SCALA 1 ASSIGNMENT

[acadgild@localhost ~]$ jps

9648 JobHistoryServer

8465 SecondaryNameNode

8707 NodeManager

16083 HQuorumPeer

23974 Jps

8247 DataNode

8151 NameNode

8605 ResourceManager

[acadgild@localhost ~]$ scala

Welcome to Scala 2.12.4 (Java HotSpot(TM) 64-Bit Server VM, Java 1.8.0\_151).

Type in expressions for evaluation. Or try :help.

TASK 1

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

name: List[String] = List(alpha, gamma, omega, zeta, beta)

Convert the list of string to a list of integers, where each string is mapped to its

corresponding length.

scala> val lengths =for(x<-name) yield name.length

lengths: List[Int] = List(5, 5, 5, 5, 5)

scala> val length =for(x<-name) yield x.length

length: List[Int] = List(5, 5, 5, 4, 4)

Find count of all strings with length 4.

scala> name.count(s=>s.length==4)

res0: Int = 2

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

name: List[String] = List(alpha, gamma, omega, zeta, beta)

scala> name.filter(s=> s.substring(0,1)=="a")

res0: List[String] = List(alpha)

Find the count of all strings which start with the alphabet ‘a’.

scala> name.filter(s=> s.substring(0,1)=="a")

res1: List[String] = List(alpha)

scala> name.filter(s=>s.startsWith("a"))

res5: List[String] = List(alpha)

scala> name.filter(s=>s.length==4)

res2: List[String] = List(zeta, beta)

Find count of all strings which contain alphabet ‘m’.

scala> name.filter(s=>s.contains("m"))

res3: List[String] = List(gamma, omega)

Task 2

Create a list of tuples, where the 1st element of the tuple is an int and the second

element is a string.

scala> var a:List[(Int,String)]=List()

a: List[(Int, String)] = List()

scala> a=a:+((1,"alpha"))

a: List[(Int, String)] = List((1,alpha))

scala> a=a:+((2,"beta"))

a: List[(Int, String)] = List((1,alpha), (2,beta))

scala> a=a:+((3,"gamma"))

a: List[(Int, String)] = List((1,alpha), (2,beta), (3,gamma))

scala> a=a:+((4,"seta")):+((5,"omega"))

a: List[(Int, String)] = List((1,alpha), (2,beta), (3,gamma), (4,seta), (5,omega))

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

scala> a.filter(s=>s.\_2.length==4)

res10: List[(Int, String)] = List((2,beta), (4,seta))

scala> for(x<-a){

| if(x.\_2.length==4) println(x.\_1)

| }

2

4

find the average of all numbers, where the corresponding string contains alphabet ‘m’

or alphabet ‘z’.

scala> var i=0

i: Int = 0

scala> var tot=0

tot: Int = 0

scala> var avg=0

avg: Int = 0

scala> for(x<-a1){

| if(x.\_2.contains("m")||x.\_2.contains("z")) {

| i=i+1

| tot=tot+x.\_1

| avg=tot/i

| }

| }

scala> avg

res22: Int = 4