```c
1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <string.h>
4
5  // Define the Student node
6  typedef struct Student {
7      int id;
8      char name[50];
9      char dept[30];
10     float gpa;
11     struct Student *prev, *next;
12 } Student;
13
14 // Head pointer for the linked list
15 Student *head = NULL;
16
17 // Create new student node
18 Student* createNode(int id, const char *name, const char *dept, float gpa) {
19     Student *newNode = (Student*)malloc(sizeof(Student));
20     if (!newNode) {
21         printf("Memory allocation failed!\n");
22         exit(1);
23     }
24
25     newNode->id = id;
26     strcpy(newNode->name, name);
27     strcpy(newNode->dept, dept);
28     newNode->gpa = gpa;
29     newNode->prev = NULL;
30     newNode->next = NULL;
```

Output

```
--- Student Records ---
ID: 101 | Name: Alice | Dept: CSE | GPA: 8.50
ID: 102 | Name: Bob | Dept: ECE | GPA: 9.00
ID: 103 | Name: Carol | Dept: IT | GPA: 7.80
Student with ID 102 deleted successfully.

--- Student Records ---
ID: 101 | Name: Alice | Dept: CSE | GPA: 8.50
ID: 103 | Name: Carol | Dept: IT | GPA: 7.80

Found: ID: 103 | Name: Carol | Dept: IT | GPA: 7.80

--- Reverse Student Records ---
ID: 103 | Name: Carol | Dept: IT | GPA: 7.80
ID: 101 | Name: Alice | Dept: CSE | GPA: 8.50

Average GPA of all students: 8.15

List cloned successfully!

--- Displaying Cloned List ---
ID: 101 | Name: Alice | Dept: CSE | GPA: 8.50
ID: 103 | Name: Carol | Dept: IT | GPA: 7.80


=== Code Execution Successful ===
```