


hello.c

↳ compile

↳ asm lang

↳ Executable

hello.out

Program

256 KB

Exec

Program

load in RAM

↓
Stored in
kernel

↓
Consume some
space in memory

High Addr.
(256 KB)

→ cmd line arguments

when function call
↓
stored in stack
↓
frame
↓
current context
of a function

Stack

↑
Heap

Dynamic memory
↑
new mem

Block started
by symbol

Data init by
OS to 0.

→ all global &
static variables

global & static
variable that
are initialized
by program

BSS (uninitialized)
data

Initialized data

Text (code seg)

↑ Read from
prog file
by exec
↓

Low Addr.
(0)

↓
Executable instruction
(ASM)