

Given a list of strings - List[String] (“alpha”, “gamma”, “omega”, “zeta”, “beta”)

- Find count of all strings with length 4.

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

scala> println(list.count(aa => aa.length == 4))
2

scala> █
```

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

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

scala> println(list.count(aa => aa.length == 4))
2

scala> val lengthMapped = list.map(aa => aa.length)
lengthMapped: List[Int] = List(5, 5, 5, 4, 4)

scala> █
```

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

```
scala> val count = list.filter( x => x.contains('m')).length
count: Int = 2
scala> █
```

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

```
scala> val count = list.filter( x => x.startsWith("a"))
count: List[String] = List(alpha)

scala> val count = list.filter( x => x.startsWith("a")).length
count: Int = 1

scala> █
```

## 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.

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

scala> inputtuple.collect(case(number, string) if string.length == 4 => number)
res4: List[Int] = List(2, 4)
```

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

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

scala> var res = inputtuple.filter(case(number, string) => string.contains("m") || string.contains("z") )
res: List[(Int, String)] = List((3,gamma), (4,zeta), (5,omega))

scala> var getValue = res.map(_._1)
getValue: List[Int] = List(3, 4, 5)

scala> var avgResult = getValue.sum / getValue.size
avgResult: Int = 4

scala> █
```