Basic Computer Programming

Assignment #2

Electrical & Electronics Engineering

Chung-Ang University

Problem

(A) Implement the function "cal_total_score".

    - In each student, total_score must be the sum of prob_1, prob_2, and prob_3.

(B) Implement the function "student_bb_sort".

    - The student array "s" must be sorted according to total_score.

    - Bubble sort algorithm should be used for the sorting.

*** The codes outside the functions must not be changed. ***

*** The execution result must be the same as the next slide ***

Expected Outputs


```
Microsoft Visual Studio 디버그 콘솔
Student 0
P1: 12  P2: 18  P3: 15
Student 1
P1: 11  P2: 30  P3: 5
Student 2
P1: 19  P2: 19  P3: 3
Student 3
P1: 15  P2: 6   P3: 26
Student 4
P1: 2   P2: 28  P3: 2
Student 5
P1: 12  P2: 26  P3: 23
Student 6
P1: 28  P2: 7   P3: 32
Student 7
P1: 25  P2: 3   P3: 34
Student 8
P1: 23  P2: 23  P3: 22
Student 9
P1: 27  P2: 9   P3: 16
Student 10
P1: 18  P2: 7   P3: 12
Student 11
P1: 19  P2: 10  P3: 33
Student 12
P1: 18  P2: 20  P3: 36
Student 13
P1: 25  P2: 24  P3: 12
Student 14
P1: 3   P2: 4   P3: 34
Student 15
P1: 15  P2: 22  P3: 32
Student 16
P1: 24  P2: 29  P3: 28
Student 17
P1: 15  P2: 23  P3: 38
Student 18
P1: 28  P2: 20  P3: 4
Student 19
P1: 22  P2: 20  P3: 19
```

```
Student 0       Score: 45
Student 1       Score: 46
Student 2       Score: 41
Student 3       Score: 47
Student 4       Score: 32
Student 5       Score: 61
Student 6       Score: 67
Student 7       Score: 62
Student 8       Score: 68
Student 9       Score: 52
Student 10      Score: 37
Student 11      Score: 62
Student 12      Score: 74
Student 13      Score: 61
Student 14      Score: 41
Student 15      Score: 69
Student 16      Score: 81
Student 17      Score: 76
Student 18      Score: 52
Student 19      Score: 61

After Bubble Sort
Student 4       Score: 32      Grade: C
Student 10      Score: 37      Grade: C
Student 2       Score: 41      Grade: C
Student 14      Score: 41      Grade: C
Student 0       Score: 45      Grade: C
Student 1       Score: 46      Grade: C
Student 3       Score: 47      Grade: C
Student 9       Score: 52      Grade: B
Student 18      Score: 52      Grade: B
Student 5       Score: 61      Grade: B
Student 13      Score: 61      Grade: B
Student 19      Score: 61      Grade: B
Student 7       Score: 62      Grade: B
Student 11      Score: 62      Grade: B
Student 6       Score: 67      Grade: A
Student 8       Score: 68      Grade: A
Student 15      Score: 69      Grade: A
Student 12      Score: 74      Grade: A
Student 17      Score: 76      Grade: A
Student 16      Score: 81      Grade: A
```

Submission files

- The submission files should be a '.c' file.
- The c file should be uploaded on the "Assignment #2" in "과제 및 평가".