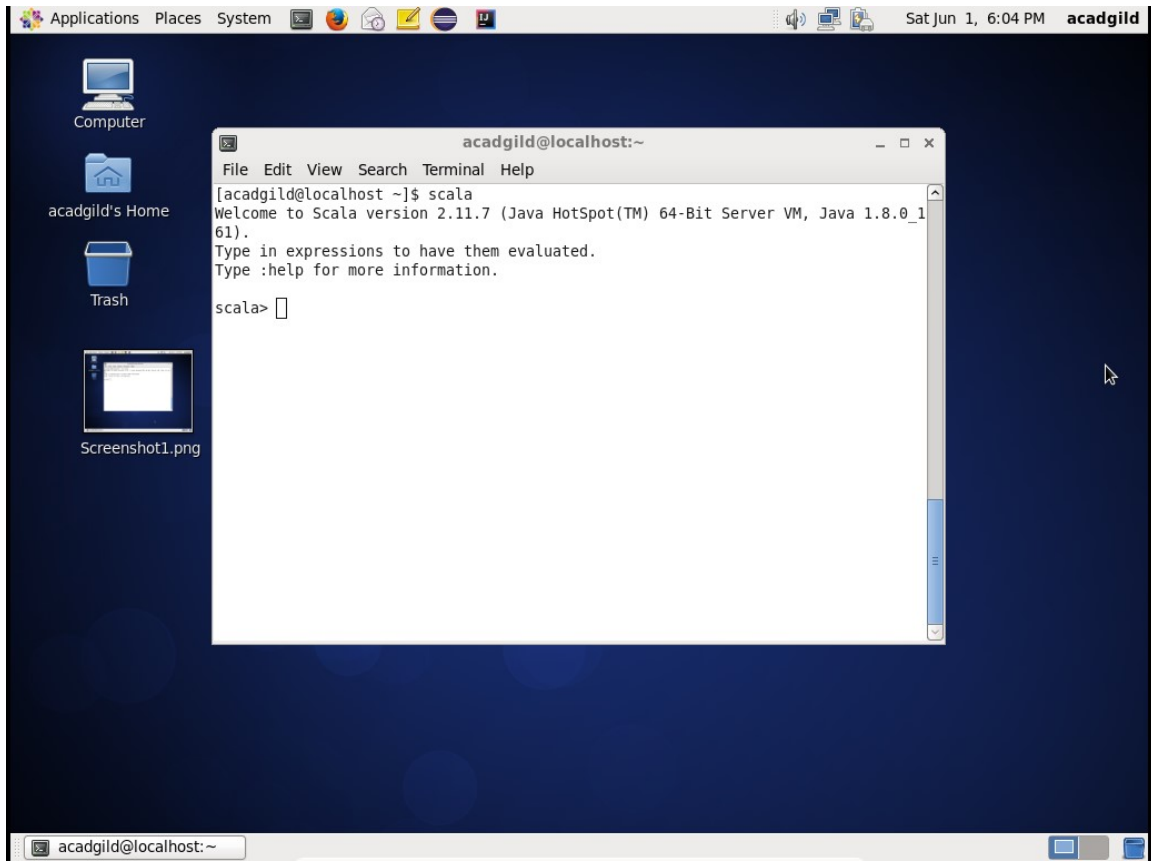


Assignment 22 : Scala -1

Task1: VM Machine Download and Scala interpreter



Task2:

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'

Code =>

```

val data = List ("alpha", "gamma", "beta", "omega", "zeta")
//find strings with length 4
for (list <- data) {
  if ( list.length() == 4 ) {
    println(list)
  }
}

//find count of all strings with length 4
val result = data.filter( x => x.length == 4 ).size
println("Count of strings with length 4 :" + result)

//Convert list of strings to list of integers
println("List of Strings to integer :")
println(for (element <- data) yield element.length)

//Count of strings with letter 'm'
val result2 = data.filter(x => x contains 'm').size
println("Count of strings containing 'm' :"+ result2)

/////Count of strings starting with letter 'a'
val result3 = data.filter(x => x startsWith("a")).size
println("Count of strings starting 'a' :"+ result3)

```

Result =>

```

K:\Scala\bin>scala ..\course_material\ACD_MDS_Offline_V2_Session_22_Code\Assignment22-1.scala
beta
zeta
Count of strings with length 4 :2
List of Strings to integer :
List(5, 5, 4, 5, 4)
Count of strings containing 'm' :2
Count of strings starting 'a' :1

```

Task 3

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

Code =>

```

//Define GCD function
def gcd(x : Int,y : Int): Int = {
  if (y == 0) x else gcd (y , x%y)
}

//Print result for gcd of 20 and 30
val result4 = gcd(20,30)
println("GCD of 20 & 30 is "+ result4)

```

Result=>

GCD of 20 & 30 is 10