

## Vijay's Assignment – Scala1

### Task 1

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'.

```
package acad_scala1

object sct1 {
  def main(args: Array[String]): Unit = {
    println("Hello Vijay")

    var list1 = List("alpha", "gamma", "omega", "zeta", "beta")

    println("List1 length :"+list1.length)
    println("List elements with length 4:"+ list1.count(x => x.length==4))

    var list2 = for(e<-list1) yield e.length
    println ("Second list :"+list2)

    println("List elements containing m:"+ list1.count(x => x.contains("m")))

    println("List elements starting with a:"+ list1.count(x => x.startsWith("a")))
  }
}
```

### Output

```
List elements with length 4:2
Second list :List(5, 5, 5, 4, 4)
List elements containing m:2
List elements starting with a:1
```

### Task 2

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'.

```

package acad_scala1

object sct1 {
  def main(args: Array[String]): Unit = {

    val map1 = Map(1->"alpha",2->"beta",3->"gamma",4->"zeta",5->"omega")
    for ((k,v) <- map1) {if (v.length()==4) println("Key value with string of length 4: "+k)}
    println("")
    var total = 0
    var keyscnt = 0
    for ((k,v) <- map1) {
      if (v.contains("m")) {total += k; keyscnt += 1}
      else if (v.contains("z")) {total += k; keyscnt += 1}
    }
    var avg = total/keyscnt
    println("Total of keys with m or z is: "+ total)
    println("Total number of keys with m or z is: "+ keyscnt)
    println("Average of keys with m or z is: "+ avg)
  }
}

```

## Output

```

Key value with string of length 4: 2
Key value with string of length 4: 4

Total of keys with m or z is: 12
Total number of keys with m or z is: 3
Average of keys with m or z is: 4

```