

Hello C

Hello world in C

- Store the source code in a file called hello.c
- Compile (turn source code into binary)
- Run

Hello world in C - source code

```
#include <stdio.h>

int main()

{

    printf("hello, world\n");

}
```

Hello world in C - compile

In a terminal, type:

```
gcc hello.c
```

or

```
gcc hello.c -o hello
```

Hello world in C - run

In a terminal, type:

```
./a.out (on Windows: a.exe)
```

or

```
./hello (on Windows: hello)
```

Source code explanation

The first line of the program,

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

tells the compiler to include information about the standard input/output library; the line appears at the beginning of many C source files.

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Source code explanation

```
int main()
```

int - returns (gives back) an integer value (-2, 0, 123)

main - is the starting point (function) of a program

() - we will not consider extra information from the user of the program when starting the program

Source code explanation

```
{
```

```
}
```

The code inside this so called block is executed when starting the program

Source code explanation

```
printf("hello, world\n");
```

A function is called by naming it, followed by a parenthesized list of arguments, so this calls the function `printf` with the argument `"hello, world\n"`. `printf` is a library function that prints output, in this case the string of characters between the quotes.

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