

This is an optional project.

It has 4 parts, and each part builds on the previous part.

1. Write a class definition that represents a student in a school.
 2. A student should have the following attributes:
 - a. First name
 - b. Last name
 - c. ID
 - i. This is a string that starts with letter 'S' and is followed by a number.
 - ii. Example: S101 or S777
 - d. A collection of courses that the student is taking for the current semester.
 - i. What data structure (choose something from STL containers) would you pick for this collection?
 - e. Any other reasonable attributes that you may want to add.
 3. Add the following behavior (API):
 - a. GetName method
 - b. GetID method
 - c. Other methods to return the attributes, as needed.
 - d. Output operator that prints the students name and ID, separated by a delimiter, say, a comma.
 4. Given the course attribute, it would then follow that you would want a class to represent a course offered at the school.
 5. Write a class definition and corresponding implementation for a course.
 6. A course should have the following attributes:
 - a. Course name (string)
 - b. Course prefix (string)
 - c. Course Number(string)
 - d. Course ID(string)
 7. Add the following behavior (API):
 - a. Add a GetFullName method that returns the course prefix, course Number and the course name.
 - i. Example: If course name is "Introduction to Computer Science" and prefix is CS, and number is 101, then GetFullName returns
CS 101 Introduction to Computer Science
 - b. Output operator that prints the full name (i.e., the string returned by GetFullName() method)
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