

OBJECT ORIENTED PROGRAMMING LAB



Lab-task#8

Submitted BY:

Najam Ali Abass

(p20-0471)

Submitted to:

MR. MUHAMMAD ABDULLAH ORAKZAI

(Computer Science Instructor)

DEPARTMENT OF SOFTWARE ENGINEERING
FAST NATIONAL UNIVERSITY OF COMPUTER
AND EMERGING SCIENCE, PESHAWAR

Session 2020-2024

Question#1: Define a class batsman with the following specifications: Note for user understanding purposes you should write comment with each line of code?

Source-code:

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

class batsman
{
private:
/* data */
int bcode;
char bname[20];
int inning,notout,runs;
int batavg;

void calcavg(){
if(inning!=notout)
batavg=runs/(inning-notout);
else
batavg=0;
}
public:
void readdata();
void displaydata();
};

void batsman::readdata()
```

```

{
cout<<"Enter Batsman code:";
cin>>bcode;

cout<<"Enter batsman name:";
cin.ignore();
cin.getline(bname,20);

cout<<"Enter innings:";
cin>>inning;
cout<<"Enter notout:";
cin>>notout;
cout<<"Enter runs:";
cin>>runs;
calcavg();
cout<<"===== "<<endl;

void batsman::displaydata(){
cout<<"Batsman code"<<bcode<<endl;
cout<<"Batsman name"<<bname<<endl;
cout<<"INNINGS"<<inning<<endl;
cout<<"Not out "<<notout<<endl;
cout<<"Runs "<<runs<<endl;
cout<<"Batting Average"<<batavg<<endl;
}

int main(){
batsman mybatsman;
mybatsman.readdata();
mybatsman.displaydata();
}

```

```
return 0;  
}
```

output#1:-

```
Enter batsman name: Najam Ali  
Enter innings: 123  
Enter notout: 12  
Enter runs; 13009  
=====
```

Batsman code	471
Batsman name	Najam Ali
INNINGS	123
Not out	12
Runs	13009
Batting Average	117

```
[1] + Done  
p/Microsoft-MIEngine-In-v6ui8bs3.uu5" 1  
janny@stoic-programmer:~/Documents/c pl
```

Question#2:-Define a class student with the following specification.
SOURCE-CODE

```
#include <string>
#include <iomanip>
using namespace std;
class Student
{
public:
// Default constructor
Student() {
s1 = 0;
s2 = 0;
s3 = 0;
}
// Parameterized constructor
Student(int no, string name, float math,
float eng, float sci) {
regono = no;
sname = name;
s1 = math;
s2 = eng;
s3 = sci;
}
// Member functions
float calculate(){
total = s1 + s2 + s3;
return total;
```

```

}
void putData();
// destructor.
~Student() {};
private:
int regono;
string sname;
float s1;
float s2;
float s3;
float total;
};

void Student::putData() {
cout << "Student number: " << regono <<
endl;
cout << "Student name: " << sname <<
endl<<endl;
cout << "s1 mathe: " <<setw(6)<< fixed
<< setprecision(2) << s1 << endl;
cout << "s2 English: " <<setw(6)<< fixed
<< setprecision(2) <<s2 << endl;
cout << "s3 Science: " <<setw(6)<< fixed
<< setprecision(2) <<s3 << endl;
cout << "total: " <<setw(6)<< fixed <<
setprecision(2) <<calculate() << endl;
}

```

```

cout << "==++==++==++==++==++
++==++==++==++=="<<endl;
}
int main() {
Student st1(123, "Najam Ali Abass", 93, 90,
94.95); //Parameterized constructor
st1.putData();
return 0;
}

```

OUTPUT2:-

```

[Running] cd "/home/janny/Documents/c plus plu
Student number: 123
Student name:  Najam Ali Abass

s1 mathe:      93.00
s2 English:    90.00
s3 Science:    94.95
total:        277.95
==++==++==++==++==++==++==

[Done] exited with code=0 in 0.636 seconds

```

