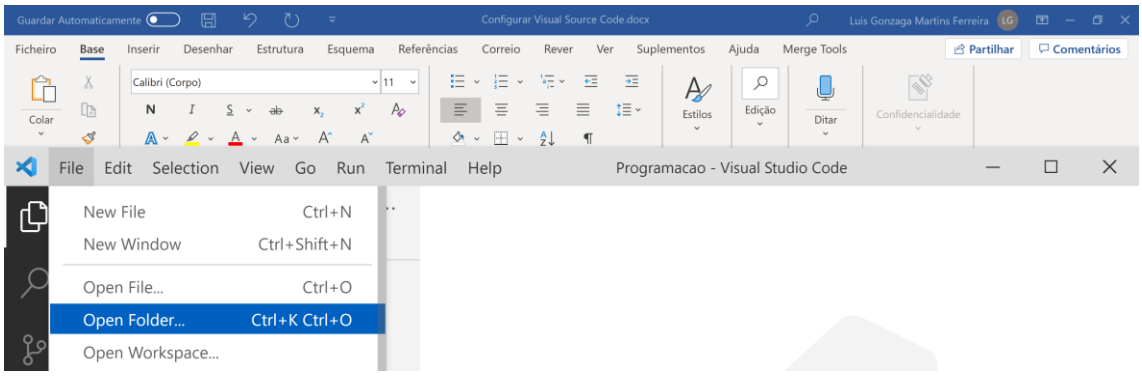
Visual Studio Code (VSC)

Preparação de Plataforma para trabalhar em C

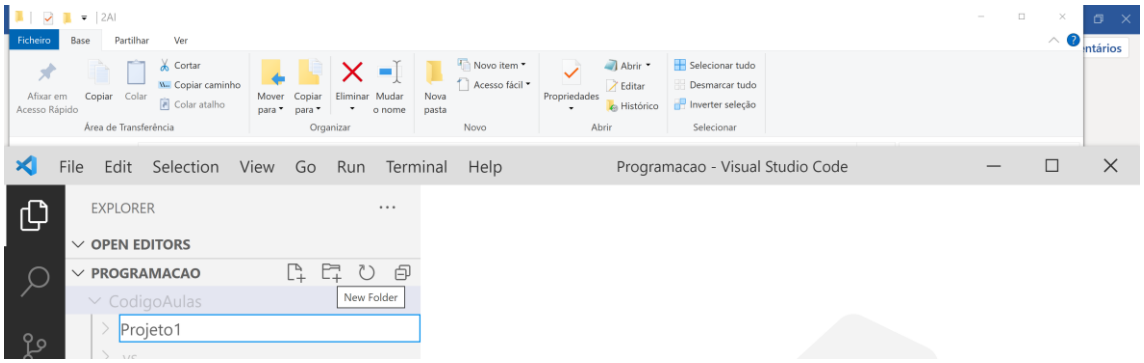
1. Criar pasta (Folder) no disco para armazenar o código produzido

   Sugestão: c:\temp\Programao

2. Iniciar VSC e colocar-se (*Open Folder*) na pasta que criou (c:\temp\Programao)



3. Crie uma nova pasta com o nome Projeto1



4. Criar ficheiro para código *Calculadora.c*. Documentar!
5. Criar ficheiro para definições de funções *Operacoes.h*. Documentar!
6. Criar ficheiro para implementação das funções *Operacoes.c*. Documentar!
7. Inserir o código necessário em cada um dos ficheiros

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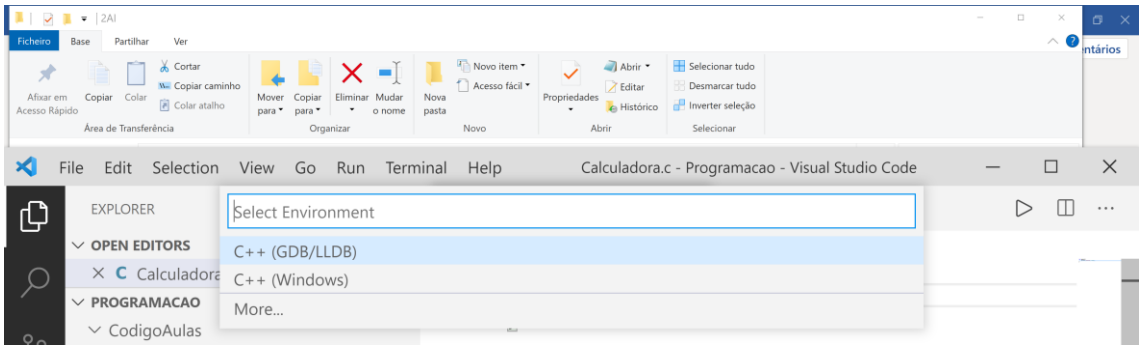
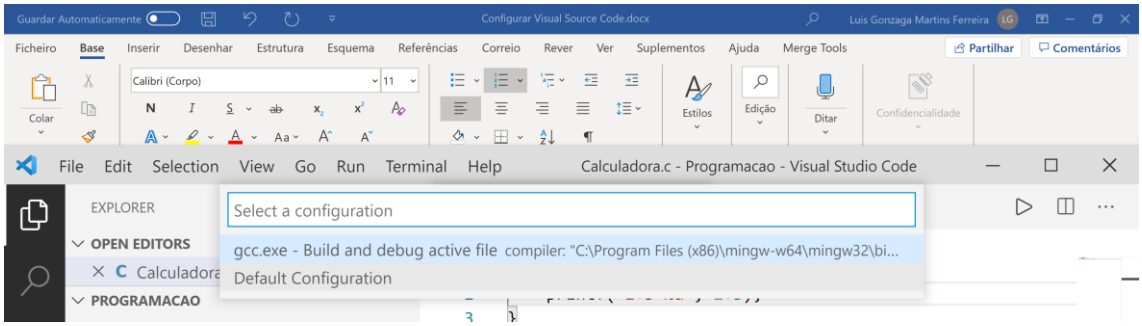
8. Compilar e preparar para Debug: **hipótese 1**
   a. *F5* ou *Run →Start Debugging*

b. Escolher C++(GDB/LLDB)



c. Escolher "*gcc.exe*"



d. Explorar o Debugg

i. Breakpoints

ii. Step into | step over

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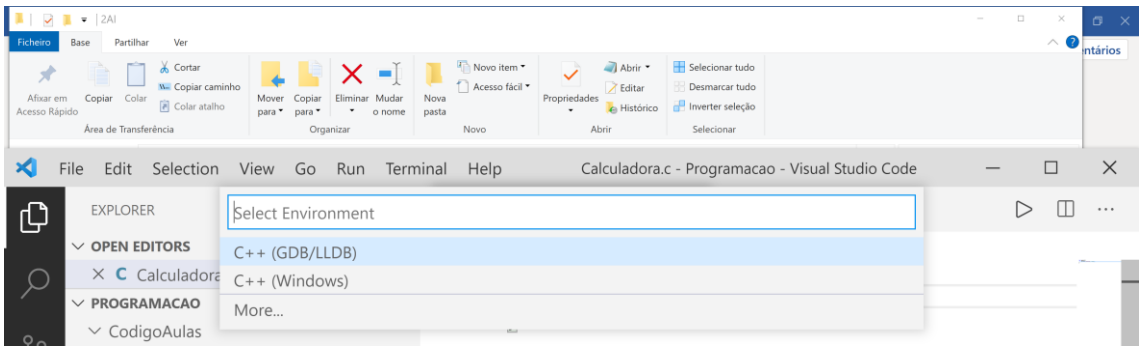
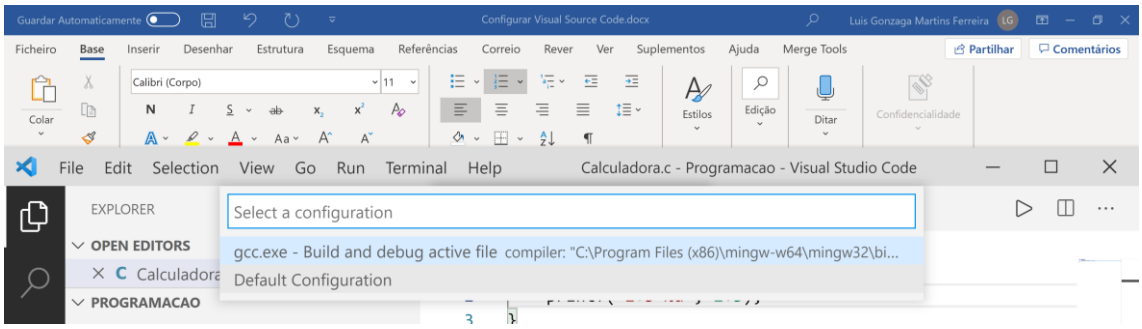
9. Compilar e preparar para Debug: **hipótese 2**

a. *F5* ou *Run →Start Debugging*

b. Escolher C++(GDB/LLDB)



c. Escolher "*Default Configuraation*"



d. É criado um ficheiro "*launch.json*". Alterar

```
1.  {
2.      // Use IntelliSense to learn about possible attributes.
3.      // Hover to view descriptions of existing attributes.
4.      // For more information, visit: https://go.microsoft.com/fwlink/?linkid=830387
5.      "version": "0.2.0",
6.      "configurations": [
7.          {
8.              "name": "(gdb) Launch",
9.              "type": "cppdbg",
10.             "request": "launch",
11.             "program": "enter program name, for example ${workspaceFolder}/a.exe",
12.             "args": [],
13.             "stopAtEntry": false,
14.             "cwd": "${workspaceFolder}",
15.             "environment": [],
16.             "externalConsole": true,
17.             "MIMode": "gdb",
18.             "miDebuggerPath": "/path/to/gdb",
19.             "setupCommands": [
20.                 {
21.                     "description": "Enable pretty-printing for gdb",
22.                     "text": "-enable-pretty-printing",
23.                     "ignoreFailures": true
24.                 }
25.             ]
26.         }
27.     ]
28. }
29.
```

Apagar

Alterar para a pasta do gdb.exe

C:\\Program Files (x86)\\mingw-w64\\mingw32\\bin\\gdb.exe

Compilar código para suportar **debug**

e. gcc -Wall *.c -g

Compilar para **static library**

//compilar todos os *.c…são gerados *.o

*gcc -c *.c*

//linkar todas as "bibliotecas" (*.o) e gerar executável

*gcc -L. *.o -o prog.exe*

Compliar com **makefiles**

//see https://www.cs.colby.edu/maxwell/courses/tutorials/maketutor/

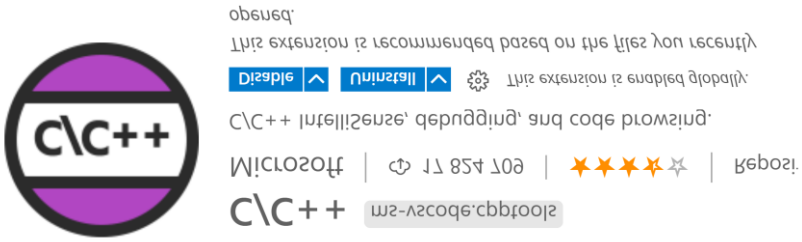
H1:

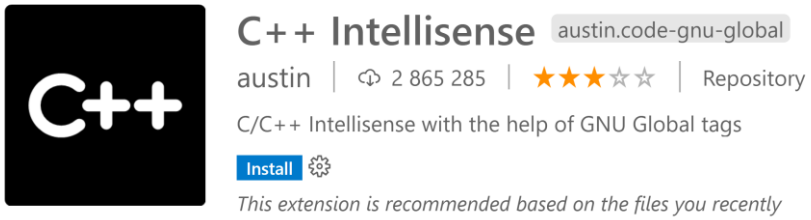
```
#makefile
#lufer

CC=gcc
CFLAGS=-I. -g -ansi -Wall
DEPS = funcs.h
OBJ = funcs.o main.o

%.o: %.c $(DEPS)
	$(CC) -c -o $@ $< $(CFLAGS)

all: $(OBJ)
	$(CC) -o $@ $^ $(CFLAGS)

clean:
	del *.o *.exe
```

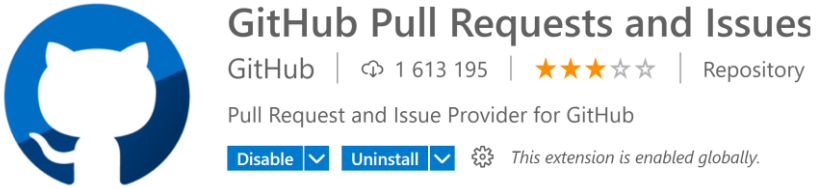
H2

```
CFLAGS = -Wall

LIBS=-L.

INCLUDES=-I.

SRC=$(wildcard *.c)

all: $(SRC)

	gcc -o $@ $^ $(INCLUDES) $(CFLAGS) $(LIBS)

clean:

	del -f *.exe *.o
```

Extensões a instalar


C\C++
C\C++ ms-vscode.cpptools
Microsoft 17 854 109 Repos
C\C++ IntelliSense, debugging, and code browsing.
Disable Uninstall This extension is enabled globally.
This extension is recommended based on the files you recently opened.


C++
C++ Intellisense austin.code-gnu-global
austin 2 865 285 Repository
C/C++ Intellisense with the help of GNU Global tags
Install
This extension is recommended based on the files you recently opened.


GitHub Pull Requests and Issues
GitHub 1 613 195 Repository
Pull Request and Issue Provider for GitHub
Disable Uninstall This extension is enabled globally.


/**
* @doxdocgen
* Generate Doxygen
* Comments in VSCode
*/
Doxygen Documentation Gener
Christoph Schlosser 468 371
Let me generate Doxygen documentation from your sourc...
Disable Uninstall This extension is enabled globally.

lufer