Practical No - 02 (Group A)

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Roll No: S211045

Div: A

Batch: A2

Problem Statement :

Develop and oriented program in c++ to create a data base of student information system containing following information Name, Roll no, class , Div , DOB , Blood Group, contact address , mobile no , driving licence no , and other construct data base with sutaible member function for initializing and destroying data with constructor , default constructor ,copy constructor ,destructor ,static member function , friend class , this pointer, inline code and dynamic memory allocation operator new and delete as well as exception handling.

Program code :

```cpp
#include<iostream>

using namespace std;


class studentInfo {

private :

string name;

int roll_no;

string Class;

char div;

string DOB;

string blood_group;

long contact;

string address;

string driving_licensce;

string other;
```

```cpp
public :
static int count;
static void display() {
count++;
cout<<"Count is : "<<count<<endl;
}
studentInfo() {
name = " ";
roll_no =0;
Class = " ";
div = ' ';
DOB = " ";
blood_group = " ";
contact = 0;
address = " ";
driving_licensce = " ";
other = " ";
}

~studentInfo() {
cout<<"Destructor is invoked";
}

friend class G;
friend class D;
};
```

```cpp
int studentInfo :: count = 0;


class G {
        public :
                void getdata(studentInfo &r) {
                cout<<"Enter name : ";
                getline(cin,r.name);
                cout<<"Enter roll no : ";
                cin>>r.roll_no;
                cout<<"Enter Class : ";
                cin>>r.Class;
                cout<<"Enter div : ";
                cin>>r.div;
                cout<<"Enter DOB : ";
                cin>>r.DOB;
                cout<<"Enter blood group : ";
                cin>>r.blood_group;
                cout<<"Enter contact : ";
                cin>>r.contact;
                cout<<"Enter address : ";
                cin>>r.address;
                cout<<"Enter driving licensce no : ";
                cin>>r.driving_licensce;
                cout<<"Enter other info : ";
                cin>>r.other;
                }

                void displaydata(studentInfo &t) {
```

```cpp
            cout<<"Name is : "<<t.name<<endl;

            cout<<"Roll no is : "<<t.roll_no<<endl;

            cout<<"Class is : "<<t.Class<<endl;

            cout<<"Div is : "<<t.div<<endl;

            cout<<"DOB is : "<<t.DOB<<endl;

            cout<<"Bloog group is : "<<t.blood_group<<endl;

            cout<<"Contact is : "<<t.contact<<endl;

            cout<<"Address is : "<<t.address<<endl;

            cout<<"Driving Licensce no. is : "<<t.driving_licensce<<endl;

            cout<<"other info : "<<t.other<<endl;

        }

};

int main() {

studentInfo s;
G all;
all.getdata(s);
all.displaydata(s);
s.display();
int *age = new int(25);
cout<<"integer age is : "<<*age<<endl;
delete age;

return 0;
}
```

Output :


```
bash: syntax error near unexpected token `('
d-comp-pli-26@dcomppli26-ThinkCentre-neo-50s-Gen-3:~$ gedit main.cpp
d-comp-pli-26@dcomppli26-ThinkCentre-neo-50s-Gen-3:~$ g++ main.cpp -o ./m
d-comp-pli-26@dcomppli26-ThinkCentre-neo-50s-Gen-3:~$ ./m
Enter name : Atharva Iparkar
Enter roll no : 45
Enter Class : S.E.
Enter div : A
Enter DOB : 14/09/2004
Enter blood group : A+
Enter contact : 8177923779
Enter address : Narhe,Pune
Enter driving licensce no : 123W10313
Enter other info : Hello!
Name is : Atharva Iparkar
Roll no is : 45
Class is : S.E.
Div is : A
DOB is : 14/09/2004
Bloog group is : A+
Contact is : 8177923779
Address is : Narhe,Pune
Driving Licensce no. is : 123W10313
other info : Hello!
Count is : 1
integer age is : 25
d-comp-pli-26@dcomppli26-ThinkCentre-neo-50s-Gen-3:~$
```