## Problem #1 (10 marks = 5 + 5)

- a. Write a structure named SessionalMarks, which contains the marks obtained by a student in each evaluation. The structure contains the Student ID of a student as an integer, the number of evaluations along with an array of integers each indicating the marks obtained by a student in a sessional evaluation. Assume that there will not be more that 15 evaluations.
- b. Write a function totalObtainedMarks which takes an object of SessionalMarks and a pointer to double dp, which points to an array of doubles. Here, the array pointed to by dp contains the weight of each sessional evaluation. This function returns the total marks obtained by a student. Here, total marks is the weighted sum of all the marks obtained by the student.

## Problem #2 (10 marks = 5 + 5)

- a. Declare an array of 60 <code>SessionalMarks</code> objects. Then read the information of each student from the file <code>in.B.txt</code>. The first line of the file contains the number of students in the file <code>n</code>. The next line contains an integer <code>m</code>, which indicates the number of evaluations that has taken place. The third line contains <code>m</code> integers each indicating the weight of <code>mth</code> evaluation. Then follows <code>n</code> lines each containing information about a student. The first integer of each line is the student id of the student. Then there are <code>m</code> integers each indicating the marks obtained by a student in an evaluation.
- b. Using the function in problem **1(b)**, compute the total marks obtained by each student and print these information in out.B.txt. The output file must contain one line for each student. Each line in the output file must contain the student ID of the student and total marks obtained by him separated by a tab character.

Sample Input File(in.B.txt)	Sample Output File(out.B.txt)
6 4 1 1 0.5 1.5 1706066 17 15 -20 16 1706067 14 13 3 17 1706068 17 8 8 18 1706069 7 19 10 19 1706070 8 5 6 16	1706066 46 1706067 54 1706068 56 1706069 59.5 1706070 40

**Explanation of Test Case:** There are 6 student in this example and each student has appeared in 4 evaluations. The student with student ID 1706066 has obtained 7, 5, 2 and 16 in these evaluations. So his total obtained marks will be 17 \* 1 + 15 \* 1 + -20 \* 0.5 + 16 \* 1.5 = 46.