

Given a list of numbers - List[Int] (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)

1. find the sum of all numbers

```
val list = sc.parallelize(List(1, 2, 3, 4, 5, 6, 7, 8, 9, 10))
val sum = list.sum.toInt
println(sum)
```

```
scala> val list = sc.parallelize(List(1, 2, 3, 4, 5, 6, 7, 8, 9, 10))
list: org.apache.spark.rdd.RDD[Int] = ParallelCollectionRDD[7] at parallelize at <console>:24

scala> val sum = list.sum.toInt
sum: Int = 55

scala> println(sum)
55
```

2. find the total elements in the list

```
val list = sc.parallelize(List(1, 2, 3, 4, 5, 6, 7, 8, 9, 10))

val length = list.count

println(length)
```

```
scala> val list = sc.parallelize(List(1, 2, 3, 4, 5, 6, 7, 8, 9, 10))
list: org.apache.spark.rdd.RDD[Int] = ParallelCollectionRDD[13] at parallelize at <console>:24

scala> val length = list.count
length: Long = 10

scala> println(length)
10

scala> █
```

3. calculate the average of the numbers in the list

```
val list = sc.parallelize(List(1, 2, 3, 4, 5, 6, 7, 8, 9, 10))  
val sum = list.sum  
val length = list.count  
val result = sum/length
```

```
scala> val list = sc.parallelize(List(1, 2, 3, 4, 5, 6, 7, 8, 9, 10))  
list: org.apache.spark.rdd.RDD[Int] = ParallelCollectionRDD[15] at parallelize at <console>:24  
  
scala> val sum = list.sum  
sum: Double = 55.0  
  
scala> val length = list.count  
length: Long = 10  
  
scala> val result = sum/length  
result: Double = 5.5  
  
scala> █
```

4. find the sum of all the even numbers in the list

```
val list = sc.parallelize(Array(1, 2, 3, 4, 5, 6, 7, 8, 9, 10))  
  
val evenNumbers = list.filter(x=>(x%2==0))  
  
val sum = evenNumbers.sum  
  
println(sum)
```

```
scala> val list = sc.parallelize(Array(1, 2, 3, 4, 5, 6, 7, 8, 9, 10))  
list: org.apache.spark.rdd.RDD[Int] = ParallelCollectionRDD[38] at parallelize at <console>:24  
  
scala> val evenNumbers = list.filter(x=>(x%2==0))  
evenNumbers: org.apache.spark.rdd.RDD[Int] = MapPartitionsRDD[39] at filter at <console>:26  
  
scala> val sum = evenNumbers.sum  
sum: Double = 30.0  
  
scala> println(sum)  
30.0  
█
```

5. find the total number of elements in the list divisible by both 5 and 3

```
val list = sc.parallelize(Array(1, 2, 3, 4, 5, 6, 7, 8, 9, 10))
```

```
val numberDivisibility = list.filter(x=>(x%3==0&& x%5==0)).count
```

```
println(numberDivisibility)
```

```
scala> val list = sc.parallelize(Array(1, 2, 3, 4, 5, 6, 7, 8, 9, 10))
list: org.apache.spark.rdd.RDD[Int] = ParallelCollectionRDD[49] at parallelize at <console>:24

scala> val numberDivisibility = list.filter(x=>(x%3==0&& x%5==0)).count
numberDivisibility: Long = 0

scala> println(numberDivisibility)
0

scala> █
```