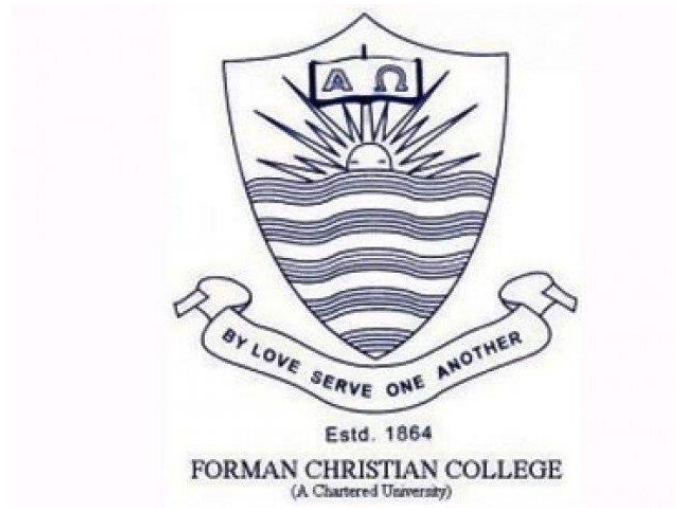


Programming II

Comp 111

Fall 2021



Department of Computer Science
Forman Christian College University

Lab 7

Composition, Aggregation and Association

Question #	Total Marks
Question 1	5
Question 2	5
Question 3	5

Lab Problem

Question 1:

Implement a class **Patient** having **PatientID, PatientName, PatientDisease and Treatment**. It should also have a method **Chart()** that prints the demographics of the patient. Implement another class Doctor, which will have **DoctorName** and **DoctorID** as its attributes and a method **treat()** that suggests the type of the **Treatment** to the **Patient**.

Hint: Workflow will beCreate patient but without any value in treatment. Then create doctor. After that call doctor treatment function and pass the patient object to set the treatment variable.

Question 2:

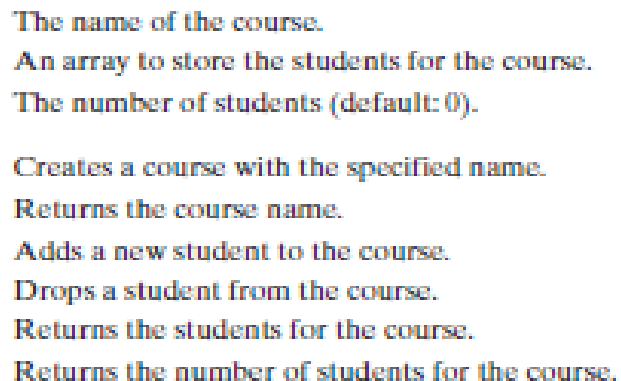
A class called **bird** contains three instance variables: **name (String)**, **color (String)**, and **gender (char of either 'm' or 'f')**. There should be getter and setter function for all instance variables. Function **Display** should print all the information of bird.

A class called **cage** is designed to hold different birds. Cage is not complete without the birds in it so it contains three instance variables: **cage_no (integer)**, **size (integer)**, **list_of_Birds (objects of the class birds)**. There should be methods **addbird()**, **deletebird()** and **DisplaycageData()**. Write a test driver to test all the methods in the class **Cage**.

Question 3:

A student class has two attributes **Id** and **name**. A course class has a **name** and has students enrolled (List of students). You should be able to add/drop a student to/from the course.

You can use a class to model the courses, as shown in Figure



- The name of the course.
- An array to store the students for the course.
- The number of students (default: 0).
- Creates a course with the specified name.
- Returns the course name.
- Adds a new student to the course.
- Drops a student from the course.
- Returns the students for the course.
- Returns the number of students for the course.