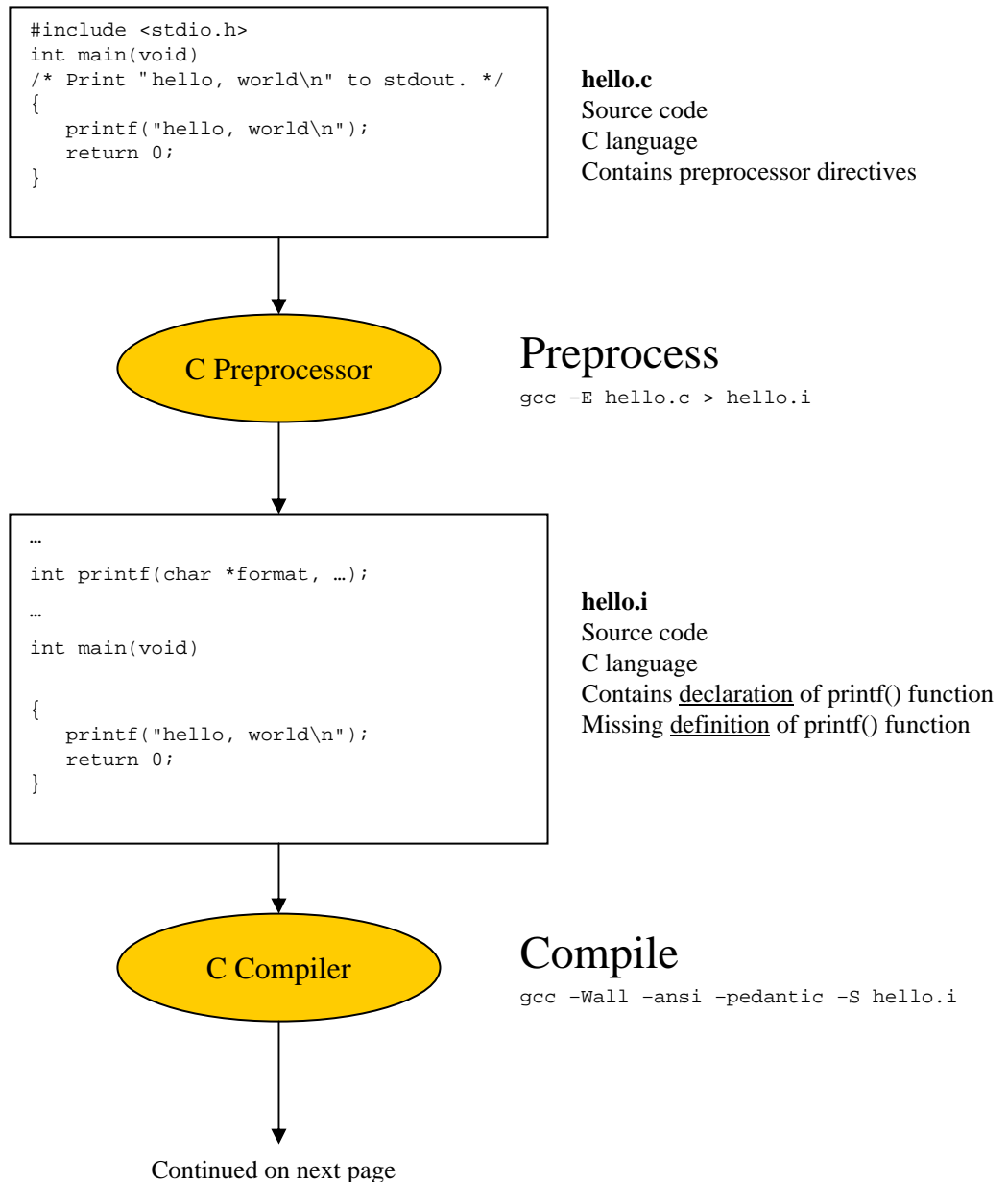


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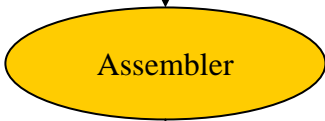
COS 217: Introduction to Programming Systems

The gcc Command



```
.section .rodata
cGreeting:
.asciz "hello, world\n"
.section .text
.globl main
.type main,@function
main:
pushl %ebp
movl %esp, %ebp
pushl $cGreeting
call printf
addl $4, %esp
movl $0, %eax
movl %ebp, %esp
popl %ebp
ret
```

hello.s
Source code
Assembly language
Missing definition of printf() function



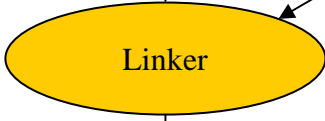
Assemble
gcc -c hello.s

```
100101000110100100100...
```

hello.o
Object code
Machine language
Missing definition of printf() function

```
11110010000010100100110...
```

libc.a
Library containing
machine language definition
of printf() function



Link
gcc -o hello hello.o -lc

```
001010000101000000111110...
```

hello
Executable code
Machine language

Shortcut:

```
gcc -Wall -ansi -pedantic -o hello hello.c
```