

Session 14:

Scala Basics 1

Assignment 1

Student Name: Subham Vishal

Course: Big Data Hadoop & Spark Training

Problem Statement

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'

Task 1

For the above list, print the numbers where the corresponding string length is 4,

SCALA REPL

```
Scala>var tuple : List[(Int,String)] = List((1,"alpha"),(2,"beta"),(3,"gamma"),(4,"zeta"),(5,"omega"))
```

```
Scala>tuple: List[(Int, String)] = List((1,alpha), (2,beta), (3,gamma), (4,zeta), (5,omega))
```

```
scala> println("*****Assignment 12.3*****")
*****Assignment 12.3*****
```

```
scala> var tuple : List[(Int,String)] = List((1,"alpha"),(2,"beta"),(3,"gamma"),(4,"zeta"),(5,"omega"))
tuple: List[(Int, String)] = List((1,alpha), (2,beta), (3,gamma), (4,zeta), (5,omega))
```

Now print the numbers where the corresponding string length is 4,

```
Scala> tuple.filter(_._2.length == 4).foreach (x=> println(x._1))
```

Required Output

```
scala> tuple.filter(_._2.length == 4).foreach (x=> println(x._1))
2
4
```

Task2

Find the average of all numbers, where the corresponding string contains alphabet 'm' or alphabet 'z'

SCALA REPL

```
scala> var tuple1 = tuple.filter(a=>(a._2.count(_=='m')!=0 || a._2.count(_=='z')!=0))
```

```
tuple1: List[(Int, String)] = List((3,gamma), (4,zeta), (5,omega))
```

```
scala> tuple1.map(_._1).sum/tuple1.size
```

```
res5: Int = 4
```

```
scala> var tuple1 = tuple.filter(a=>(a._2.count(_=='m')!=0 || a._2.count(_=='z')!=0))
tuple1: List[(Int, String)] = List((3,gamma), (4,zeta), (5,omega))
```

Required Output

```
scala> tuple1.map(_._1).sum/tuple1.size
res5: Int = 4
```