



BIG DATA
HADOOP
&
SPARK
TRAINING

ACADGILD

ASSIGNMENT
12.2

BY :-

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PROBLEM STATEMENT

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'

Note – I have install Scala version 2.12.4 in my System with windows 7 to resolve the Assignment 12.2

Task 1

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

Command for Task 1

```
scala> val myList = List("alpha","gamma","omega","zeta","beta")
```

Result:-

```
C:\Users\khuranas\Desktop\Scala>
C:\Users\khuranas\Desktop\Scala>scala -version
Scala code runner version 2.12.4 -- Copyright 2002-2017, LAMP/EPFL and Lightbend, Inc.

C:\Users\khuranas\Desktop\Scala>scala
Welcome to Scala 2.12.4 (Java HotSpot(TM) 64-Bit Server VM, Java 1.8.0_144).
Type in expressions for evaluation. Or try :help.

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

scala>
```

Task 2

find count of all strings with length 4

Command for Task 2

```
scala> val myListCount = myList.count(s => s.length == 4)
```

or

```
val myListCount2 = myList.count(_.length == 4)
```

Result:-

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

scala> val myListCount = myList.count(s => s.length == 4)
myListCount: Int = 2

scala> val myListCount2 = myList.count(_.length == 4)
myListCount2: Int = 2

scala>
```

Task 3

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

Command for Task 3

```
scala> val myListModifiedList = myList.map(s => s.length)
```

or

```
scala> val myListModifiedList2 = myList.map(_.length)
```

Result:-

```
scala> val myListModifiedList = myList.map(s => s.length)
myListModifiedList: List[Int] = List(5, 5, 5, 4, 4)

scala> val myListModifiedList2 = myList.map(_.length)
myListModifiedList2: List[Int] = List(5, 5, 5, 4, 4)

scala>
```

Task 4

find count of all strings which contain alphabet 'm'

Command for Task 3

```
scala> val myListContaining_m = myList.count(s => s.contains('m'))
```

or

```
scala> val myListContaining_m2 = myList.count(_.contains('m'))
```

Result:-

```
scala> val myListContaining_m = myList.count(s => s.contains('m'))
myListContaining_m: Int = 2

scala> val myListContaining_m2 = myList.count(_.contains('m'))
myListContaining_m2: Int = 2
```

Task 5

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

Command for Task 5

```
scala> val myListStringStartingWith_a = myList.filter(s => s(0)=='a').length  
or
```

```
scala> val myListStringStartingWith_a2 = myList.filter(_(0)=='a').length  
or
```

```
scala> val myListStringStartingWith_a3 = myList.count(_.startsWith("a"))
```

Result:-

```
scala> val myListStringStartingWith_a = myList.filter(s => s(0)=='a').length  
myListStringStartingWith_a: Int = 1  
  
scala> val myListStringStartingWith_a2 = myList.filter(_(0)=='a').length  
myListStringStartingWith_a2: Int = 1  
  
scala> val myListStringStartingWith_a3 = myList.count(_.startsWith("a"))  
myListStringStartingWith_a3: Int = 1  
  
scala>
```