

Object Oriented Programming

Assignment # 02



Note:

- First think about a problem statement and then write/draw your logic on paper.
- After designing the logic on paper, code the problem statement on any editor (VS Code, Gedit, etc).
- Copied tasks will be awarded **zero** marks without any investigation.
- Comments you code properly.
- Assignment After Due Date Assignment will not be Accepted.
- Plagiarism upto 30% will result in zero marks.
- Due date will not be extended.
- **Plagiarism of any shape or form will not be tolerated. In case of plagiarism, the particular question will be marked zero and 50% marks from total obtained marks will be deducted.**

Problem 1

We want to store the information of different vehicles. Create a class named Vehicle with two data members named mileage and price. Create its two subclasses Car with data members to store ownership cost, warranty (by years), seating capacity and fuel type (diesel or petrol).

*Bike with data members to store the number of cylinders, number of gears, cooling type (air, liquid or oil), wheel type (alloys or spokes) and fuel tank size (in inches)

Make another two subclasses Audi and Ford of Car, each having a data member to store the model type. Next, make two subclasses Bajaj and TVS, each having a data member to store the make-type.

Now, store and print the information of an Audi and a Ford car (i.e. model type, ownership cost, warranty, seating capacity, fuel type, mileage and price.) Do the same for a Bajaj and a TVS bike.

Additional Requirements:

1. Add the appropriate constructors.
2. Make a copy constructor to copy the data of one object to another.
3. Create a menu driven Program for users to add/remove/find Car, Bike and Display their information according to their choice.