



OOP (Object Oriented Programming) Lab

LAB REPORT # 1

Semester: 2nd Semester

Section: B

Submitted To:

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Submitted By:

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Code:

```
✓ #include <iostream>
#include <string>

using namespace std;

struct student
{
    ....string name;
    ....string reg;
    ....float m1, m2, m3, m4, m5;
    ....int sum;
    ....string CGPA;
};

int main()
{
    ....student s[3];

    ....for (int i = 0; i < 3; i++)
    {
        ....cout << "Enter Your Name : ";
        ....if (i > 0)
        ....cin.ignore();
        ....getline(cin, s[i].name);
        ....cout << "Enter Your Registraion Number : ";
        ....getline(cin, s[i].reg);
        ....cout << "Enter marks for subject 1 : ";
        ....cin >> s[i].m1;
        ....cout << "Enter marks for subject 2 : ";
        ....cin >> s[i].m2;
        ....cout << "Enter marks for subject 3 : ";
        ....cin >> s[i].m3;
        ....cout << "Enter marks for subject 4 : ";
        ....cin >> s[i].m4;
        ....cout << "Enter marks for subject 5 : ";
        ....cin >> s[i].m5;
        ....s[i].sum = float(s[i].m1 + s[i].m2 + s[i].m3 + s[i].m4 + s[i].m5) / 500 * 100 / 10;
        ....switch (s[i].sum)
        {
            ....case 10:
            ....case 9:
            ....s[i].CGPA = 'A';
            ....break;
            ....case 8:
            ....s[i].CGPA = "B+";
            ....break;
            ....case 7:
            ....s[i].CGPA = 'B';
            ....break;
            ....case 6:
            ....s[i].CGPA = "C+";
            ....break;
            ....case 5:
            ....s[i].CGPA = 'C';
            ....break;
            ....default:
            ....s[i].CGPA = 'F';
        }
    }

    ....for (int i = 0; i < 3; i++)
    {
        ....cout << "The CGAP of student : " << s[i].name << " registraion number : " << s[i].reg << " is : " << s[i].CGPA << endl;
    }

    ....return 0;
}
```

Output:

```
Enter Your Name : haseeb
Enter Your Registraion Number : 22-CS-030
Enter marks for subject 1 : 45
Enter marks for subject 2 : 67
Enter marks for subject 3 : 78
Enter marks for subject 4 : 34
Enter marks for subject 5 : 90
Enter Your Name : Saquib
Enter Your Registraion Number : 34
Enter marks for subject 1 : 56
Enter marks for subject 2 : 76
Enter marks for subject 3 : 86
Enter marks for subject 4 : 345
Enter marks for subject 5 : 0
Enter Your Name : Sultan
Enter Your Registraion Number : 001
Enter marks for subject 1 : 65
Enter marks for subject 2 : 76
Enter marks for subject 3 : 87
Enter marks for subject 4 : 45
Enter marks for subject 5 : 34
The CGAP of student haseeb registraion number 22-CS-030 is : C+
The CGAP of student Saquib registraion number 34 is : F
The CGAP of student Sultan registraion number 001 is : C+
```