# Quiz 01

**Composition:**

Create a class Program that contains attributes such as name, ID, and courses. The courses attribute should be an array of Course objects. The Course class should contain attributes such as course code, course name, and instructor. Create an addCourse() method in the Program class that allows a user to add a Course object to the courses array. You can use static array with pre-defined size for ease.

In main, create an object of the Program class and add a few Course objects to its courses array data member. Do not violate the rules of composition. Display all the data of program object including the program ID, name, and the courses info.

**Polymorphism**

Create a class Vehicle that contains attributes such as ID, model, and year. The Vehicle class should have a virtual method named displayDetails() that displays the details of the vehicle.

Create two derived classes from the Vehicle class named Car and Truck. The Car class should contain attributes such as number of doors and maximum speed. The Truck class should contain attributes such as payload capacity. Override the displayDetails() method in both the Car and Truck classes to display the details of the vehicle, as well as the specific details for each class.

In main, create an array of Vehicles and add some Car and Truck objects to it. Pass the entire array to a function named displayAll() that will display each vehicle's ID, model, year, and specific details.

In the output, your program should display the information about the vehicles, and also the destructors should be called of each class.