

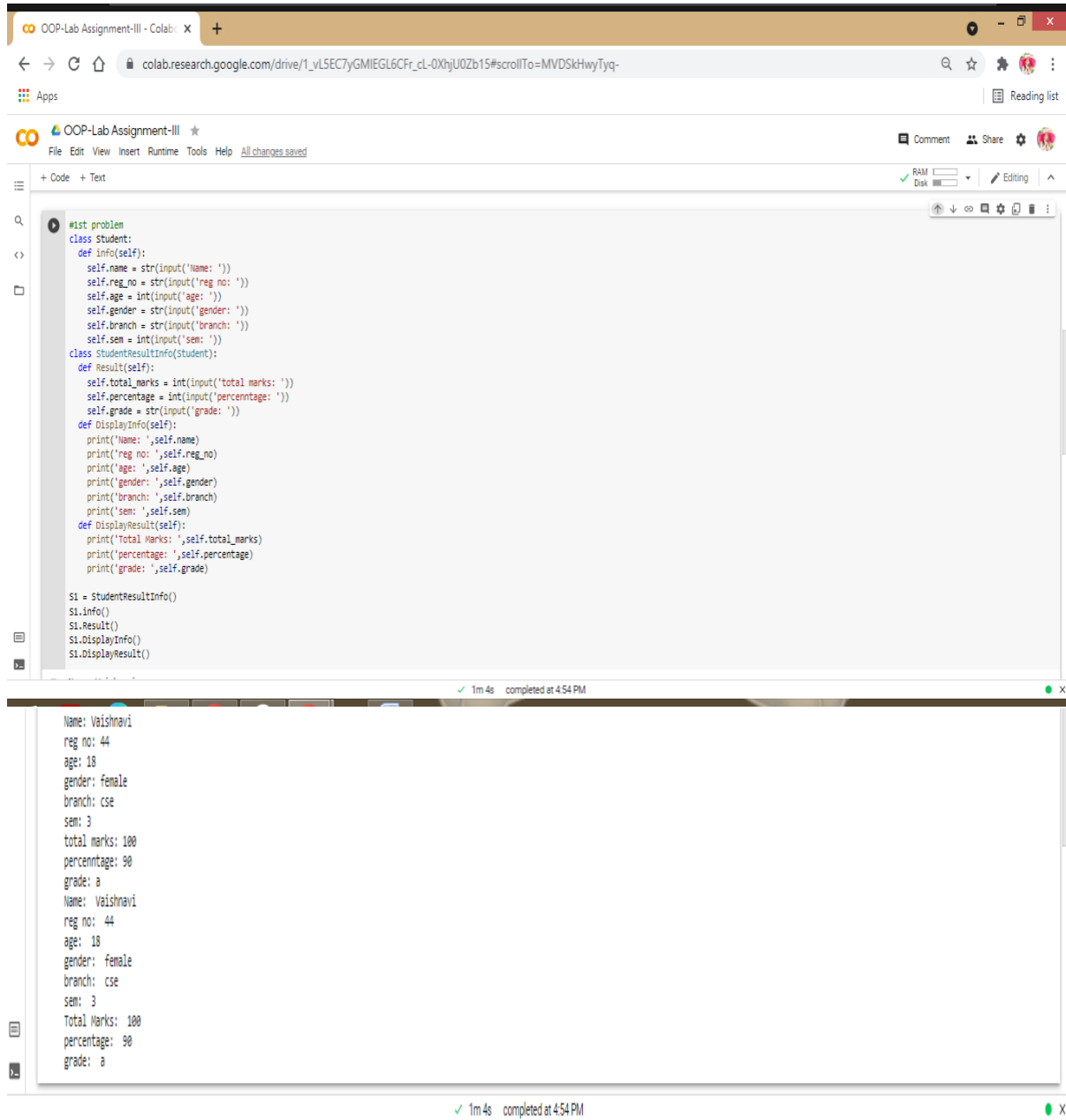
# Object Oriented Programming

## Lab Assignment –III

Name: - E.Vaishnavi

RegNo: 20BCS044

### Problem-1 Solution:-



```
#1st problem
class Student:
    def info(self):
        self.name = str(input('Name: '))
        self.reg_no = str(input('reg no: '))
        self.age = int(input('age: '))
        self.gender = str(input('gender: '))
        self.branch = str(input('branch: '))
        self.sem = int(input('sem: '))
class StudentResultInfo(Student):
    def Result(self):
        self.total_marks = int(input('total marks: '))
        self.percentage = int(input('percentage: '))
        self.grade = str(input('grade: '))
    def DisplayInfo(self):
        print('Name: ',self.name)
        print('reg no: ',self.reg_no)
        print('age: ',self.age)
        print('gender: ',self.gender)
        print('branch: ',self.branch)
        print('sem: ',self.sem)
    def DisplayResult(self):
        print('Total Marks: ',self.total_marks)
        print('percentage: ',self.percentage)
        print('grade: ',self.grade)

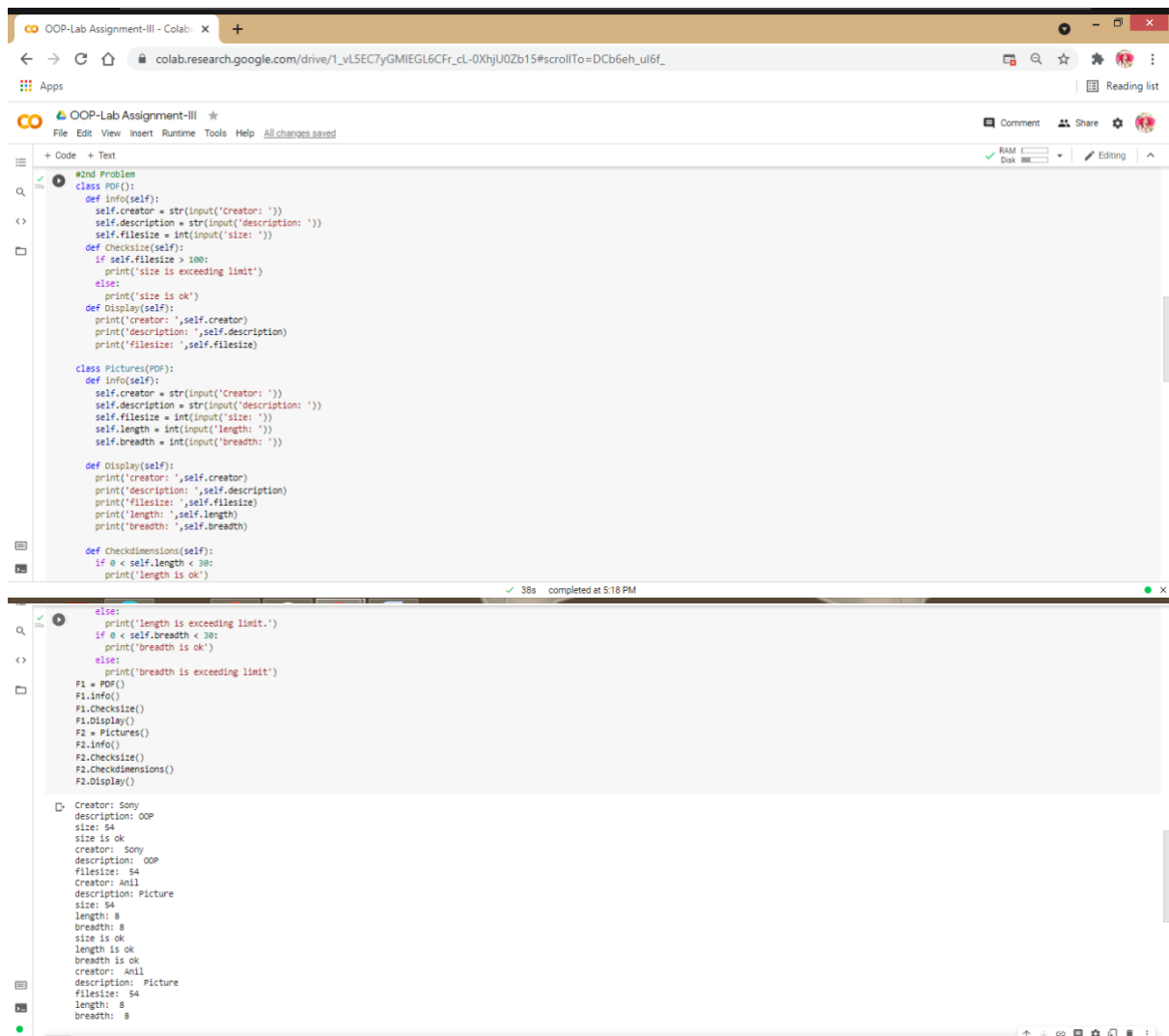
s1 = StudentResultInfo()
s1.info()
s1.Result()
s1.DisplayInfo()
s1.DisplayResult()
```

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Name: Vaishnavi  
reg no: 44  
age: 18  
gender: female  
branch: cse  
sem: 3  
total marks: 100  
percentage: 90  
grade: a  
Name: Vaishnavi  
reg no: 44  
age: 18  
gender: female  
branch: cse  
sem: 3  
Total Marks: 100  
percentage: 90  
grade: a

1m 4s completed at 4:54 PM

## Problem-2 Solution:-



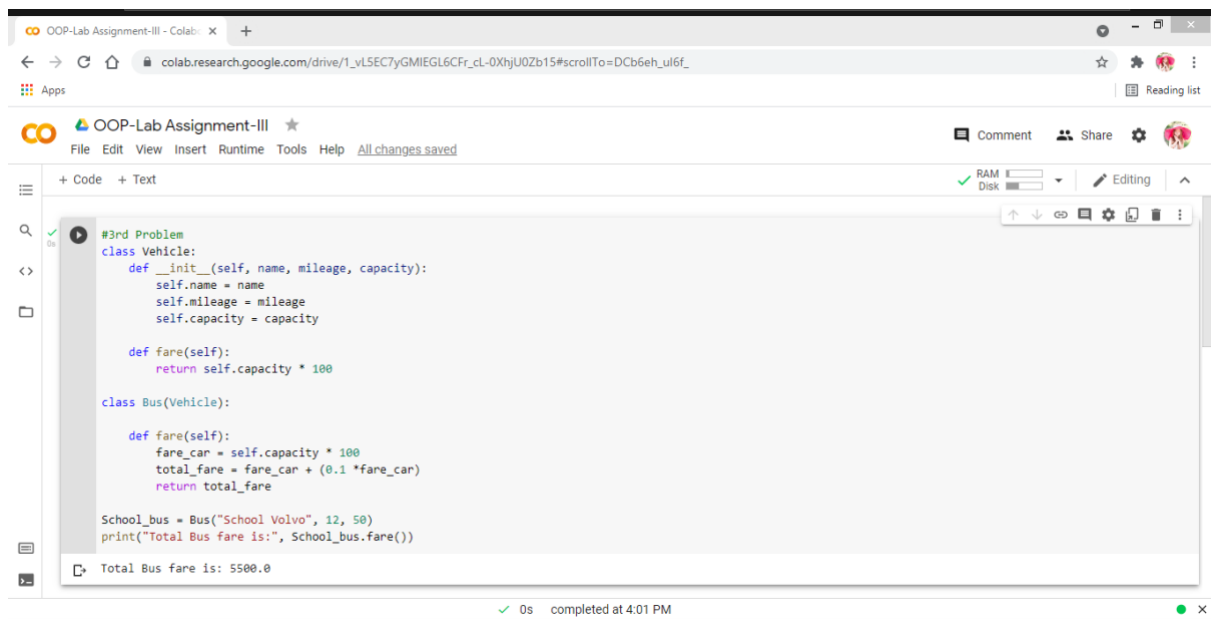
```
#2nd Problem
class PDF():
    def info(self):
        self.creator = str(input('creator: '))
        self.description = str(input('description: '))
        self.filesize = int(input('size: '))
    def Checksize(self):
        if self.filesize > 100:
            print('size is exceeding limit')
        else:
            print('size is ok')
    def Display(self):
        print('creator: ',self.creator)
        print('description: ',self.description)
        print('filesize: ',self.filesize)

class Pictures(PDF):
    def info(self):
        self.creator = str(input('creator: '))
        self.description = str(input('description: '))
        self.filesize = int(input('size: '))
        self.length = int(input('length: '))
        self.breadth = int(input('breadth: '))
    def Display(self):
        print('creator: ',self.creator)
        print('description: ',self.description)
        print('filesize: ',self.filesize)
        print('length: ',self.length)
        print('breadth: ',self.breadth)
    def Checkdimensions(self):
        if 0 < self.length < 30:
            print('length is ok')
        else:
            print('length is exceeding limit.')
        if 0 < self.breadth < 30:
            print('breadth is ok')
        else:
            print('breadth is exceeding limit')

f1 = PDF()
f1.info()
f1.Checksize()
f1.Display()
f2 = Pictures()
f2.info()
f2.Checksize()
f2.Checkdimensions()
f2.Display()

Creator: Sony
description: OOP
size: 54
size is ok
Creator: Sony
description: OOP
filesize: 54
Creator: Anil
description: Picture
size: 54
length: 8
breadth: 8
size is ok
length is ok
breadth is ok
creator: anil
description: Picture
filesize: 54
length: 8
breadth: 8
```

## Problem-3 Solution:-



```
#3rd Problem
class Vehicle:
    def __init__(self, name, mileage, capacity):
        self.name = name
        self.mileage = mileage
        self.capacity = capacity
    def fare(self):
        return self.capacity * 100

class Bus(Vehicle):
    def fare(self):
        fare_car = self.capacity * 100
        total_fare = fare_car + (0.1 * fare_car)
        return total_fare

School_bus = Bus("School Volvo", 12, 50)
print("Total Bus fare is:", School_bus.fare())

Total Bus fare is: 5500.0
```