

## Lesson 1 Notes

### ✅ Step 1: Install VS Code (You already have this 👍)

### ✅ Step 2: Install a C Compiler

For Windows (you only need to do this once):

#### Option A: Install MinGW (recommended for most users)

1. Download MinGW from: <https://sourceforge.net/projects/mingw/>
  2. During installation, check:
    - `mingw32-gcc-g++`
    - `mingw32-base`
    - `mingw32-gcc-objc`
  3. After install, add the **bin folder** (usually `C:\MinGW\bin`) to your **System PATH**:
    - Open Start Menu → search “Environment Variables”
    - Edit `Path` → Add new → paste the bin path
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### ✅ Step 3: Install C/C++ Extension in VS Code

1. Open VS Code
  2. Go to Extensions (`Ctrl + Shift + X`)
  3. Search **C/C++ by Microsoft** → Install it
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### ✅ Step 4: Write Your C Program

1. Create a new file: `01_lesson.c`

Write this simple program:

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

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## ✓ Step 5: Compile & Run

### Option 1: Using Terminal (Recommended)

1. Open Terminal in VS Code (**Ctrl + ``** )
2. Compile your code:

```
gcc 01_lesson.c -o 01_lesson.exe
```

3. Run your code:

```
./01_lesson.exe
```

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## ✓ Notes: From Lesson 1

- std-> Refers to standard
- io -> Input and Output
- stdio.h -> h means Header File
- What are header files ?

These are library files which contain definitions of functions written by developers of C. For example

- printf -> Displays output in terminal/console.
  - scanf -> Takes input from the user after you run the code.
- Whatever you write inside the main block is executed first as you run the code.
- Where do we not write semi colons ( ; ) ?
  - While including header files ( # include <stdio.h>
  - First line of function ( int main() { } )
  - if condition
  - Loop