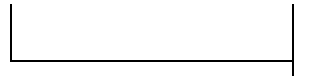


ACADGILD

Session 43:
Scala 1
Assignment 1



Assignment 1 – You must perform the given tasks.

Table of Contents

1.	Introduction	3
2.	Objective	3
3.	Prerequisites:	3
4.	Associated Data Files	3
5.	Problem Statement	3
6.	Expected Output	4
7.	Approximate Time to Complete Task	4

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1. Introduction

In this assignment, you need to perform the given tasks.

2. Objective

This assignment will help you to consolidate the concepts learnt in the session 4.

3. Prerequisites:

None

4. Associated Data Files

None

5. Problem Statement

Task 1

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

[ACADGILD_VM](#)

NOTE: If your system is compatible with 64 bit VM, then please download the Acadgild Spark 64 Bit file, else download the Acadgild Spark 32 Bit file from the below link.

Task 2

Given a list of strings - List[String] ("alpha", "gamma", "omega", "zeta", "beta")
- find count of all strings with length 4

answer .

```
scala> val ListString=List("alpha","gamma","omega","zeta","beta")
ListString: List[String] = List(alpha, gamma, omega, zeta, beta)

scala> def lenStr(str:String):Int={str.length}
lenStr: (str: String)Int

scala> val lengthString=ListString.map(lenStr)
lengthString: List[Int] = List(5, 5, 5, 4, 4)

scala> val len4=ListString.count(x=>(lenStr(x)==4))
len4: Int = 2
```

find count of all strings with length 4

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- convert the list of string to a list of integers, where each string is mapped to its corresponding length

answer.

```
scala> val ListString=List("alpha","gamma","omega","zeta","beta")
ListString: List[String] = List(alpha, gamma, omega, zeta, beta)

scala> def lenStr(str:String):Int={str.length}
lenStr: (str: String)Int

scala> val lengthString=ListString.map(lenStr)
lengthString: List[Int] = List(5, 5, 5, 4, 4)
```

convert list of strings to integers where each string is mapped to its length

- find count of all strings which contain alphabet 'm'

answer.

```
scala> val ListString=List("alpha","gamma","omega","zeta","beta")
ListString: List[String] = List(alpha, gamma, omega, zeta, beta)

scala> def findChar(str:String):Boolean={str.contains("m")}
findChar: (str: String)Boolean

scala> val mcountStr=ListString.count(x=>(findChar(x)==true))
mcountStr: Int = 2

scala>
```

find count of all strings which contains alphabet 'm'

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- find the count of all strings which start with the alphabet 'a'

answer.

```
scala> val ListString=List("alpha","gamma","omega","zeta","beta")
ListString: List[String] = List(alpha, gamma, omega, zeta, beta)

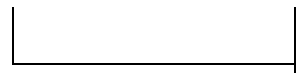
scala> ListString.find(_.contains("a"))
res11: Option[String] = Some(alpha)

scala> []
```

find the count of all strings which start with the alphabet'a'

Task 3

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



6. Expected Output

Solution report with commands, explanation to commands and screenshot for output.

Report shall be in PDF format. Submitted in GitHub

7. Approximate Time to Complete Task

6 hours.