

## Quiz Section for Program Design (II)

### Exercise #7

After the examination, the teaching assistants need to enter the scores of the test paper into the system. Let's write a program that can sort data of the exam paper to match the student list on the course system.

Due to the school restrictions, the maximum size of class is 40 students. First, the users can choose how many records they want to key in. Then, they can start to input the student's ID and the score of the exam one by one. After typing happily, the program needs to sort the input data by the student ID in the ascending order and then display the sorted results. **You can use any method to sort.** Moreover, please **add the comments in the code to explain the sorting process you implemented.** For example, if you use one of the greedy methods, the comments you write in the program would be like "...go through the list of data to find the smallest value and return it, then look for the second smallest value...until the largest value is visited".

The table below shows the example input and output. The underscored number is the input from users. **Notice: Please use “\t” to generate intervals in the output format.**

Input	Output
Number of records you want to key in: <u>3</u> Enter ID & score: <u>12345</u> <u>75</u> Enter ID & score: <u>45678</u> <u>50</u> Enter ID & score: <u>12344</u> <u>10</u>	ID          score 12344      10 12345      75 45678      50
Number of records you want to key in: <u>5</u> Enter ID & score: <u>123</u> <u>11</u> Enter ID & score: <u>256</u> <u>88</u> Enter ID & score: <u>456</u> <u>77</u> Enter ID & score: <u>804</u> <u>33</u> Enter ID & score: <u>410</u> <u>10</u>	ID          score 123        11 256        88 410        10 456        77 804        33
Number of records you want to key in: <u>5</u> Enter ID & score: <u>123</u> <u>1</u> Enter ID & score: <u>201</u> <u>10</u> Enter ID & score: <u>121</u> <u>1</u> Enter ID & score: <u>103</u> <u>6</u> Enter ID & score: <u>307</u> <u>8</u>	ID          score 103        6 121        1 123        1 201        10 307        8