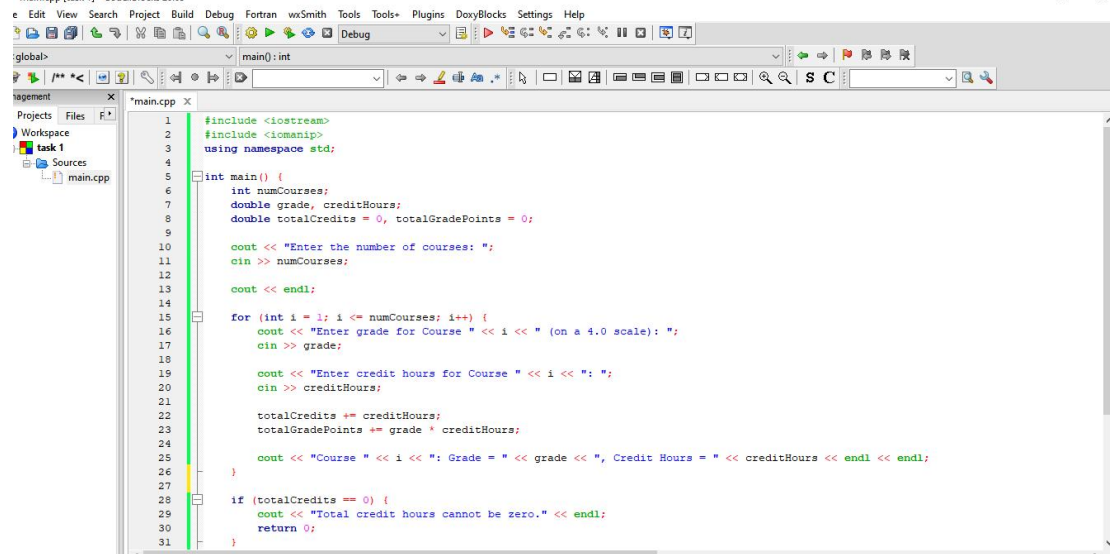
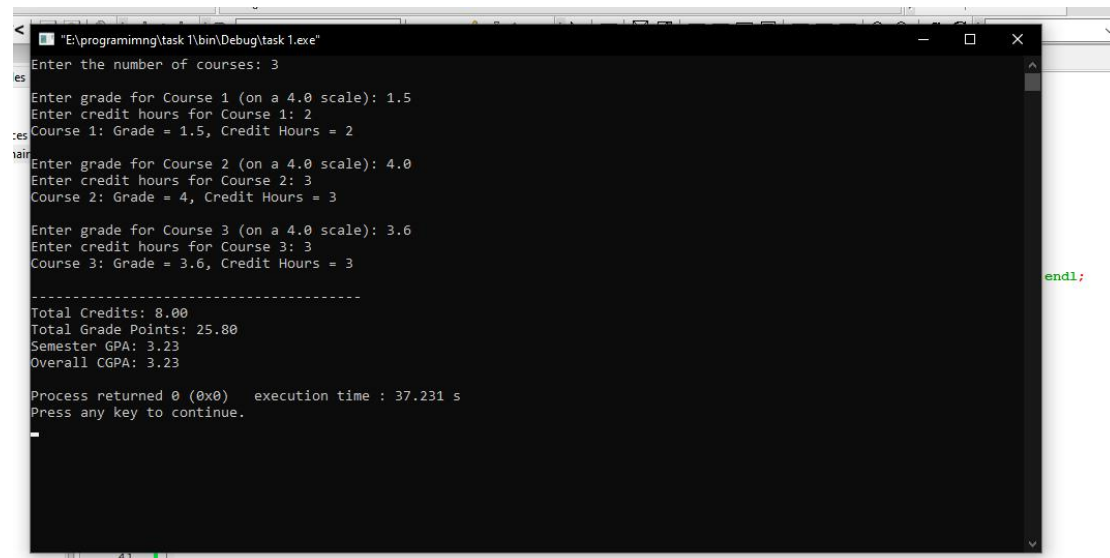


Name: Shahd Allam Mohamed



```
1 #include <iostream>
2 #include <iomanip>
3 using namespace std;
4
5 int main() {
6     int numCourses;
7     double grade, creditHours;
8     double totalCredits = 0, totalGradePoints = 0;
9
10    cout << "Enter the number of courses: ";
11    cin >> numCourses;
12
13    cout << endl;
14
15    for (int i = 1; i <= numCourses; i++) {
16        cout << "Enter grade for Course " << i << " (on a 4.0 scale): ";
17        cin >> grade;
18
19        cout << "Enter credit hours for Course " << i << ": ";
20        cin >> creditHours;
21
22        totalCredits += creditHours;
23        totalGradePoints += grade * creditHours;
24
25        cout << "Course " << i << ": Grade = " << grade << ", Credit Hours = " << creditHours << endl << endl;
26    }
27
28    if (totalCredits == 0) {
29        cout << "Total credit hours cannot be zero." << endl;
30        return 0;
31    }
```

```
29    cout << "Total credit hours cannot be zero." << endl;
30    return 0;
31 }
32
33 double gpa = totalGradePoints / totalCredits;
34
35 cout << fixed << setprecision(2);
36 cout << "-----" << endl;
37 cout << "Total Credits: " << totalCredits << endl;
38 cout << "Total Grade Points: " << totalGradePoints << endl;
39 cout << "Semester GPA: " << gpa << endl;
40 cout << "Overall CGPA: " << gpa << endl; // Assuming CGPA is same as GPA for this semester
41
42 return 0;
43 }
44
```



```
"E:\programming\task 1\bin\Debug\task 1.exe"
Enter the number of courses: 3
Enter grade for Course 1 (on a 4.0 scale): 1.5
Enter credit hours for Course 1: 2
Course 1: Grade = 1.5, Credit Hours = 2
Enter grade for Course 2 (on a 4.0 scale): 4.0
Enter credit hours for Course 2: 3
Course 2: Grade = 4, Credit Hours = 3
Enter grade for Course 3 (on a 4.0 scale): 3.6
Enter credit hours for Course 3: 3
Course 3: Grade = 3.6, Credit Hours = 3
-----
Total Credits: 8.00
Total Grade Points: 25.80
Semester GPA: 3.23
Overall CGPA: 3.23
Process returned 0 (0x0)   execution time : 37.231 s
Press any key to continue.
```