**Assume that one constructor initializes data member say num\_vehicle, hour and rate. There should be 10% discount if num\_vehicle exceeds 10. Display the total charge. Use two objects and show bit-by-bit copy of one object to another (make your own copy constructor).**

**#include <iostream>**

**#define SUCCESS 0**

**using namespace std;**

**class Lease**

**{**

**private:**

**int num\_vehicles;**

**float hour, charge;**

**public:**

**Lease(int n, float h, float c):num\_vehicles(n),hour(h),charge(c){};**

**Lease(Lease &a)**

**{**

**num\_vehicles=a.getNumVehicles();**

**hour=a.getHour();**

**charge=a.getCharge();**

**}**

**int getNumVehicles()**

**{**

**return num\_vehicles;**

**}**

**float getHour()**

**{**

**return hour;**

**}**

**float getCharge()**

**{**

**return charge;**

**}**

**float getTotal()**

**{**

**float total = num\_vehicles\*hour\*charge;**

**if (num\_vehicles > 10)**

**{**

**total \*= 0.9;**

**}**

**return total;**

**}**

**void display()**

**{**

**cout << "No of vehicle " << num\_vehicles << endl;**

**cout << "No of hours " << hour << endl;**

**cout << "Charge " << charge << endl;**

**cout << "Total " << getTotal() << endl;**

**}**

**};**

**int main()**

**{**

**Lease a(4,5,5),b(12,5,5);**

**cout << "Object constructed via constructor" << endl;**

**a.display();**

**b.display();**

**Lease c= a, d=b;**

**cout << "Object constuced via copy constructor" << endl;**

**c.display();**

**d.display();**

**return SUCCESS;**

**}**

**#include<iostream>//or**

**using namespace std;**

**class Vehicle**

**{**

**int num\_vehicle;**

**float hour, rate, charge;**

**public:**

**Vehicle(int n, float h, float r): num\_vehicle(n), hour(h), rate(r) {}**

**Vehicle(Vehicle& v1)**

**{**

**hour = v1.hour;**

**num\_vehicle = v1.num\_vehicle;**

**rate = v1.rate;**

**}**

**float total\_charge()**

**{**

**if(num\_vehicle >= 10)**

**return hour \* rate \* 0.9;**

**else**

**return hour \* rate;**

**}**

**void display()**

**{**

**cout << "Number of Vehicles: " << num\_vehicle << endl << "Hour: " << hour << endl << "Rate: Rs. " << rate << " per hour" << endl << "Total Charge = " << total\_charge() << endl;**

**}**

**};**

**int main()**

**{**

**int n;**

**float h, r;**

**cout << "Enter number of vehicles: ";**

**cin >> n;**

**cout << "Enter hours: ";**

**cin >> h;**

**cout << "Enter rate: ";**

**cin >> r;**

**Vehicle v1(n, h, r);**

**Vehicle v2(v1);**

**v1.display();**

**v2.display();**

**}**