Practical: 9

Consider an example of declaring the examination result. Design three classes: Student, Exam, and Result. The Student class has data members such as those representing roll Number, Name, etc. Create the class Exam by inheriting Student class. The Exam class adds fields representing the marks scored in six subjects. Derive Result from the Exam class, and it has its own fields such as total marks. Write an interactive program to model this relationship.

Code:

```python
class Student:

    rollNumber = None

    name = None


class Exam(Student):

    marks = []


class Result(Exam):

    def print_total(self):

        print(sum(self.marks))


r = Result()

r.name = (input("Enter name of student : "))
```

```python
r.rollNumber = int(input("Enter roll number of student : "))


for i in range(1, 7):

    r.marks.append(int(input("Enter marks of "+str(i) + " subject : ")))


print("Total marks : ")

r.print_total()
```

Output:

```
Enter name of student : amin
Enter roll number of student : 1
Enter marks of 1 subject : 90
Enter marks of 2 subject : 89
Enter marks of 3 subject : 76
Enter marks of 4 subject : 89
Enter marks of 5 subject : 78
Enter marks of 6 subject : 67
Total marks :
489
```

Github link: https://github.com/SwetSoni/Python_Practicals