# Practical 9

## Aim :

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 rollNumber, 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.

## Pract :

**Code:**

```
# 20CE003_RAJ BELADIYA
# https://github.com/rajbeladiya4/PIP-Practical.git

class student:
    def __init__(self, name, id):
        self.name = name
        self.id = id

    def studen_info(self):
        print('Name is', self.name)
        print('Id is', self.id)

class Exam(student):
    def __init__(self, name, id, m1, m2, m3, m4, m5, m6):
        student.__init__(self, name, id)
        self.m1 = m1
        self.m2 = m2
        self.m3 = m3
        self.m4 = m4
        self.m5 = m5
        self.m6 = m6

    def marks_info(self):
        print('m1 =', self.m1)
        print('m2 =', self.m2)
```

```
        print('m3 =', self.m3)
        print('m4 =', self.m4)
        print('m5 =', self.m5)
        print('m6 =', self.m6)

class result(Exam):
    def __init__(self, name, id, m1, m2, m3, m4, m5, m6):
        Exam.__init__(self, name, id, m1, m2, m3, m4, m5,
m6)
        self.total_marks = m1+m2+m3+m4+m5+m6

    def final_result(self):
        return self.total_marks

print('How many record of student you want to print :')
n = int(input())
for i in range(1, n):
    print('Enter Name of the student :')
    Name = str(input())
    print('Enter id of the student :')
    Id = str(input())
    print('enter m1')
    m1 = int(input())
    print('enter m2')
    m2 = int(input())
    print('enter m3')
    m3 = int(input())
    print('enter m4')
    m4 = int(input())
    print('enter m5')
    m5 = int(input())
    print('enter m6')
    m6 = int(input())
    result = result(Name, Id, m1, m2, m3, m4, m5, m6)
    result.studen_info()
    result.marks_info()
    print('total marks is :', result.final_result())
```

**Output:**

```
PS C:\Users\Raj Beladiya> python -u "f:\Sem 4\CE259-PIP\PIP_Practical 9\PIP_Practical 9.py"
How many record of student you want to print :
2
Enter Name of the student :
raj
Enter id of the student :
ce003
enter m1
39
enter m2
39
enter m3
20
enter m4
55
enter m5
54
enter m6
43
Name is raj
Id is ce003
m1 = 39
m2 = 39
m3 = 20
m4 = 55
m5 = 54
m6 = 43
total marks is : 250
PS C:\Users\Raj Beladiya>
```