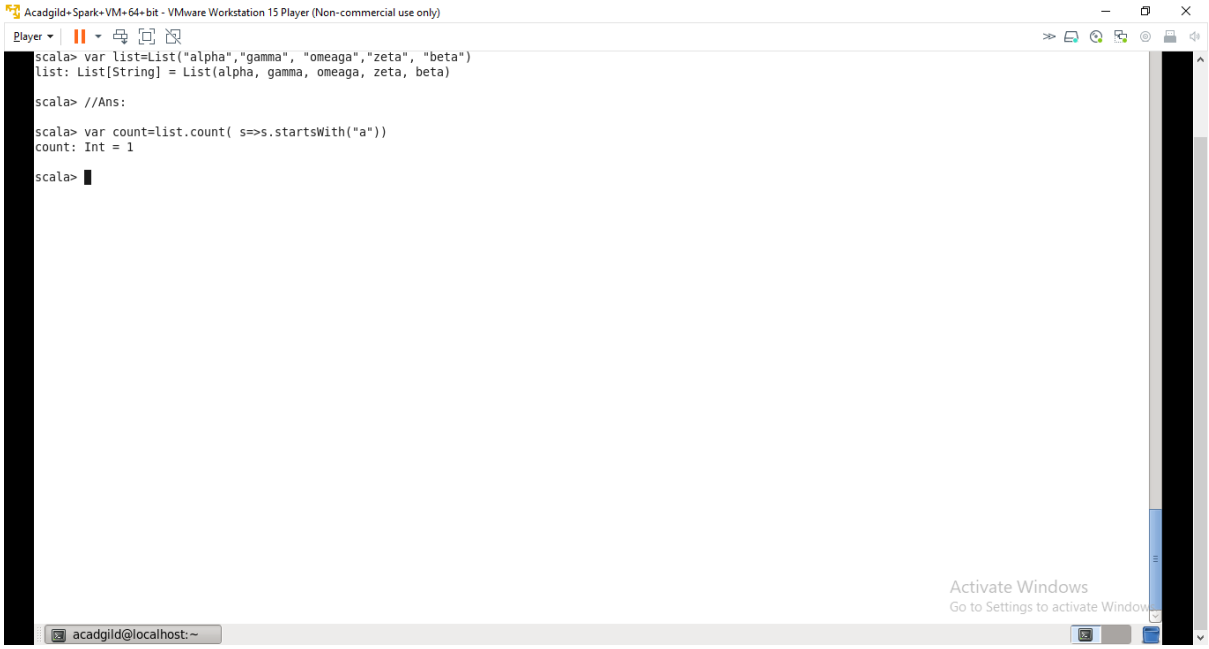
Q2.3: Find the count of strings that contains the alphabet ‘m’.

Answer: - Here I have used the lambda function that evaluate the given condition, then list.count method count the total number of cases that are true.



Q2.4:- Find the count of all strings which start with the alphabet ‘a’.

Answer: - Here I have used the lambda function that evaluate the given condition, then list.count method count the total number of cases that are true.



Q3:- Create a Scala application to find the GCD of two numbers.

Answer:- An **efficient solution** is to use Euclidean algorithm which is the main algorithm used for this purpose. The idea is, GCD of two numbers doesn't change if smaller number is subtracted from a bigger number.