

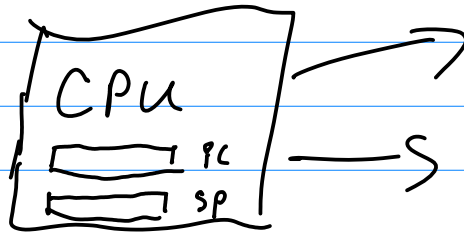
memory

Static fixed locations

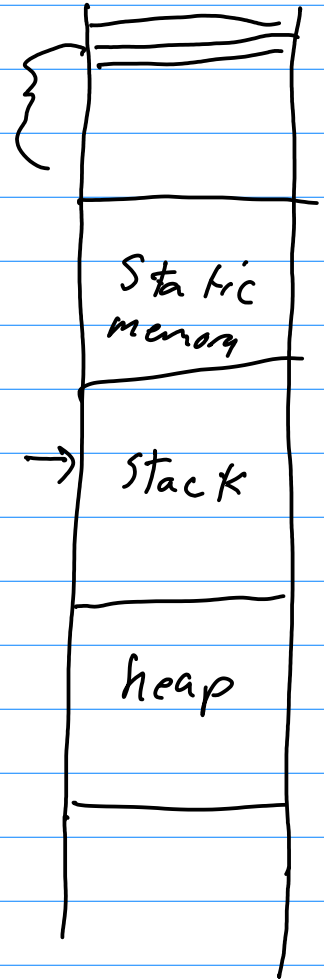
Stack: temporary

heap: managed by a memory manager

Processor PC - program counter



SP - stack pointer



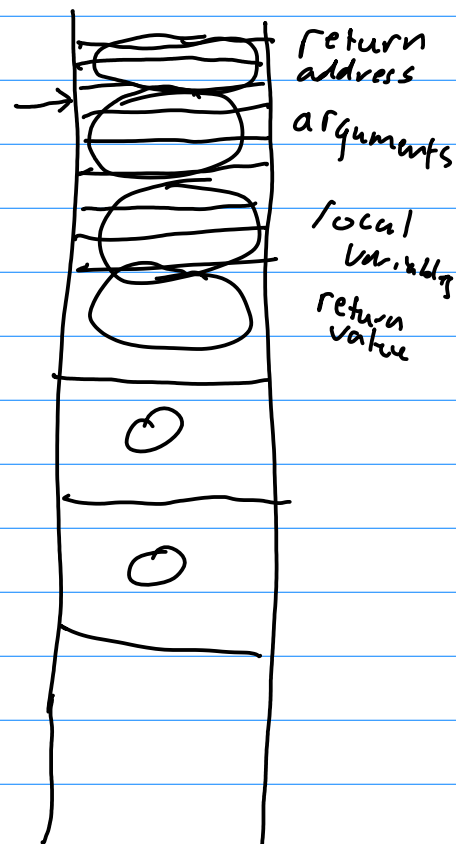
Stack = LIFO

last in - first out buffer

int square(int x);

Stack

SP →



non-volatile vs volatile

Variables given the keyword "volatile" can change at any time so the compiler should not make assumptions about value

static memory

x = PORTA ; ← external
|

PORTA = x

memory mapped I/O

volatile char PORTA ;

