

Q.1 Define a class called Car with attributes such as make, model, and year. Include member functions to set and get these attributes. Create an object of the Car class and demonstrate the use of its member functions

```
1. #include <iostream>
2. using namespace std;
3.
4. class Car
5. {
6. private:
7.     string make;
8.     string model;
9.     int year;
10.
11. public:
12.     void setData(string make, string model, int year)
13.     {
14.         this->make = make;
15.         this->model = model;
16.         this->year = year;
17.     }
18.
19.     void getData()
20.     {
21.         cout << "Car Details:\n";
22.         cout << "Make: " << make << endl;
23.         cout << "Model: " << model << endl;
24.         cout << "Year: " << year << endl;
25.     }
26. };
27.
28. int main()
29. {
30.     // Creating objects of Car and setting data using setData()
31.
32.     Car c1, c2;
33.
34.     c1.setData("Hyundai", "i20", 2008);
35.     c2.setData("Suzuki", "Swift", 2012);
36.
37.     c1.getData();
38.     c2.getData();
39.
40.     return 0;
41. }
42.
```

Q.2 Define a class called Address with attributes such as street, city, and zipCode. Create a class called Person that has an Address object as a member variable. Demonstrate composition by creating a Person object and accessing its Address attributes.

```
1. #include <iostream>
2. using namespace std;
3. class Address
4. {
5.     string street;
6.     string city;
7.     string zipCode;
8.
9. public:
10.    void setData(string street, string city, string zipCode)
11.    {
12.        this->street = street;
13.        this->city = city;
14.        this->zipCode = zipCode;
15.    }
16.
17.    void showData()
18.    {
19.        cout << "street: " << street << endl;
20.        cout << "city: " << city << endl;
21.        cout << "zipCode: " << zipCode << endl;
22.    }
23. };
24.
25. class Person
26. {
27.     Address adr;
28.
29. public:
30.    void setData(string s, string c, string z)
31.    {
32.        adr.setData(s, c, z);
33.    }
34.
35.    void showData()
36.    {
37.        adr.showData();
38.    }
39. };
40.
41. int main()
42. {
43.
44.     Person per;
45.
46.     per.setData("MG Road", "Indore", "0454775");
47.     per.showData();
48.
49.     return 0;
50. }
51.
```