

بسم الله الرحمن الرحيم

C-Programming First Project

Description: The student will write a complete program using C-language, the program consists of a set of functions as follow:

When the user runs the program, the following **start menu** should appear:

M- Math functions.
A- Array functions.
C- Convert functions.
X- Exit.
What's Your Choice?

Start menu tasks description:

1. If the user pressed (M), a sub menu (functions menu) should appear including at least 4 functions as follows:

1. Factorial (n).
2. Power (base, power).
3.
4.
5.
What's Your Choice?

For example, when the user presses (1), he/she will enter a number you need to calculate its factorial and so on.

2. If the user pressed (A), a sub menu (array menu) should appear including five choices as follow:

1. Enter array elements.
2. View array elements.
3. Search about an element.
4. Sort array elements.
5. Statistic.
What's Your Choice?

Notes:

- You should show the array size and elements' data type (int, float, char, etc...) before viewing array menu.
- Sort choice containing a sub menu with ascending and descending order.
- Statistic choice views the biggest element, smallest element, elements summation, elements count and finally the average of these elements.

3. If the user pressed (C), a sub menu should appear including three choices as follow:

1. Convert a Capital letter into small letter.
 2. Convert from **Fahrenheit** unit to **Celsius** unit.
 3. Convert from **Cm** into **Inch**.
- What's Your Choice?

4. If the user pressed (X), the program will exit.

NOTES:

- You must submit your mini-project before the deadline.
- Use **logical operators** and **loops**.
- Use **functions** to perform the previous tasks.
- For each menu of project, you will use **switch-case** statements.
- The deadline of the project submission is **26 November 2012**.
- Start early and don't waste time.
- Don't hesitate to ask me for more clarifications.

☺ **Best wishes** ☺