**Practical 9**

**Q)** 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.

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| **Code** | *class* Student:  *def* \_\_init\_\_(*self*, *rollNumber*, *name*, *div*):  *self*.rollNumber = *rollNumber*  *self*.name = *name*  *self*.div = *div*  *class* Exam(Student):  *def* \_\_init\_\_(*self*, *rollNumber*, *name*, *div*):          super().\_\_init\_\_(*rollNumber*, *name*, *div*)  *self*.mark = []  *def* marks(*self*):          print(*f*"Enter marks for six subject of {*self*.name} : ")          for i in range(6):              temp = int(input())  *self*.mark.append(temp)  *class* Result(Exam):  *def* \_\_init\_\_(*self*, *rollNumber*, *name*, *div*):          super().\_\_init\_\_(*rollNumber*, *name*, *div*)  *self*.total\_marks = 0  *def* final\_result(*self*):          for i in range(6):  *self*.total\_marks += *self*.mark[i]          print(*f*"-----RESULT-----"  *f*"\nName :\t\t\t{*self*.name}\nRoll No : \t\t{*self*.rollNumber}\nDivision : \t\t{*self*.div}\nTotal Marks : \t{*self*.total\_marks}")  result = Result("20CE007","Jatan Bhimani","CE-1 A Batch")  result.marks()  result.final\_result() |
| **Output** |  |