

After Installing Debian using WSL:

```
sudo apt-get update
```

```
sudo apt-get upgrade
```

```
sudo apt-get install build-essential
```

Check for g++ version: Should be 6.3 to be C11 and work with Visual Studio.

```
g++ -v
```

```
gcc -v
```

Make your code directory:

```
$ mkdir code
```

```
$ cd code
```

```
$ mkdir cdev
```

```
$ mkdir cppdev
```

```
$ cd cdev
```

Copy the hi.c to the cdev directory.

```
#include<stdio.h>
```

```
Int main()
```

```
{
```

```
printf("Hi there\n");
```

```
}
```

Compile your C program by using this command:

```
$ cc hi.c
```

Run your program with this command:

```
$ ./a.out
```

Spreadsheet Calculator:

```
Sudo apt install sc
```

```
mkdir sc
```

Basic:

```
sudo apt install brandy bwbasic
```

```
mkdir basic
```

ncurses break:

Ok I can not find the gnu prolog and the clisp that I want to install. So, I am going take a break and talk about ncurses based applications. I do not know much about it, I just know of it. Ncurses is used for the sending esc code sequence. It is a lib that is in C and can be used with C/C++. Curses was used for Unix and Unix like systems. I have never used it or looked at the source. I am telling you this because I am going to install some applications that use it. I have already install at least one application that use it. That would be mc.

Install aptitude:

```
sudo apt install aptitude
```

and just type "aptitude" for an Interactive session.

AI:

```
sudo apt install gprolog
```

```
sudo apt install sbcl
```

```
mkdir AI
```

```
cd AI
```

```
mkdir Prolog
```

```
mkdir Lisp
```

```
mkdir ANN
```

To startup sbcl (clisp) and do a couple of test:

```
cd Lisp
```

```
sbcl
```

```
(+ 5 6)
```

```
(- 6 5)
```

```
(* 5 6)
```

```
(/ 6 3)
```

```
(exit)
```

Should be at the command prompt.

At the command prompt:

```
vi hi.lisp
```

```
(write-line "hi there")
```

```
^D
```

```
cp hi.lisp ave.lisp
```

```
edit ave.lisp:
```

```
(write-line "this is a function called ave")
```

```
(defun ave (n1 n2) (/ (+ n1 n2) 2))
```

```
sbcl
```

```
(load "hi.lisp")
```

```
(load "ave.lisp")
```

```
(ave 2 6)
```