

28 C Compiler

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cc - C compiler

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

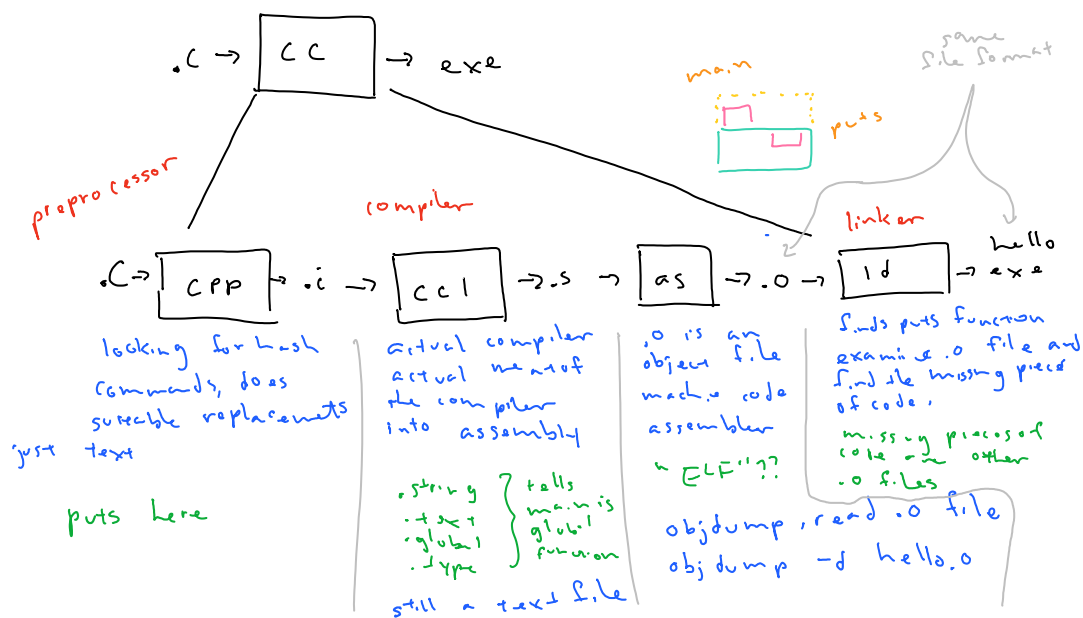
```
#include <stdlib.h>
```

```
int main(void) {  
    puts("Hi there!");  
    return EXIT_SUCCESS;  
}
```

cc creates an executable file called a.out

! then s then o

Temp files for c compiler



.o file doesn't actually have "Hello there!" string. Actually stored in read only data, .rodata not in .text

Could have written w/o the includes

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

```
// #include <stdlib.h>
```

```
int main(void) {
```

```
    Puts("Hi there!");  
    Return 0; //EXIT_SUCCESS;  
}
```

We never tell it what puts is, (in include)

It "invents" puts

Code still runs

Cci still puts "puts" in code, linker just sticks a suitable function in

Can put extra arguments

```
    Puts("Hi there!", 23, 645, "yo");
```

Because function parameters put on stack then taken off after function completes

If put nothing, or put something now a string will get a segmentation fault

Linker is not very smart, used by a bunch of different languages