

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();
}

```