

Getting started with C

Adapted from materials by Dr. Carrier

HELLO
WORLD

Our first C program!

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int main(){
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gcc hello_world.c
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To run:

```
./a.out
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Breaking it down

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(We’ll talk about header files later)

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You can think of this like importing in Python!

Breaking it down

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}
```

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int main() {
    ...
}
```

Is our “main function”.

Breaking it down

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    ...
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```

Is our “main function”.

Execution always starts in the “main” function!

Breaking it down

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```

`printf("...");`

Will print a formatted string to stdout

But in this case, it's just a typical string.

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`return 0;`

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`return 0;`

Our main function returns an int (integer), so we actually need to return one!

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GNU C Compiler

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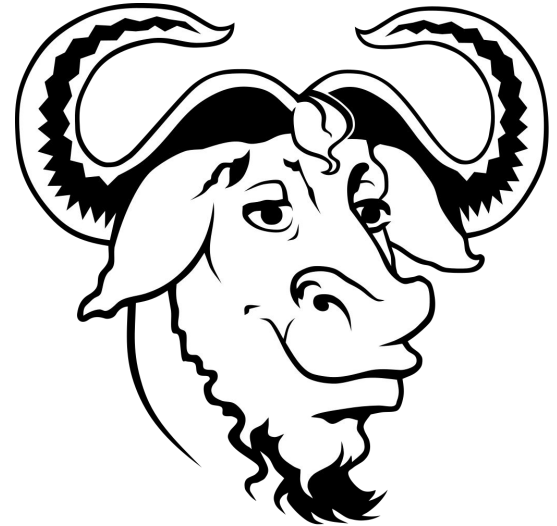
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This compiles our source code into executable machine code (binary)

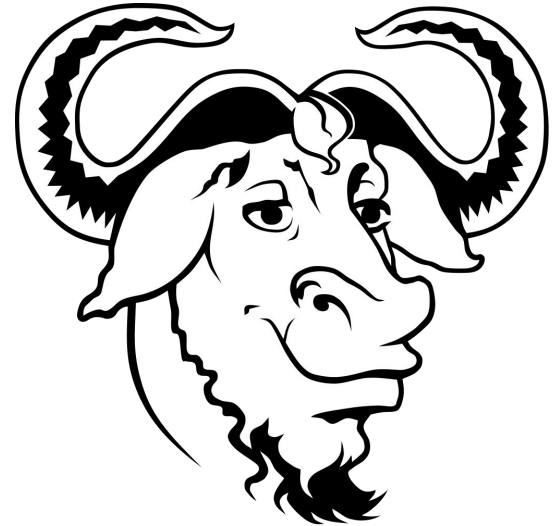
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gcc hello_world.c
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Stored in the a.out file by default

Compiler flags

Specify the output file:

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gcc hello_world.c -o output_name
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WARNING, don't do this:

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gcc hello_world.c -o hello_world.c
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Compiler flags (continued)

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Debug flag: -g (we’ll discuss later)

Warning flags:

- Wall to enable all (can also enable some)