

SCALA 1

Task 1

Created the list

Converted into integer and found the length and kept in newlists

Used contains and startswith methods to find the tasks

```
scala> val list = List("alpha","gamma","omega","zeta","beta")
list: List[String] = List(alpha, gamma, omega, zeta, beta)

scala> list.count(s => s.length==4)
res0: Int = 2

scala> val newList = List(list(0).length,list(1).length,list(2).length,list(3).length,list(4).length)
newList: List[Int] = List(5, 5, 5, 4, 4)

scala> val count_list=List(list(0).contains('m'),list(1).contains('m'),list(2).contains('m'),list(3).contains('m'),list(4).contains('m'))
count_list: List[Boolean] = List(false, true, true, false, false)

scala> val count_list_string=List(count_list(0).toString(),count_list(1).toString(),count_list(2).toString(),count_list(3).toString(),count_list(4).toString())
count_list_string: List[String] = List(false, true, true, false, false)

scala> count_list_string.count(s => s.length==4)
res1: Int = 2

scala> val liststarts=List(list(0).startsWith("a"),list(1).startsWith("a"),list(2).startsWith("a"),list(3).startsWith("a"),list(4).startsWith("a"))
liststarts: List[Boolean] = List(true, false, false, false, false)

scala>
scala> val liststart_string=List(liststarts(0).toString,liststarts(1).toString,liststarts(2).toString,liststarts(3).toString,liststarts(4).toString)
liststart_string: List[String] = List(true, false, false, false, false)

scala> liststart_string.count(s => s.length==4)
res2: Int = 1

scala> █
```

Task 2

Below are the output , created the tuple where first element s integer and second is string.

```
scala> val tup = ((1,"alpha"),(2,"beta"),(3,"gamma"),(4,"zeta"),(5,"omega"))
tup: ((Int, String), (Int, String), (Int, String), (Int, String), (Int, String)) = ((1,alpha),(2,beta),(3,gamma),(4,zeta),(5,omega))

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

scala> input.collect { case(number, string) if string.length == 4 => number}
res3: List[Int] = List(2, 4)

scala> input.collect { case(number, string) if string.contains('m') => number}
res4: List[Int] = List(3, 5)

scala> input.collect { case(number, string) if string.contains('z') => number}
res5: List[Int] = List(4)

scala> █
```