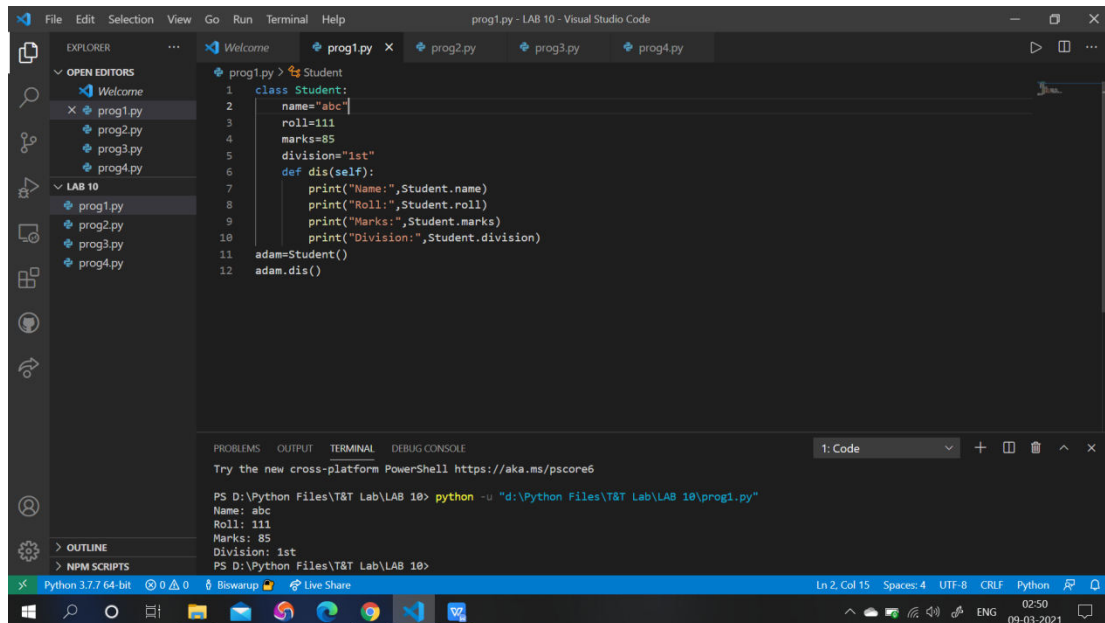


T&T LAB-10

BISWARUP MUKHERJEE

ROLL :- 1806468

1. WAP in python to make a class with name "student" and in the class you have to create objects which are named name, roll, marks and division.



```
1 class Student:
2     name="abc"
3     roll=111
4     marks=85
5     division="1st"
6     def dis(self):
7         print("Name:",Student.name)
8         print("Roll:",Student.roll)
9         print("Marks:",Student.marks)
10        print("Division:",Student.division)
11
12 adam=Student()
13 adam.dis()
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

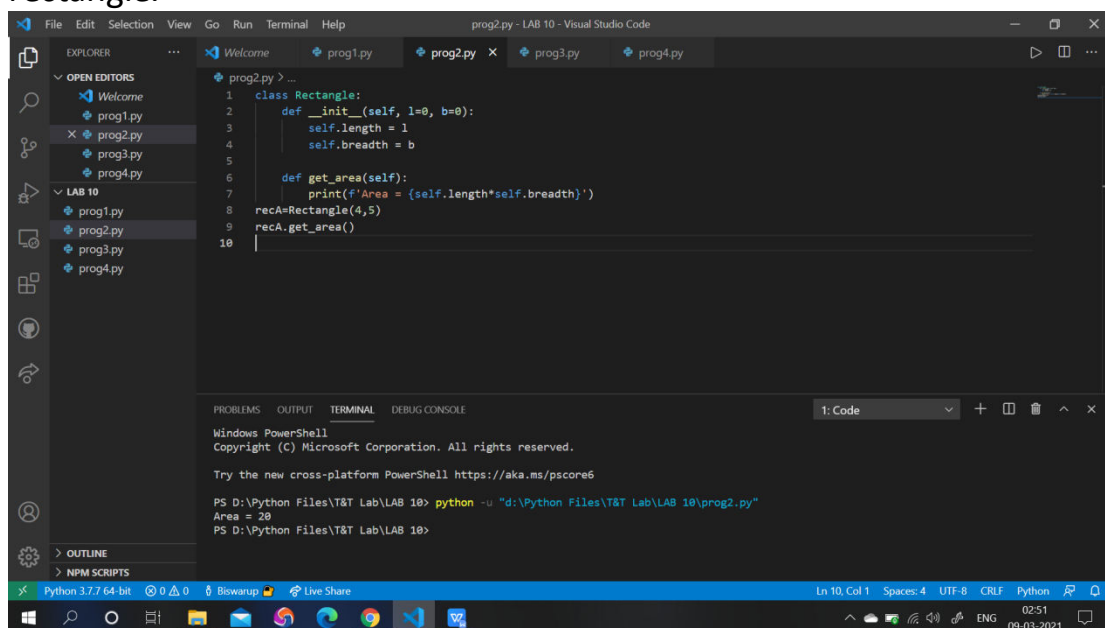
Try the new cross-platform PowerShell <https://aka.ms/pscore6>

PS D:\Python Files\T&T Lab\LAB 10> python -u "d:\Python Files\T&T Lab\LAB 10\prog1.py"

Name: abc
Roll: 111
Marks: 85
Division: 1st

PS D:\Python Files\T&T Lab\LAB 10>

2. WAP in python to make a class named rectangle which is constructed by length and breadth through a method, compute the area of this rectangle.



```
1 class Rectangle:
2     def __init__(self, l=0, b=0):
3         self.length = l
4         self.breadth = b
5
6     def get_area(self):
7         print(f'Area = {self.length*self.breadth}')
8
9 recA=Rectangle(4,5)
10 recA.get_area()
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

1: Code

Windows PowerShell
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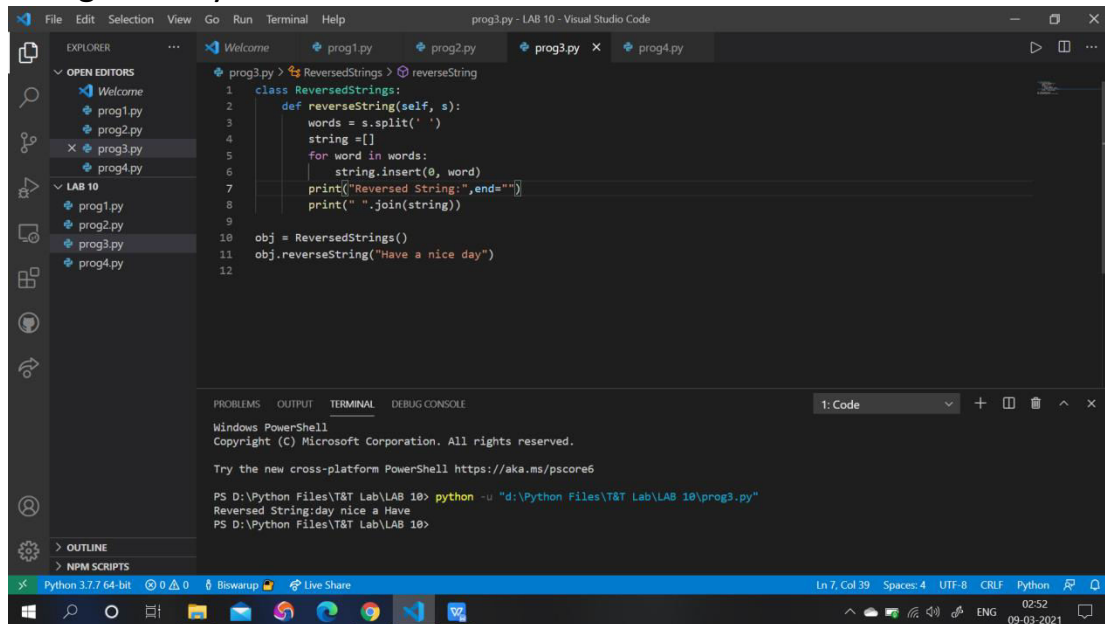
Try the new cross-platform PowerShell <https://aka.ms/pscore6>

PS D:\Python Files\T&T Lab\LAB 10> python -u "d:\Python Files\T&T Lab\LAB 10\prog2.py"

Area = 20

PS D:\Python Files\T&T Lab\LAB 10>

3. WAP in python to make a class named string reverse and reverse string word by word.

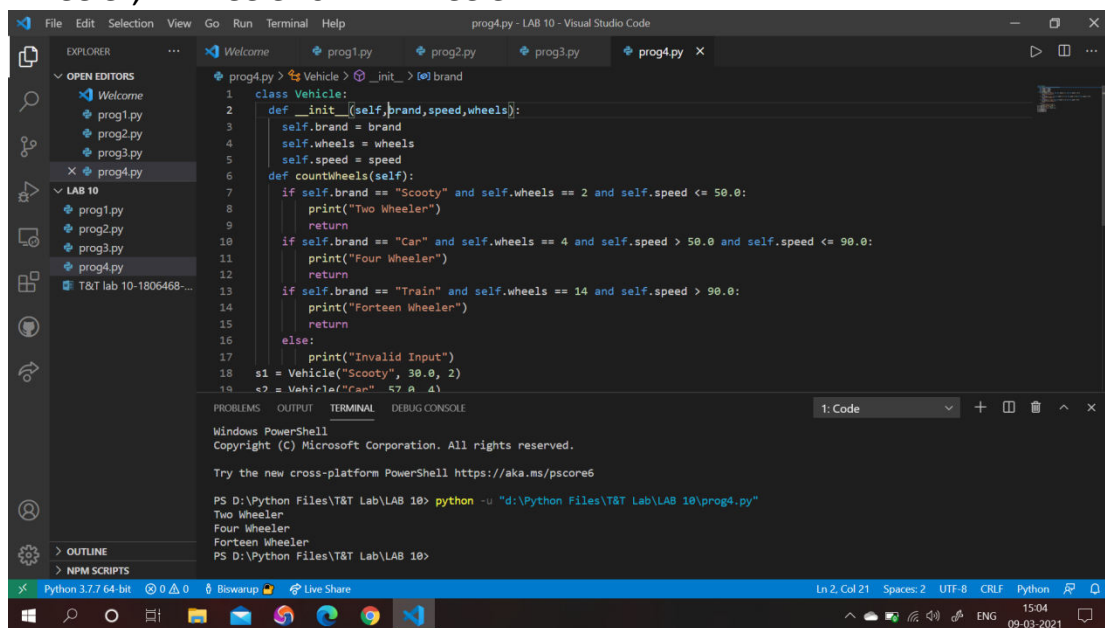


The screenshot shows the Visual Studio Code editor with a file named `prog3.py` open. The code defines a class `ReversedStrings` with a method `reverseString` that takes a string `s` and returns it with words reversed. The terminal output shows the execution of the program, which prints the reversed string: `Reversed String: day nice a Have`.

```
1 class ReversedStrings:
2     def reverseString(self, s):
3         words = s.split(' ')
4         string = []
5         for word in words:
6             string.insert(0, word)
7         print("Reversed String:", end=" ")
8         print(" ".join(string))
9
10 obj = ReversedStrings()
11 obj.reverseString("Have a nice day")
12
```

```
PS D:\Python Files\T&T Lab\LAB 10> python -u "d:\Python Files\T&T Lab\LAB 10\prog3.py"
Reversed String: day nice a Have
PS D:\Python Files\T&T Lab\LAB 10>
```

4. WAP in python to make a class named vehicle details and create objects like speed, brand name and through this declare the vehicle is 4 wheeler, 2 wheeler or 14 wheeler.



The screenshot shows the Visual Studio Code editor with a file named `prog4.py` open. The code defines a class `Vehicle` with a method `countWheels` that takes a brand name, speed, and number of wheels as input and returns the vehicle type based on these criteria. The terminal output shows the execution of the program, which prints the vehicle type: `Two Wheeler`, `Four Wheeler`, and `Forteen Wheeler`.

```
1 class Vehicle:
2     def __init__(self, brand, speed, wheels):
3         self.brand = brand
4         self.wheels = wheels
5         self.speed = speed
6     def countWheels(self):
7         if self.brand == "Scooty" and self.wheels == 2 and self.speed <= 50.0:
8             print("Two Wheeler")
9             return
10        if self.brand == "Can" and self.wheels == 4 and self.speed > 50.0 and self.speed <= 90.0:
11            print("Four Wheeler")
12            return
13        if self.brand == "Train" and self.wheels == 14 and self.speed > 90.0:
14            print("Forteen Wheeler")
15            return
16        else:
17            print("Invalid Input")
18        s1 = Vehicle("Scooty", 30.0, 2)
19        s2 = Vehicle("Can", 57.0, 4)
```

```
PS D:\Python Files\T&T Lab\LAB 10> python -u "d:\Python Files\T&T Lab\LAB 10\prog4.py"
Two Wheeler
Four Wheeler
Forteen Wheeler
PS D:\Python Files\T&T Lab\LAB 10>
```