PW sheet No. 1

Part 1 : Launching the programming environment Code::Blocks

The purpose of this practical work is to familiarize you with the Code::Blocks programming environment.

• To launch Code::Blocks, click on the shortcut available on the desktop or in the Start menu/CodeBlocks (otherwise it will be indicated by your PW assistant).



▼] ⇔ ⇔ | ₱ ₿ ₿ ₿ ₿ <u>₿</u> | ₽* *< ● Չ |

• Once you have launched the Code::Blocks IDE, choose "Create a new project" or go to File/New/Project.



• Then, select the "Console application" project from the list and click "Next" to continu.





▼ 🗟 🖡 ▶ 🧐 ६: ५: ८: ५: ५: ॥ 🛛 💽 🔳

Mme SERIDI BORDJIBA Y October 2024

 n the language selection window, select C and click "Next".

• Give your project a name and choose the directory where it should be saved. Click "Next" to continue.

- In the compiler selection window, keep the default settings and click "Finish".
- X Console application 🐻 Console Please select the language you want to use < Back Next > Cancel X Console application 🐻 Console Please select the folder where you want the new project to be created as well as its title. Project title: Folder to create project in: C:\tp_C\ ... Project filename: Resulting filename: <invalid path> Console application 🐻 Console Please select the compiler to use and which configurations you want enabled in your project. Compiler: GNU GCC Compiler -Create "Debug" configuration: Debug "Debug" options Output dir.: bin\Debug\ Objects output dir.: obj\Debug\ Create "Release" configuration: Release eate "Release" Release" options bin\Release\ Output dir.: Objects output dir.: obj\Release\ < Back Finish Cancel
- In the left pane "Projects", expand the tree by clicking on the small "+" to display the list of project files. You should have at least a main.c file with a little bit of source code already in it. You can open the main.c file by double-clicking on it.

| 📕 main.c [firstTP] - Code::Bloc | ks 17.12 | The party of the local division of the local | e ann Calor Minde B | - comparisonne - Ma | at Silver & Factors | the dependent | | |
|---|---|--|--------------------------------|---------------------|----------------------|---------------|--------------------|-------------------------------------|
| File Edit View Search Pro | oject Build Debug Fortran wx | Smith Tools Tools+ | Plugins DoxyBlocks | Settings Help | | | | |
| | 💼 🔍 🔍 🖉 🕨 🕨 😵 🖾 Del | | ▶ ₩ 61 ₩ 21 61 4 | | | | | |
| <pre>clobal></pre> | • | | | | | P B B R R | 2 0 0 | |
| | 🗢 🛥 🚣 🏟 🗶 🚺 🖂 🔛 | | | | <u>_</u> | | | |
| Management × | main c | - | | 110 | | | | |
| Projects Symbols Fil | 1 the lude st | dio h | | | | | | |
| Workspace | 2 #include <st< td=""><td>dlib.h></td><td></td><td></td><td></td><td></td><td></td><td></td></st<> | dlib.h> | | | | | | |
| firstTP | 3 | | \mathbf{N} | | | | | |
| 🖻 🗁 Sources | int main() | | | | | | | |
| 🗋 main.c | 5 H(| Hello worldl\n" | a. 1 | | | | | |
| \land | 7 return 0 | ; | ·· | | | | | |
| | 8 } | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | • | | III | | | | | Þ. |
| | Logs & others | | | | | | | × |
| 📢 🔥 Code::Blocks 🛪 🔍 Search results 🛪 🔓 Cocc 🛪 😋 Build log 🛪 🗣 Build messages 🛪 🔥 Copcheck/Vera++ 🛪 🔥 Copcheck/Vera++ messages 🛪 🔥 Copcheck/Vera++ messages | | | | | | | | r 🛛 🖌 DoxyBlocks 🕨 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | <u> </u> | · | _ | | | | | |
| C:\tp_C\firstTP\main.c | | C/C++ | Windows (CR+LF) | WINDOWS-1252 | Line 1, Col 1, Pos 0 | Insert | Read/Write default | |
| 🕘 🚺 🔮 |) 🔚 🔼 🕡 | - | | | | FR (7 |) 🕻 🔛 🤹 🔺 🔐 | (¹⁾ 19:45 30/09/2018 |

- To save a file, go to the File/Save menu or press the keyboard shortcut Ctrl+S.
- To open a file (or project), go to the File/Open... menu or press the keyboard shortcut Ctrl+O.



- To compile a C program (i.e., generate the executable program), you can either go to the Build menu and select Build, or press Ctrl+F9. You can also use the Compile toolbar button.
- To run a program, you can either go to the Build menu and select Run, or press Ctrl+F10.
- Pour quitter Code::Blocks, aller dans le menu File/Quit ou taper la combinaison de touches Ctrl+Q.

Part 2 : My first C programs

The "Hello world" program and the display instruction

When you double-click on the main.c file name, the

following code will be displayed:

- 1. Compile and run your project.
 - Modify the program to display the following phrase: "Bonjour je m'appelle Amine", instead of "Hello World", and then re-run it.
 - Modify the program, add the \n character after the word "Bonjour" and re-run it. What do you observe?

#include <stdio.h>
#include <stdlib.h>

int main()

ł

}

printf("Hello world!\n");
return 0;

2. Replace the instruction printf("Hello world!n") with the following instruction:

printf("La valeur de a=%d",2); then compile and run.

- 1. Change the value 2 by 10 and then by 10.5
 - a. Deduce the action of the format specifier %d
 - b. Change %d by %f, What do you notice?
- 3. Type the following code
 - a. Compile and run
 - b. What do you deduce from this ?

#include <stdio.h>
#include <stdio.h>
int main()
{
 int a;
 a=5;
 printf("La valeur de %d*%d=%d",a,10,a*10);
 return 0;
 }

In conclusion,

1. In the C programming language, printing is done using the printf() instruction, which is written as follows:

printf("<character string>",<variable or expression>);

- 2. The instruction contains a single string of characters between double quotes
- 3. The following are some of the special characters that can be used in a string with the printf() instruction:
 - \n Newline
 - %d Replaces an integer value
 - %f Replaces a floating-point value
 - %c Replaces a character
 - And there are others...

Exercice supplémentaire

To learn how to choose variable names, test the following program:

- a. Create a new project.
- b. Type this code, then compile and run.
- c. Replace the note variable with each of the following variables:
 - note Algo
 - note_Algo
 - Note
 - _note_Algo
 - 3noms
 - num-tel
 - N°inscription
 - MoyAlGo1_T

#include <stdio.h>
#include <stdlib.h>

int main()

{
int note;
note=15;
printf("La valeur de cette variable est %d », note);
return 0;
}