
BOUMERDES UNIVERSITY
Institute of Electrical and Electronics Engineering
I.G.E.E (ex-INELEC)

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Laboratory Experiment 3:
C Programming--EE122 (Arrays (2D))

Exercise1:

Write a program that reads for N students, M tests (M Modules) scores in the range 0 through 20 and print the following statistics:

- The average (mean) score of each student.
- The student with the highest average score.
- The student with the lowest average score.
- The number of students whose average score equals or exceeds the average.

Exercise2:

A patient was hospitalized for **5 days** in some hospital. His temperature was taken **5 times every day**. Write a program that reads the temperatures of this patient during the five days he spent in the hospital **into two-dimensional array**. The program should **computes and displays** the **maximum temperature** and **average temperature** recorded during the patient stays in the hospital.

Exercise3:

A car selling company sells three car models in each of its four shops. The current car stock for the company is:

| | SHOP1 | SHOP2 | SHOP3 | SHOP4 |
|--------|-------|-------|-------|-------|
| MODEL1 | 5 | 7 | 3 | 0 |
| MODEL2 | 2 | 6 | 4 | 8 |
| MODEL3 | 3 | 12 | 10 | 5 |

Write a program which reads the stock data into a two-dimensional array. The program then prints tables of the total number of cars in each shop.

The output should be in the form:

| SHOP# | NUMBER OF CARS |
|-------|----------------|
| 1 | 10 |
| 2 | 25 |
| 3 | 17 |
| 4 | 13 |