**Experiment Name:**

Write a program to print the name of each student and his or her average(truncated to an integer) marks of the best three exams out of four.

**Theory:**

The objective of this program is to print the name along with his/her best three exams’ average out of four exams. Stack, OUTDEC and Array are needed to perform the I/O operation. For this program in assembly, ADD, DIV, Loop, CMP, XCHG, BUBBLE procedure were used as well as the required instructions and some registers to execute the solution.

**Code:**

**Output:**

**Discussion:**

In the above program, four exam marks were assigned to a student name using array and four students’ marks were used as input in this program. Firstly, for an individual student, his/her marks for four exams were sorted in a descending order using BUBBLE procedure for applying bubble sort algorithm. Then the last element of that bubble sorted array was ignored and rest of the first three marks were added using ADD operation and the sum was divided by 3 using DIV operation, After that the average of best three exams out of four exams was printed in the output for every four student alongside with their corresponding name. Thus the program was executed successfully.