

## Assignment 12.3:

### 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

```
var tup = List((1, "alpha"), (2, "beta"), (3, "gamma"), (4, "zeta"), (5, "omega"))
tup.filter(a => a._2.length == 4).map(_._1).foreach(println)
```

```
C:\WINDOWS\system32\cmd.exe - scala
scala> println("***** Assignment 12.3 *****")
***** Assignment 12.3 *****

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

scala> tup.filter(a => a._2.length == 4).map(_._1).foreach(println)
2
4

scala>
```

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

```
var tup = List((1, "alpha"), (2, "beta"), (3, "gamma"), (4, "zeta"), (5, "omega"))
```

```
val res = tup.filter(a => a._2.contains('m') || a._2.contains('z')).length
println("Average of all numbers, where the corresponding " +
  "string contains alphabet 'm' or alphabet 'z' is: " +
  + tup.filter(a => a._2.contains('m') || a._2.contains('z')).map(_._1).sum/res)
```

```
C:\WINDOWS\system32\cmd.exe - scala
scala> println("***** Assignment 12.3 *****")
***** Assignment 12.3 *****

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

scala>

scala> val res = tup.filter(a => a._2.contains('m') || a._2.contains('z')).length
res: Int = 3

scala> println("Average of all numbers, where the corresponding " +
  | "string contains alphabet 'm' or alphabet 'z' is: " +
  | + tup.filter(a => a._2.contains('m') || a._2.contains('z')).map(_._1).sum/res)
Average of all numbers, where the corresponding string contains alphabet 'm' or alphabet 'z' is: 4

scala>
```