Home Work

Task 01:

Lamborghini is an international luxury sports car developer stationed in Italy. The company has a reputation for producing cars that are extremely expensive, powerful and rare. Lamborghini has developed a brand new model called the Diablo. The company produces a very limited number of Diablo's each year. The company is producing the Diablo in only one colour called the "Hot Red".

When the company has produced a Diablo, the car has a number of attributes like colour, cubic capacity, number of seats, year of manufacture, engine number, frame number and owner name. Out of these attributes the attributes that remain the same for all Diablo's being produced are colour, cubic capacity and number of seats.

Suppose you are working on a system specially designed for the Lamborghini Diablo. Follow the instructions below for creating the class and objects:

- Store the owners name as a dynamic array data member.
- Create an object named "obj1" and initialize the object.
- Create a copy constructor that can copy all those attributes that remain the same for all cars.
- Generate another object named "obj2" that is created by copying only those attributes that are the same from "obj1".
- Initialize the remaining attributes with values of your own.

Task 02:

Your task is to create a class that contains an integer pointer data member. Create a single object named "one" in the

main and assign values to the data member of the object. Then create another object named "two" that is a copy of the "one". Create a shallow copy constructor and then demonstrate that both objects share a common memory i.e. modifying one object in fact modifies the other. Create a display function that will show the values of the object.

END