

**NAME :** **HASNAT AHMAD.**  
**CLASS :** **BSE(2A).**  
**ROLL NO :** **20P-0079.**  
**SUBJECT :** **OPP LAB.**

## ***ASSIGNMENT 2.***

### ***QUESTION 1.***

```
#include<iostream>
#include<string>
using namespace std;
class Test{
    private:
        int Testcode;
        string Description;
        int NoCandidate;
        int CenterReqd;
        int CALCNTR(){
            return CenterReqd=(NoCandidate/100+1);
        }
    public:
        void SCHEDULE(){
```

```

        cout<<"Enter TestCode , Description , No of CAndidate : "<<endl;
        cin>>Testcode>>Description>>NoCandidate;
        CALCNTR();
    }
    void DISPTTEST(){
        cout<<"TestCode : "<<Testcode<<endl;
        cout<<"Description : "<<Description<<endl;
        cout<<"Number Of Candidates : "<<NoCandidate<<endl;
        cout<<"Number Of Centers Required : "<<CenterReqd<<endl;

    }
};
int main(){
    Test t1;
    t1.SCHEDULE();
    t1.DISPTTEST();

}

```

## ***OUTPUT.***

```

Enter TestCode , Description , No of CAndidate :
8
testing
4
TestCode : 8
Description : testing
Number Of Candidates : 4
Number Of Centers Required : 1

```

## QUESTION 2.

```
#include<iostream>
#include<string>
using namespace std;
class Jet{
    private:
        int Flight_number;
        string Destination;
        float Distance;
        float Fuel;
        void CALFUEL(){
            if (Distance<=1000){
                Fuel=500;
            }
            else if( Distance>=1000 & Distance<=2000){
                Fuel=1100;
            }
            else if(Distance>2000){
                Fuel=2200;
            }
        }
    public:
        void FEEDINFO(){
            cout<<"Enter Flight Number , Destination , Distance "<<endl;
            cin>>Flight_number>>Destination>>Distance;
            CALFUEL();
        }
        void SHOWINFO(){
            cout<<"FLight Number : "<<Flight_number<<endl;
```

```
        cout<<"Destination : "<<Destination<<endl;
        cout<<"Distance : "<<Distance<<endl;
        cout<<"Fuel : "<<Fuel<<endl;
    }

};

int main(){
    Jet j1;
    j1.FEEDINFO();
    j1.SHOWINFO();
}
```

## ***OUTPUT.***

```
Enter Flight Number , Destination , Distance
22
Peshawar
2400
FLight Number : 22
Destination : Peshawar
Distance : 2400
Fuel : 2200
```

## ***QUESTION 3.***

```
#include<iostream>
```

```

#include<string>
using namespace std;
class Book{
    private:
        int Book_number;
        char Book_title[20];
        float Price;
        void TOTAL_COST(int N){
            cout<<"Total Cost = "<<N*Price<<endl;
        }
    public:
        void INPUT(){
            cout<<"Enter Book Number , Book Title , Price "<<endl;
            cin>>Book_number>>Book_title>>Price;
        }
        void PURCHASE(){
            int c;
            cout<<"Enter Number Of Copies : ";
            cin>>c;
            TOTAL_COST(c);
        }
};
int main(){
    Book b1;
    b1.INPUT();
    b1.PURCHASE();
}

```

***OUTPUT.***

```
Enter Book Number , Book Title , Price
4
Kings
400
Enter Number Of Copies : 6
Total Cost = 2400
```

## ***QUESTION 4.***

```
#include<iostream>
using namespace std;
class Report{
    private:
        int adno;
        char name[20];
        float marks[5];
        int avg=0;
        void GET_AVG(){
            int total=0;
            for(int i=0;i<5;i++){
                total+=marks[i];
            }
            avg=total/5;
        }
    public:
        void READINFO(){
            cout<<"Enter Admission Number , Name "<<endl;
            cin>>adno>>name;
            cout<<"Enter 5 Subject MArks : "<<endl;
            for(int i=0;i<5;i++){
                cin>>marks[i];
            }
        }
}
```

```

    }
    GET_AVG();
    }
    void DISPLAYINFO(){
        cout<<"Admission No : "<<adno<<endl;
        cout<<"Name : "<<name<<endl;
        cout<<"MArks : "<<endl;
        for(int i=0;i<5;i++){
            cout<<marks[i]<<" ";
        }
        cout<<"Average : "<<avg<<endl;

    }
};
int main(){
    Report R1;
    R1.READINFO();
    R1.DISPLAYINFO();
}

```

## ***OUTPUT.***

```

Enter Admission Number , Name
22
Hasnat
Enter 5 Subject MArks :
77
86
99
87
69
Admission No : 22
Name : Hasnat
MArks :
77  86  99  87  69  Average : 83

```

## QUESTION 5.

```
#include<iostream>
using namespace std;
class Time{
    private:
        int hours,minutes;
    public:
        void settime(int h,int m){
            hours=h;
            minutes=m;
        }
        void showtime(){
            cout<<"Hours : "<<hours<<" "<<" Minutes : "<<minutes<<endl;
        }
        Time sum(Time t2){
            Time t3;
            t3.minutes=minutes+t2.minutes;
            t3.hours=hours+t2.hours;
            return t3;
        }
};
int main(){
    Time t1,t2,t3;
    t1.settime(3,55);
    t1.showtime();
    t2.settime(5,32);
    t2.showtime();
    t3=t1.sum(t2);
    t3.showtime();
}
```



## ***OUTPUT.***

Hours : 3      Minutes : 55

Hours : 5      Minutes : 32

Hours : 8      Minutes : 87