

```
1 // Attached:
2 // File      :
3 // =====
4 // Programmer: Ashley Syhongpan
5 // Class      : CS 1B
6 // Instructor: Med Mogasemi
7 // =====
8 // Program: Student Record(HW_1c)
9 // =====
10 // Description:
11 // User inputs student name, id, and gpa.
12 // The program outputs this information.
13 // =====
14 // =====
15
16 #include <iostream>
17 #include <iomanip>
18 #include <string>
19 #include <stdlib.h>
20 using namespace std;
21
22 #include "prototypes.h"
23
24 // =====
25 // ==== main =====
26 // =====
27 int main()
28 {
29     int id    = 0;
30     float gpa = 0;
31     string name;
32
33     // function used to prompt the user for id, name, gpa
34     getRecord(id, name, gpa);
35
36     // to clear screen
37     system("CLS");
38
39     // function used to output id, name, gpa
40     displayRecord(id, name, gpa);
41
42 } // END - int main()
43 // =====
44
45
46
47
48 // =====
49 // ===== function declaration =====
```

```
50 // =====
51
52 // ==== getRecord =====
53 // This function prompts the user for student id, student
54 // name, and student gpa.
55 //
56 // Input:
57 // Student id, name, and gpa.
58 //
59 // Output:
60 //
61 // =====
62 void getRecord(int& id, string& name, float& gpa)
63 {
64     cout << left;
65
66     cout << "Enter a student record:\n";
67
68     cout << setw(6) << "ID: ";
69     cin >> id;
70     cin.ignore(1000, '\n');
71
72     cout << setw(6) << "NAME: ";
73     getline(cin, name);
74
75     cout << setw(6) << "GPA: ";
76     cin >> gpa;
77     cin.ignore(1000, '\n');
78
79     cout << right;
80 } // END - getRecord()
81 // =====
82
83
84
85
86 // ==== displayRecord =====
87 // This function displays the student id, name, and gpa.
88 //
89 // Input:
90 // Student id, name, and gpa.
91 //
92 // Output:
93 // Student id, name, and gpa.
94 // =====
95 void displayRecord(int id, string name, float gpa)
96 {
97     cout << "STUDENT RECORD\n";
98
```

```
99     cout << left;
100     cout << "ID: ";
101     cout << setw(14) << right << id << endl;
102
103     cout << left;
104     cout << "NAME: ";
105
106     cout << setw(12) << right << name << endl;
107
108     cout << left;
109     cout << "GPA: ";
110
111     cout << setw(13) << right << gpa;
112 } // END - displayRecord()
113 // =====
114
115 /* ===== Output =====
116 Enter a student record:
117 ID:   12345
118 NAME: Tom Lee
119 GPA:  3.5
120 --- screen clears ---
121 STUDENT RECORD
122 ID:           12345
123 NAME:        Tom Lee
124 GPA:          3.5
125 C:\Users\ashle\source\repos\Student_Record\x64\Debug\Student_Record.exe  ↗
    (process 23108) exited with code 0.
126 Press any key to close this window . . .
127 */
```