

PROPOSED EXERCISES

First day

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I propose you for the first day two exercises that will help to remember your background in C Language. Moreover you will need to use this two exercises in the coming days since will be the base of more complex exercises.

1. Menu application

Make a program that displays and execute the next menu:

1. Remainder of the division
2. The largest number
3. The smallest number
4. Display the numbers
5. Quit.

Please select one option:

The program will read from keyboard the option and two numbers and will execute the corresponding option of the menu.

The menu will appear again to offer other option until the user enters the option 5.

The program must check that the option introduced by the user is a number between 1 and 5. You can download the executable file of the program to see the running of the application.

The program will be formed by 3 files:

1. Header file, which contains the directives to the pre-processor and the function prototypes.
2. Code file 1, which contains the functions `main()` and `menu()`

```
int Menu (void);
```

3. Code file 2 with the next 4 functions:

```
int Remainder_of_division (int, int);
```

```
int Largest (int, int);
```

```
int Smallest (int, int);
```

```
void Display (int, int);
```

Header.h

```
#define _CRT_SECURE_NO_WARNINGS
#include <stdio.h>
//.....

//Prototypes of te functions
```

main.c

```
#include "Header,h"

int main()
{
    // ...
}
```

functions.c

```
#include "Header,h"

int Remainder_of_division (...
{
    // ...
}
```

2. Static array of structures

Make a program that read the name and the mark of a subject of a list of students. The program must display the percentage of students that have past the exam and the percentage of those that have fail the exam. The maximum number of students is 100. In order to don't force to the user to enter the data of the 100 students at one time, it will ask if he or she wishes to continue entering data. (See the executable file of the application)

Note that constants and data types must be included in the header file.

Program a function that read from keyboard the data of one student. Think about the prototype of the function.