Question2.cpp

```cpp
//<----Lab 01 - Arrays and Dynamic Memory Allocation---->

// Q2. Write a program to calculate the CGPA of students of all subjects of a single semester.
//     Assume all the courses have the same credit hour (let's assume 3 credit hours).

#include<bits/stdc++.h>
using namespace std;

//This assumes CGPAs are already given
int main(){
    float students[5][5]={{3.66,3.33,4.0,3.0,2.66},{3.33,3.0,3.66,3.0,0},{4.0,3.66,2.66,0,0},{2.66,2.33,4.0,0,0},{3.33,3.66,4.0,3.0,3.33}};
    float count=0,total=0;
    for(int i=0;i<5;i++){
        for(int j=0;j<5;j++){
            total+=students[i][j];
            (students[i][j] != 0 )?count=count+1:count=count;
        }
        cout<<"CGPA (ignoring -- subjects) of student #"<<i+1<<" "<<total/count<<endl;
        count=0;total=0;
    }
    for(int i=0;i<5;i++){
        for(int j=0;j<5;j++){
            total+=students[i][j];
        }
        cout<<"CGPA of student #"<<i+1<<"  "<<total/5<<endl;
        count=0;total=0;
    }
}

/*  This one takes input of all GPAs then calculates for those
#include<iostream>
using namespace std;

int main(){
    float cgpa;
    int NoOfSub;
    int CreditHours=3;
    float gradePoints=0;
    float grades;
    cout<<"enter total number of subjects"<<endl;
    cin>>NoOfSub;

    for(int i=1;i<=NoOfSub;i++){
    cout<<"enter the grades of courses"<<i<<" "<<endl;
    cin>>grades;
    gradePoints+=grades*3;
    CreditHours=3*NoOfSub;
    }

    cgpa=gradePoints/CreditHours;
    cout<<"cgpa of sem is"<<cgpa<<endl;
    return 0;
```

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}
*/

```