Computer Science Department
Comp142 (Due : midnight 28/04/2020 )

Assignment #3

## This assignment is an exercise on using arrays.

Write a C program to do the following tasks:

- 1) Create a text file *rains.txt*, which contains the rain accumulation for the months of 1-4 for the last 10 years in **ml**.
- 2) Each line in the file contains:

year, 4 integer readings for the rain fall in the months Jan through Apr as shown below.

2011 320 140 80 23 2012 270 210 30 110 . . 2020 160 170 105 96

3) Define:

**int** *years*[10];

**int** *quantity*[10][4];

**float** years-sum[10];

- 4) Write a **void** function **Fill\_Matrix** which reads and fill the matrices *years and quantity* from the text file.
- 5) Write a **void** function **Print\_Matrix** which receives *years* and *quantity* and prints the above table.
- 6) Write a **void** function **Compute\_Sum** which receives **years** and **quantity** and fill the array **years\_sum**.
- 7) Write a **void** function **Sort** which receives the matrix **years\_sum** and sorts the array **years\_sum** on descending order. (Each time you do the switching when sorting the array **years\_sum** you should do the same switching in the corresponding rows in the matrix **years**).
- 8) Write a void function **Print\_Average** which receives the array *years\_sum* and prints the report:

Year	The 4 months readings	The 4 months Sum
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## **Notes:**

- Submit your assignment through Ritaj webpage by replying to message **142-Ass3**.
- No assignment will be accepted through a regular message on Ritaj webpage, or by an Email.