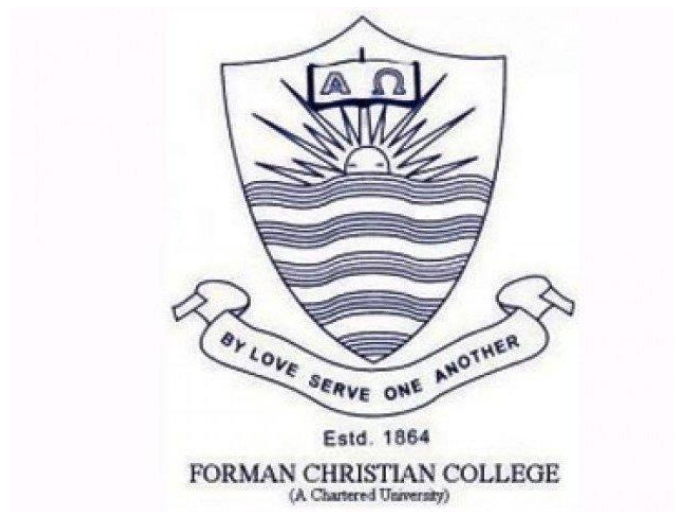


Introduction to C/C++

Comp 295

Spring 2023



Department of Computer Science

Forman Christian College University

Lab 9
OOP Design

Question #	Total Marks
Question 1	-
Question 2	-

In Lab Problem

Question 1. Vehicle Class

Consider the following inventory list that contains the information on vehicles available in a vehicle dealer shop. The first column in the inventory lists the make of the vehicles, the second column lists the year of the vehicles, and the third column lists the horsepower of the vehicles.

Nissan	2012	750.50
Toyota	2017	650.00
Jeep	2011	650.00
Hyundai	2018	500.00
Hyundai	2008	700.50
Mazda	2014	500.00
Kia	2010	750.50
Kia	2012	700.00
Jeep	2012	750.00
Toyota	2013	600.50
Kia	2018	700.00
Jeep	2008	750.00
BMW	2009	600.50
Jeep	2017	550.00
Honda	2013	500.00
Mazda	2012	700.00
BMW	2009	750.00
Jeep	2005	650.00
Hyundai	2010	750.50
Toyota	2008	750.00

In order to store a vehicle information, let us declare a C++ Class as follows:

```
class Vehicle {  
  
    string make;  
    int year;  
    double hp; //horse power of the vehicle  
};
```

Write a C++ friend function named `readVehicleInventory` that takes a string argument which is the full path of an input text file containing an inventory similar to the sample shown above, reads all the vehicle information in the input file to an array of `Vehicle` class, and finally returns the array of `Vehicle` objects. Observe that we do not know how many vehicle objects are listed in the input file

Question 2.

Write a function named `most powerful` that takes a array of `Vehicle` structs and string as make of vehicle and print the highest power among all elements of the same make as the string argument