
Exercise 1. Creating your CSC215 directory:

1.1. Launch one of the following:
- The terminal (U:unix-like)
- Or the command line (W:windows).

1.2. It will open in your home directory.

1.3. To create a new directory with the name "CSC215", type the command:
- `mkdir CSC215` then ⏎ (U)
- `md CSC215` then ⏎ (W)

1.4. To view the current files and folders type:
- `ls` ⏎ (U)
- `dir` ⏎ (W)

1.5. You will be able to see your newly created directory.

1.6. To enter the directory "CSC215" type:
- `cd CSC215` ⏎

1.7. Using what you just learned, create a new directory with the name "Lab01" inside "CSC215" and let it be the current working directory. (1 point)

Exercise 2. Writing your first C program:

2.1. **PART 1 : Creating the program file using emacs:**
While in the terminal, inside the directory "Lab01", type:
- `emacs hello.c`⏎ (U)
- `notepad hello.c`⏎ (W)
- or launch your preference of text editors, to create a new document titled "hello.c" (Optional)

2.2. Save the file on the disk.

2.3. Close the text editor application.

2.4. Reopen the file "hello.c" in the text editor. (1 point)

2.5. **PART 2 : Writing the program using emacs:**
Make sure you Opened the file "hello.c" in a text editor

2.6. Then type the following c code:

```
#include <stdio.h>
int main(){
      puts("Hello World !");
      return 0;
}
```

2.7. Save your work.

2.8. Close the editor.

2.9. In the terminal, view your files (using `ls` command) and make sure that "hello.c" is created and updated.

Exercise 3. Compiling your first c program using GCC:

3.1. While in the terminal, in directory "Lab01", type:
- `gcc -Wall -ansi -o hello hello.c`⏎
  If your program contains no errors this will produce a file: "hello" in the current directory.

3.2. Run the program hello by typing:
- ./hello⏎

3.3. Modify the 4th line in "hello.c" to: `puts("Hello World !\n");`
Then, recompile and run. (1 point)

3.4. Modify the 4th line in "hello.c" to: `printf("Hello World !");`
Then, recompile and run. (1 point)

Exercise 4. Using printf with char and int arguments:

4.1. Create a new c file named "ex4.c"

4.2. Type the following program and save it:

```
#include <stdio.h>

int main(){
      char letter = 'b';
      printf("%c\n", letter);
      printf("%d\n", letter);
      printf("%c\t%d\n", letter, letter);
      return 0;
}
```

4.3. Compile and run.

4.4. Record your output.

4.5. Modify the program by adding the following statement right before return line:
`printf("%c\t%c\n", letter, letter+15);`

4.6. Compile and run.

4.7. Record your output.

4.8. Explain the last result. (1 point)

Lab assignment: (5 points)

Write a C program that declares a char variable, say, `ch`, and initializes it to any lowercase letter, ex: `ch = 'b'`

The program should:

1. print the character `ch`.
2. print in a new line the **three** characters that follow the `ch` character in the alphabetical order.

Note: In your answer don't change the value of `ch` and don't use any other variable.

Expected output:

```
CH = b
The following three characters are: c d e
```