1. Create a student class for storing information related to student information for the Saddleback College. This class should contain the student’s name, student’s Id, phone number, age, gender, class standing, and GPA. You should write a series of member functions that change the student’s name, student’s Id, phone number, age, class standing, and GPA. You should write a print function that prints all information related to a student. The class specification and implementation should be in separate files. Write a client to test **all** your member functions. Print the **before and after** when testing your change functions. You should write at least two different constructors (default and non-default). Store the Students objects in an array.
2. Create a date class.
3. Derive a CS1Cstudent class from the student class. Add the following data members to the CS1Cstudent class:

Total score on the student’s assignments

Knowledge of Python (yes or no)

Projected graduation date (use the date class (composition))

1. Store the CS1CStudent objects in an array.
2. Redefine the print method in the CS1Cstudent class to print the student’s name, student’s Id, phone number, age, gender, class standing, GPA, total score, knowledge of Python, and projected graduation date for CS1Cstudent objects.

You should write at least two different constructors (default and non-default) for the CS1Cstudent class.

You should write (and test) member functions that change the total score, knowledge of Python and projected graduation date data members.

1. Write software to change the name, age, phone number, student ID and class standing of a CS1Cstudent object.

One should be able to follow your output without looking at your source code.

Data:

Students

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Student’s Id | Phone | Age | Gender | Class standing | GPA |
| Celine Dion | 44444 | 949-555-1234 | 49 | F | Freshman | 4.0 |
| Madonna | 123456 | 714-555-5555 | 59 | F | Sophomore | 3.23 |
| Jennifer Lopez | 876542 | 760-703-1234 | 48 | F | Sophomore | 3.79 |
| Lady Gaga | 777744 | 213-555-6789 | 31 | F | Freshman | 2.10 |

CS1CStudents

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Student’s Id | Phone | Age | Gender | Class standing | GPA |
| Adele | 667788 | 949-665-1234 | 29 | F | Freshman | 3.3 |
| Taylor Swift | 156789 | 248-555-6543 | 27 | M | Sophomore | 3.9 |
| Bruno Mars | 876543 | 703-703-7654 | 31 | F | Sophomore | 3.2 |

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Assignment Score | Python Knowledge | Graduation Date |
| Adele | 500 | no | 5/12/2017 |
| Taylor Swift | 700 | no | 5/11/2018 |
| Bruno Mars | 800 | yes | 5/11/2017 |

Due September 6th