



Task(12.1)

Hackerrank problem: University Management System

Requirements:

1. Base Class - Person:

- The class Person will be an abstract class (cannot be instantiated directly) with the following:
 - Two pure virtual functions:
 - getdata(): for inputting data.
 - putdata(): for displaying data.
 - Two data members:
 - name: a string representing the name of the person.
 - age: an integer representing the age of the person.

2. Derived Class - Professor:

- Inherits from the Person class.
- Additional data members:
 - publications: an integer representing the number of publications.
 - curr_id: a unique identifier for the professor. It is a static integer that increments each time a new professor is created.
- Overrides the getdata() and putdata() methods:
 - getdata() should input the name, age, and number of publications.
 - putdata() should display the name, age, publications, and current professor ID.

3. Derived Class - Student:

- Inherits from the Person class.
- Additional data members:
 - marks[6]: an array of six integers representing the marks of the student.
 - curr_id: a unique identifier for the student. It is a static integer that increments each time a new student is created.
- Overrides the getdata() and putdata() methods:
 - getdata() should input the name, age, and six marks.
 - putdata() should display the name, age, the sum of the six marks, and current student ID.

Hackerrank URL to submit the solution:

<https://www.hackerrank.com/challenges/virtual-functions/problem?isFullScreen=true>

Thank You