

databricks Assignment_22.1

Task 2

```

/*
Given a list of strings - List[String] ("alpha", "gamma", "omega", "zeta",
"beta")
- find count of all strings with length 4
- convert the list of string to a list of integers, where each string is mapped
to its
corresponding length
- find count of all strings which contain alphabet 'm'
- find the count of all strings which start with the alphabet 'a'
*/

var lst = List[String] ("alpha", "gamma", "omega", "zeta", "beta") //Given
list data

//Prints the count of all strings with length 4
var count_strings_length_4 = lst.count(s => s.length == 4 )
println("The count of all strings with length 4 is: "+ count_strings_length_4)

//Prints list of integers where each string is mapped to its corresponding
length
var list_of_integers = lst.map(s => s.length)
println("The list of integers where each string is mapped to its corresponding
length is: "+list_of_integers)

//Prints count of all strings which contain alphabet 'm'
lst.forall(s => s.endsWith("o"))

The count of all strings with length 4 is: 2
The list of integers where each string is mapped to its corresponding length i
s: List(5, 5, 5, 4, 4)
lst: List[String] = List(alpha, gamma, omega, zeta, beta)
count_strings_length_4: Int = 2
list_of_integers: List[Int] = List(5, 5, 5, 4, 4)

```

Task 3

```
/*  
Create a Scala application to find the GCD of two numbers.  
*/  
def gcd(a: Int,b: Int): Int = {  
    if(b ==0) a else gcd(b, a%b)  
}  
  
var a = 10  
var b = 3  
  
println("The gcd of "+ a + " and is " + b +" is: " +gcd(a,b))
```

```
The gcd of 10 and is 3 is: 1  
gcd: (a: Int, b: Int)Int  
a: Int = 10  
b: Int = 3
```

```
class Calculator{
  var result = 0

  def add(a: Int, b: Int ) {
    result = a + b
    println(result)
  }

  def sub(a: Int, b: Int )
  {
    result = a - b
    println(result)
  }

  def mul(a: Int, b: Int ) {
    result = a * b
    println(result)
  }

  def add(c: Int){
    result += c
    println(result)
  }

  def sub(c: Int){
    result -= c
    println(result)
  }

  def mul(c: Int){
    result *= c
    println(result)
  }
}

defined class Calculator

var calc = new Calculator

calc: Calculator = Calculator@76be9901

calc.add(4, 5)

calc.sub(4, 5)
```

```
res3: Int = -1
```

```
calc.mul(4, 5)
```

```
res6: Int = 20
```

```
res11: Int = 9
```