

Question-1.

```
#include<iostream>
using namespace std;

class Student{
    private:
        int admno;
        char sname[20];
        float eng,math,science,total;
        float ctotal(){
            total = eng+math+science;
            return total;
        }

    public:
        void takeData(){
            cout<<"Enter admno: ";
            cin>>admno;
            cout<<endl<<"Enter student's name: ";
            cin>>sname;
            cout<<endl<<"Enter marks: "<<endl;
            cin>>eng>>math>>science;
        }

        void showData(){
            cout<<"The Admission number "<<admno;
            cout<<" "<<sname;
            cout<<endl<<"Marks of English, Math and Science respectively are
"<<eng<<" "<<math<<" "<<science<<endl;
            cout<<"The total marks is "<<ctotal();
        }
};

int main(){
    Student s1;
    s1.takeData();
    s1.showData();
    return 0;
}
```

Question-2.

```
#include<iostream>
using namespace std;

class Batsman{
    private:
        int bcode;
        char bname[20];
        int innings, notout, runs;
        int batavg;
        int calavg(){
            batavg = runs/(innings-notout);
            return batavg;
        }

    public:
        void readData(){
            while(true)
            {
                cout<<"Enter Code: "<<endl;
                cin>>bcode;
                if(bcode>999 && bcode <10000){
                    break;
                }
                else{
                    cout<<"Invalid CODE"<<endl;
                }
            }

            cout<<"Enter batsman name: "<<endl;
            cin>>bname;
            cout<<"Enter innings, notout,runs:"<<endl;
            cin>>innings>>notout>>runs;
            calavg();
        }

        void displayData(){
            cout<<"Displaying data"<<endl;
            cout<<bcode<<"\n"<<bname<<"\n"<<innings<<"\n"<<notout<<"\n"<<runs<
<"\n"<<batavg<<endl;
        }
};

int main(){
    Batsman b1;
    b1.readData();
    b1.displayData();
}
```

```
    return 0;  
}
```

Question-3.

```
#include<iostream>
using namespace std;

class Test{
    private:
        int test_code;
        string description;
        int Nocandidate, centerReqd, no_of_center;
        int calcnctr()
        {
            no_of_center = (Nocandidate/100) + 1;
            return no_of_center;
        }

    public:
        void schedule(){
            cout<<"Enter details: "<<endl;
            cin>>test_code>>description>>centerReqd>>Nocandidate;
            calcnctr();
        }
        void disptest(){
            cout<<"*****The details are
*****"<<endl;
            cout<<test_code<<endl;
            cout<<description<<endl;
            cout<<Nocandidate<<endl;
            cout<<centerReqd<<endl;
            cout<<no_of_center<<endl;
        }
};

int main(){
    Test t1;
    t1.schedule();
    t1.disptest();
}
```

Question-4.

```
#include<iostream>
using namespace std;

class Qatar{
    private:
        int flight_no;
        string destination;
        float distance, fuel;

        void cal_fuel(){
            if(distance<=1000){
                fuel = 500;
            }
            else if (distance>1000 && distance<=2000){
                fuel = 1100;
            }
            else{
                fuel = 2200;
            }
        }

    public:
        void feed_info(){
            cout<<"Enter details: "<<endl;
            cin>>flight_no>>destination>>distance;
            cal_fuel();
        }
        void show_info(){
            cout<<"*****"<<endl;
            cout<<"The Details are "<<endl;
            cout<<"Flight number: "<<flight_no<<endl;
            cout<<"Destination: "<<destination<<endl;
            cout<<"Distance: "<<distance<<endl;
            cout<<"Fuel: "<<fuel;
        }
};

int main(){
    Qatar q1;
    q1.feed_info();
    q1.show_info();
}
```

Question-5.

```
#include<iostream>
using namespace std;

class Book{
    private:
        int book_no, no_of_copies;
        char book_title[20];
        float price, total;
        void total_cost(int n){
            total = n*price;
            cout<<"The total cost is "<<total;
        }

    public:
        void input(){
            cout<<"Enter details: "<<endl;
            cin>> book_no>> book_title>> price;
        }

        void purchase(){
            cout<<"Enter number of copies: ";
            cin>>no_of_copies;
            total_cost(no_of_copies);
        }

};

int main(){
    Book b1;
    b1.input();
    b1.purchase();
    return 0;
}
```

Question-6.

```
#include<iostream>
using namespace std;

class Report{
    private:
        int adno;
        char name[20];
        float marks[5],average,sum=0;
        void GETAVG(){
            for(int i=0;i<5;i++){
                sum+= marks[i];
            }
            average = sum/5;
        }

    public:
        void read_info(){
            cout<<"Enter details: ";
            cin>>adno>>name;
            cout<<endl<<"Enter marks:";
            for(int i=0;i<5;i++){
                cin>>marks[i];
            }
            GETAVG();
        }

        void display_info(){
            cout<<"*****"<<endl;
            cout<<"The output is:"<<endl;
            cout<<adno<<endl;
            cout<<name<<endl;
            cout<<"The marks are: ";
            for(int i=0;i<5;i++){
                cout<<marks[i]<<endl;
            }
            cout<<"The average is "<<average;
        }
};

int main(){
    Report r1;
    r1.read_info();
    r1.display_info();
}
```