

SCALA BASICS ASSIGNMENT

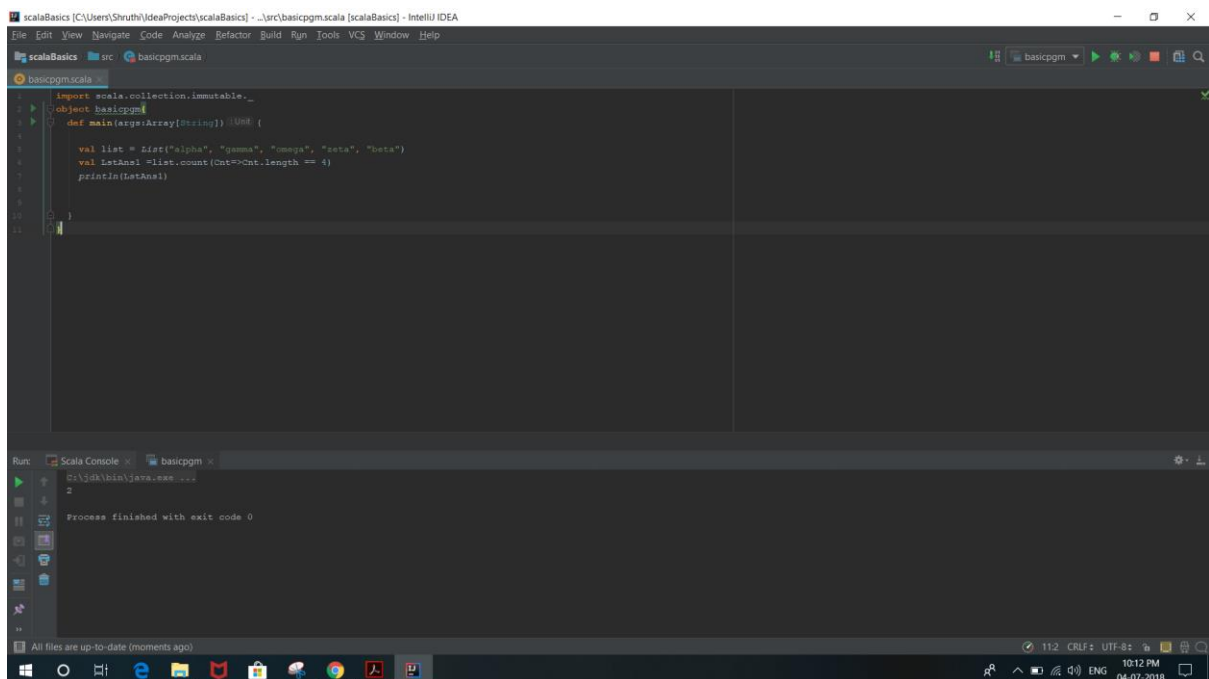
Task 1

Given a list of strings - List[String] ("alpha", "gamma", "omega", "zeta", "beta")
- Find count of all strings with length 4.

```
import scala.collection.immutable._
object basicpgm{
  def main(args:Array[String]){

    val list = List("alpha", "gamma", "omega", "zeta", "beta")
    val LstAns1 =list.count(Cnt=>Cnt.length == 4)
    println(LstAns1)

  }
}
```



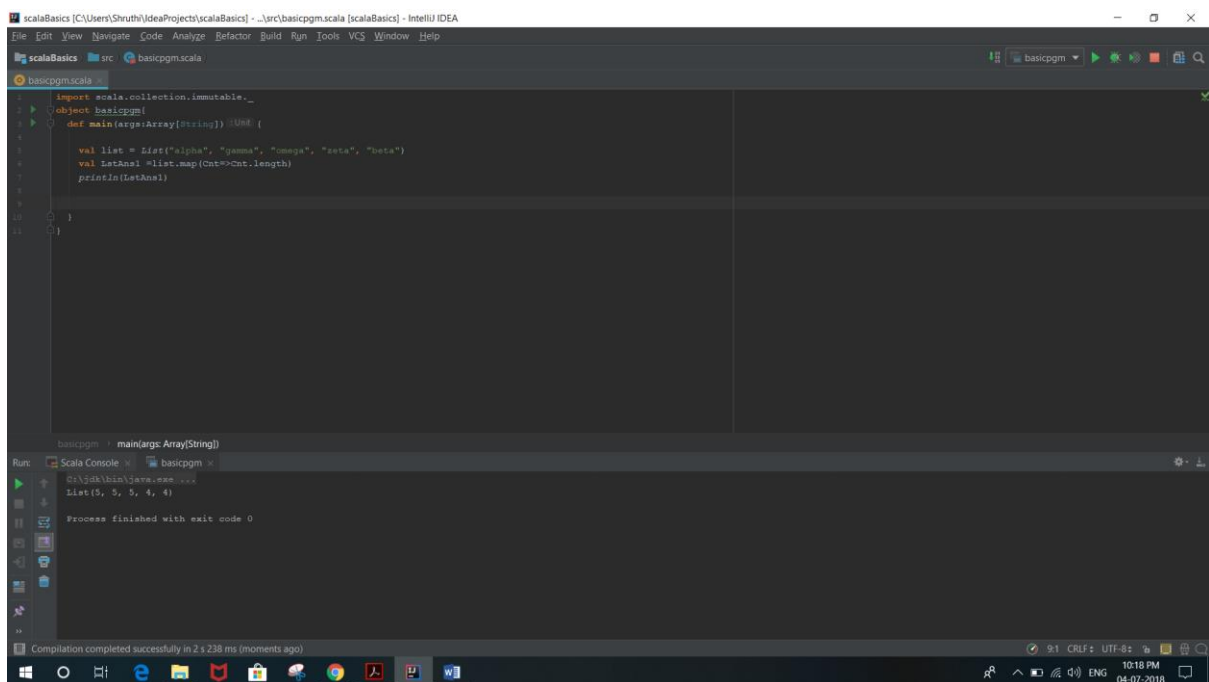
SCALA BASICS ASSIGNMENT

- Convert the list of string to a list of integers, where each string is mapped to its corresponding length.

```
import scala.collection.immutable._
object basicpgm{
  def main(args:Array[String]){

    val list = List("alpha", "gamma", "omega", "zeta", "beta")
    val LstAns1 =list.map(Cnt=>Cnt.length)
    println(LstAns1)

  }
}
```



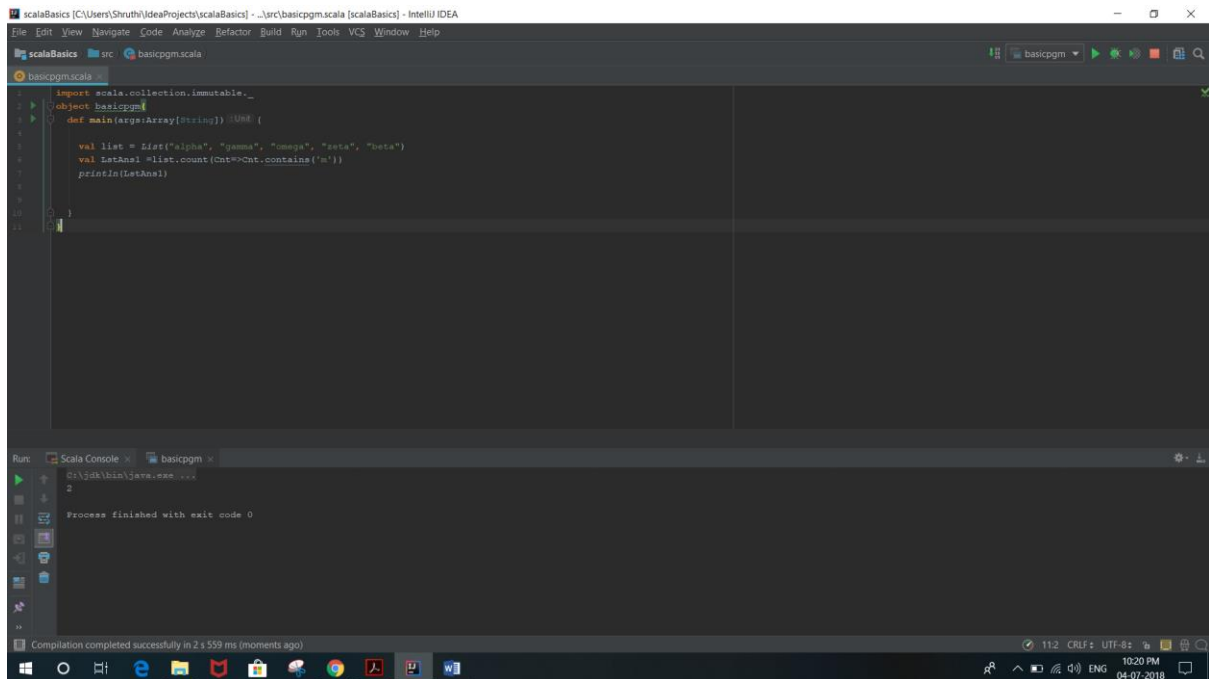
SCALA BASICS ASSIGNMENT

- Find count of all strings which contain alphabet 'm'.

```
import scala.collection.immutable._
object basicpgm{
  def main(args:Array[String]){

    val list = List("alpha", "gamma", "omega", "zeta", "beta")
    val LstAns1 =list.count(Cnt=>Cnt.contains('m'))
    println(LstAns1)

  }
}
```



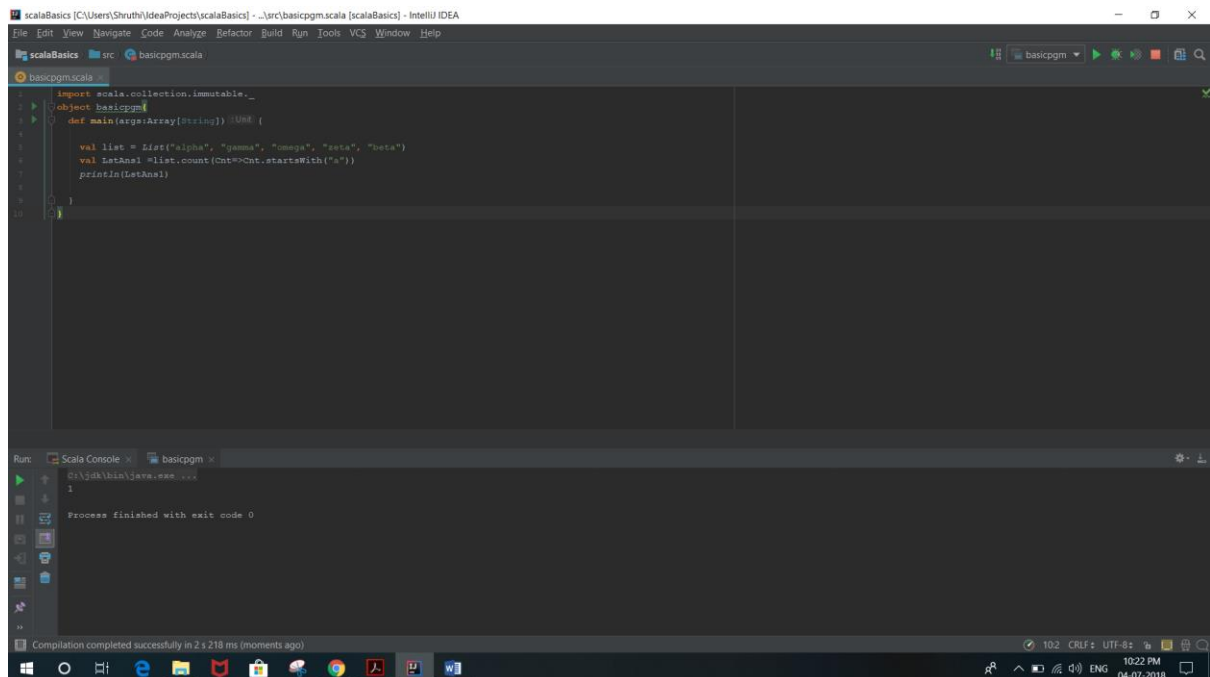
SCALA BASICS ASSIGNMENT

- Find the count of all strings which start with the alphabet 'a'.

```
import scala.collection.immutable._
object basicpgm{
  def main(args:Array[String]){

    val list = List("alpha", "gamma", "omega", "zeta", "beta")
    val LstAns1 =list.count(Cnt=>Cnt.startsWith("a"))
    println(LstAns1)

  }
}
```



SCALA BASICS ASSIGNMENT

Task 2

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

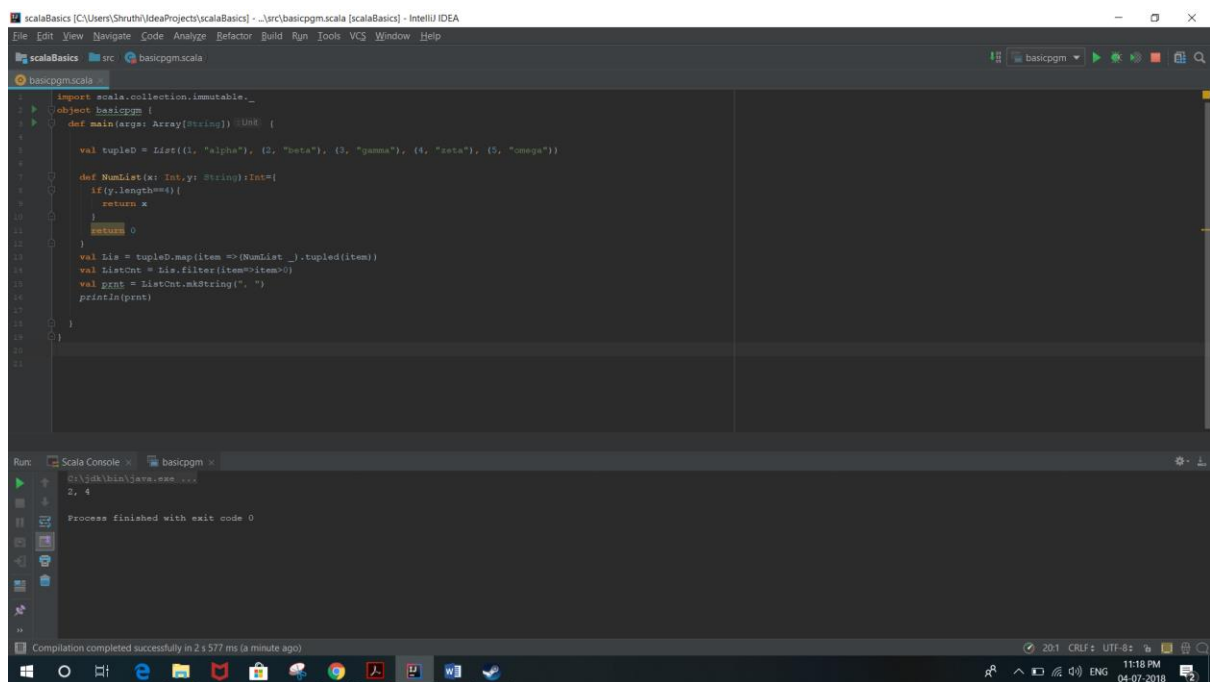
Example - ((1, 'alpha'), (2, 'beta'), (3, 'gamma'), (4, 'zeta'), (5, 'omega'))

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

```
import scala.collection.immutable._
object basicpgm {
  def main(args: Array[String]) {

    val tupleD = List((1, "alpha"), (2, "beta"), (3, "gamma"), (4, "zeta"), (5, "omega"))
    val ListAns = tupleD.filter(cnt=>cnt._2.length==4).map(cnt=>cnt._1)
    println(ListAns)

  }
}
```



SCALA BASICS ASSIGNMENT

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

```
import scala.collection.immutable._
object basicpgm {
  def main(args: Array[String]) {

    def getSumAverage(numbers: List[Int]) = {
      val sum = numbers.sum
      val average = (sum: Double) / numbers.length
      (sum, average)
    }

    val tupleD = List((1, "alpha"), (2, "beta"), (3, "gamma"), (4, "zeta"), (5, "omega"))
    val numbers = tupleD.filter(cnt => cnt._2.contains('m') || cnt._2.contains('z')).map(cnt => cnt._1)

    println(numbers)
    val (sum, average) = getSumAverage(numbers)
    println("Sum, average is: " + sum + ", " + average) //Prints "Sum, average is: 91, 18.2".
  }
}
```

