Ankara University
Computer Engineering Department
COM267 HW 2
Due Date: 20.10.2017 23:59

A lecturer teaches 4 different classes of Data Structures. The number of students in these classes may be different. Using the node structures given below, perform the given assignment. Be careful to leave student list as sorted when performing the insert operation. Sort will be performed in decreasing order based on the midterm scores. After the insert operation is complete, students with the lowest midterm will be deleted from the list until the class numbers are equalized. After this process, the midterm average of each class will be calculated and written to classMidtermAverage in the class list. Then the id of each class and the midterm average will be printed on the screen. Write a print method that prints all the structure on the screen to show that the lists are created correctly - **void printAll(nodeClass *head)**. Write another print method that prints the desired class list - **void printClassList(nodeClass *head, int classId)**. Students who begin with StudentID 66 are in class 1, students starting with 77 in class 2, students starting with 88 are in class 3, and students starting with 99 are in class 4.

Example Input (studentId midterm)

```
99215 75
66123 45
66127 50
99321 90
88234 90
88313 45
77245 65
77248 70
99218 70
99219 80
77445 75
```

Example Output (classId classMidtermAverage)

```
1 47.5
2 72.5
3 67.5
4 85.0
```

(Note: You will also call printAll and printClassList functions to display all the structure and a specified class list respectively.)

```
struct nodeClass
{
        int classID;
        double classMidtermAverage;
        struct nodeClass *next;
        struct nodeStudent *studentPtr;
};

struct nodeStudent
{
        int studentID;
        int midterm;
        struct nodeStudent *next;
};
```