C language

pointer with parameter

Pi

⟨RAM⟩

... | 1 | 4 | 1 | 5 | 9 | 2 | 6 | 5 | 3 | 5 | ...

int pi[] = {1,4,1,5,9,2,6,5,3,5};
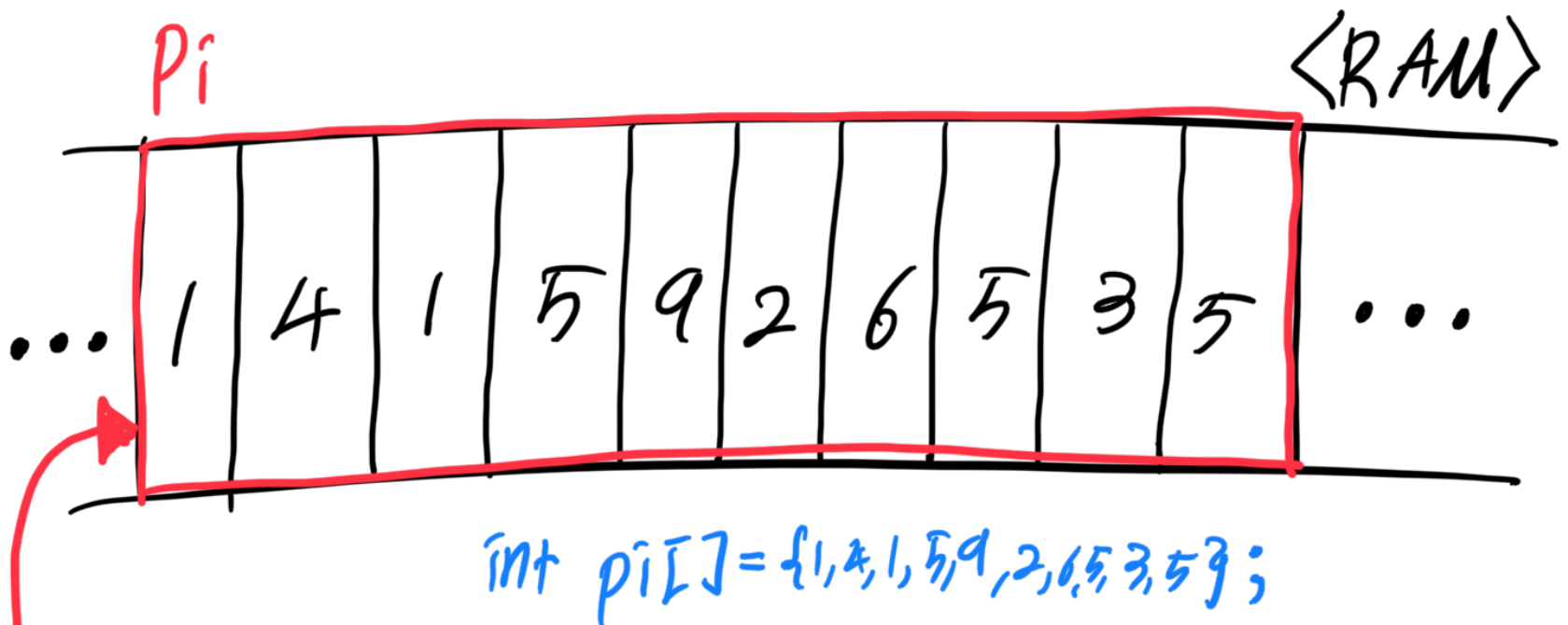
$p = \&pi[0] = pi$
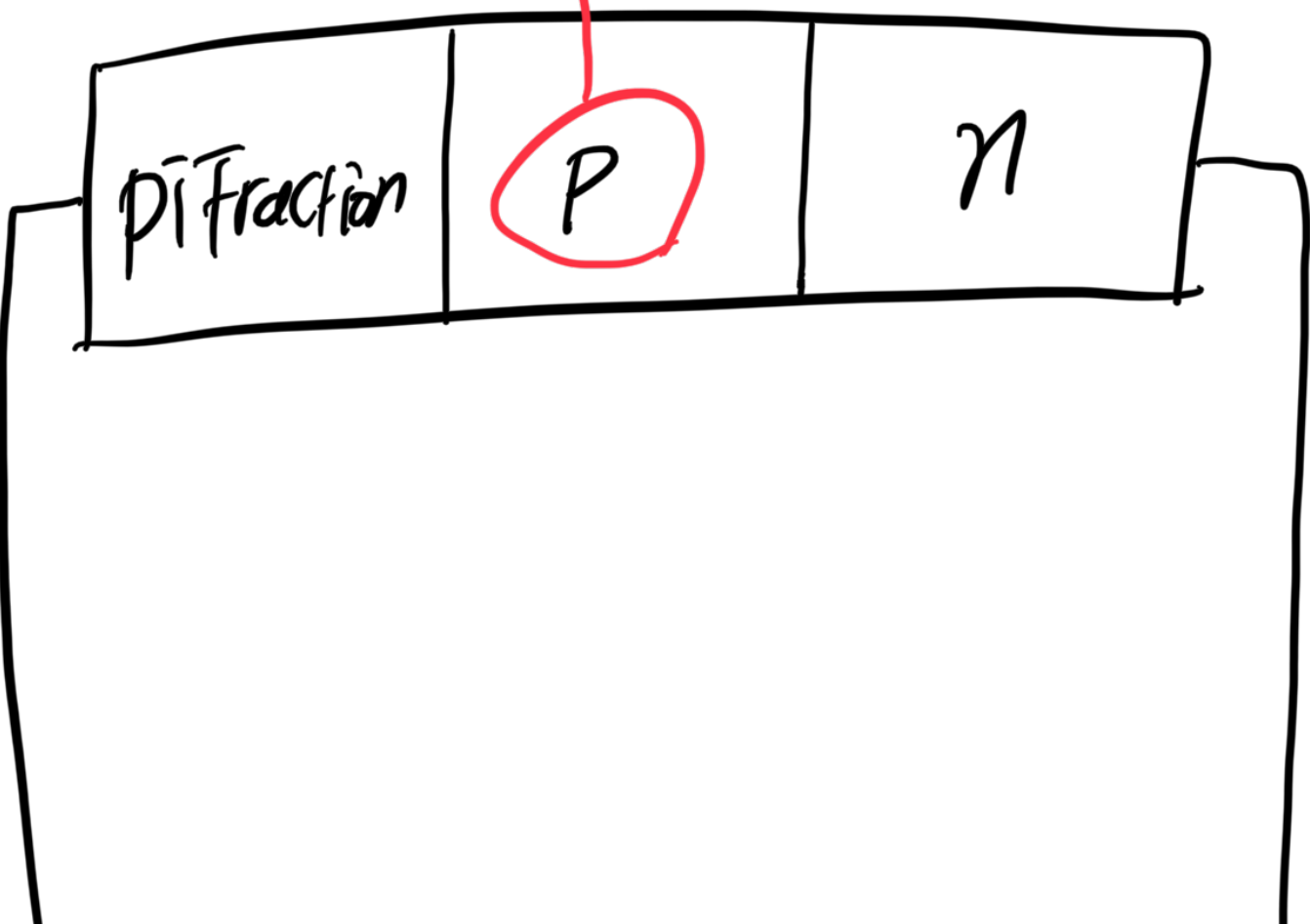
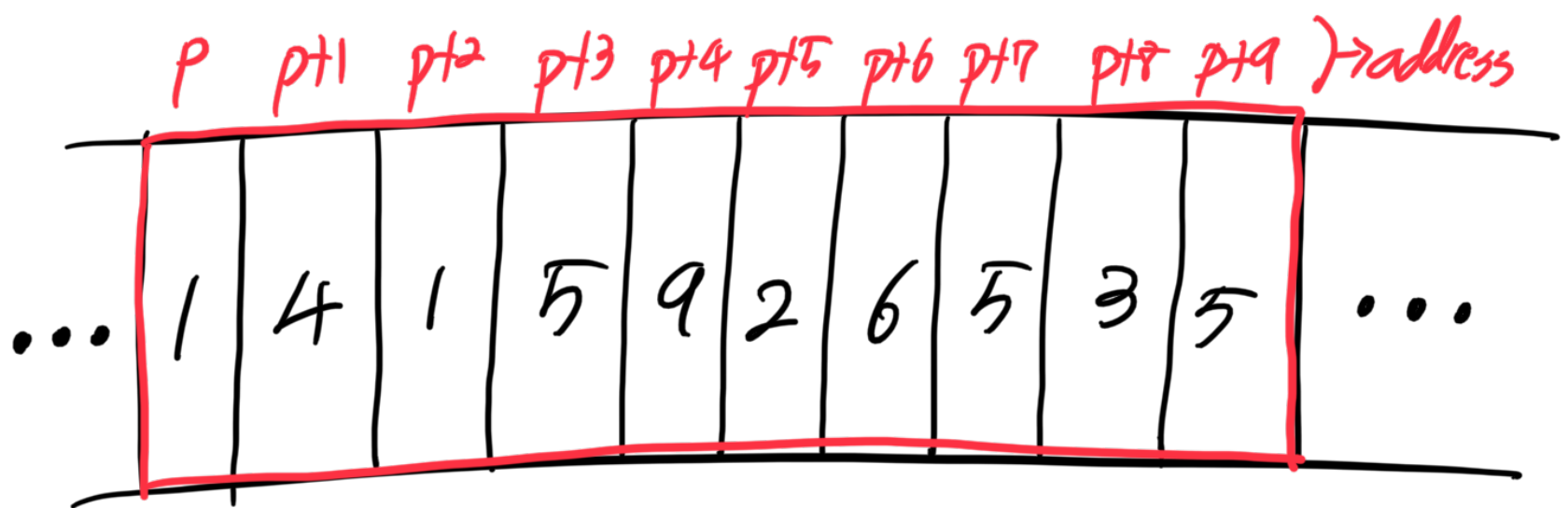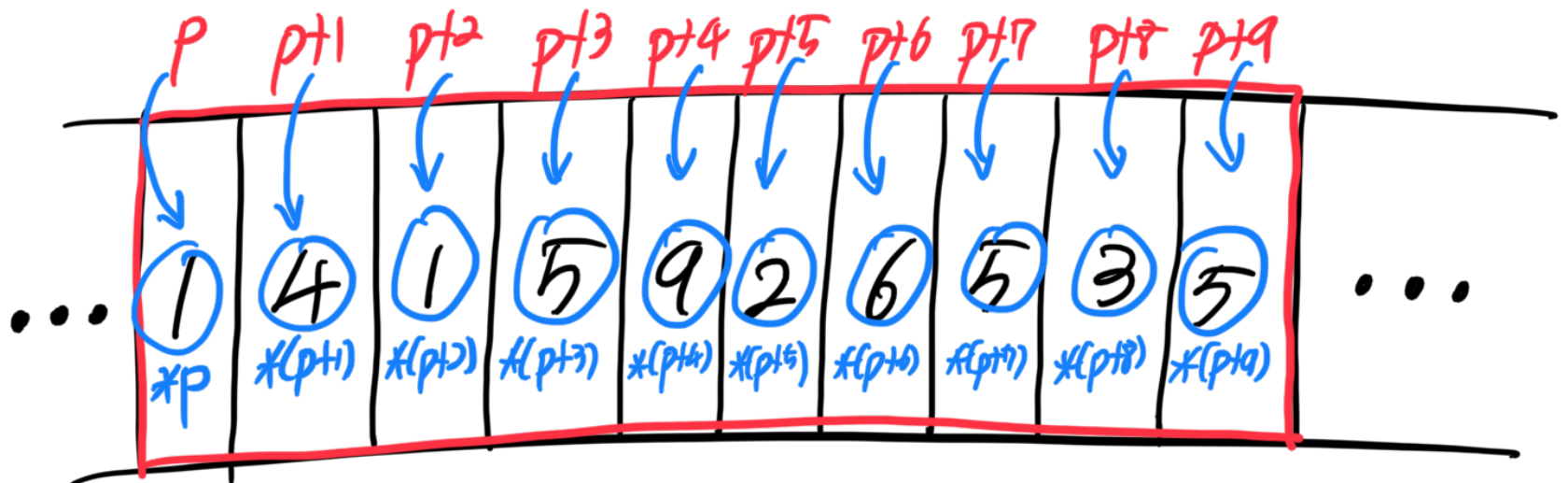| Pifraction | P | n |

Void PiFraction (int *pi, int n)

Represent address of pi with p

P | p+1 | p+2 | p+3 | p+4 | p+5 | p+6 | p+7 | p+8 | p+9)→address

... | 1 | 4 | 1 | 5 | 9 | 2 | 6 | 5 | 3 | 5 | ...

Represent data of pi with *(p)

P | p+1 | p+2 | p+3 | p+4 | p+5 | p+6 | p+7 | p+8 | p+9

... | 1 | 4 | 1 | 5 | 9 | 2 | 6 | 5 | 3 | 5 | ...

*P | *(p+1) | *(p+2) | *(p+3) | *(p+4) | *(p+5) | *(p+6) | *(p+7) | *(p+8) | *(p+9)

Diagram

parameter

P

&Pi

code

PiFraction

Pi

1 | 4 | 1 | 5 | ... | 6 | 5 | 3 | 5

...

main
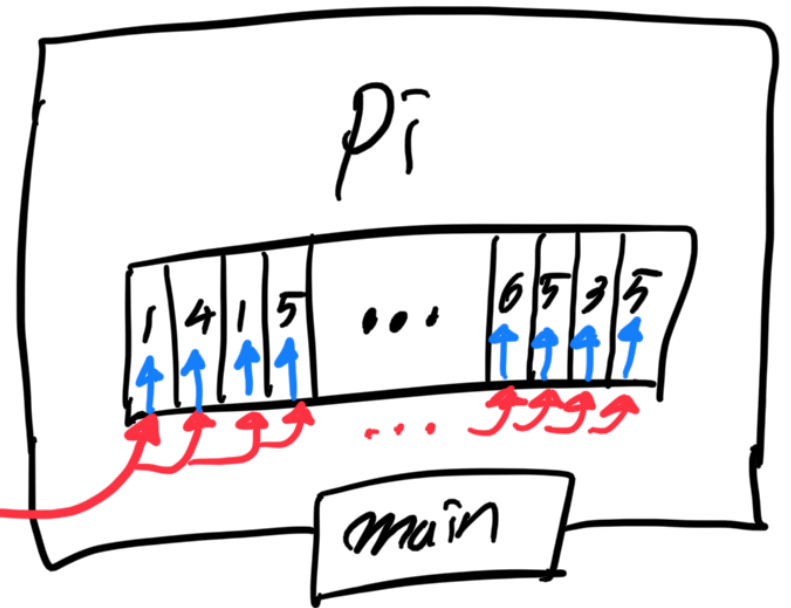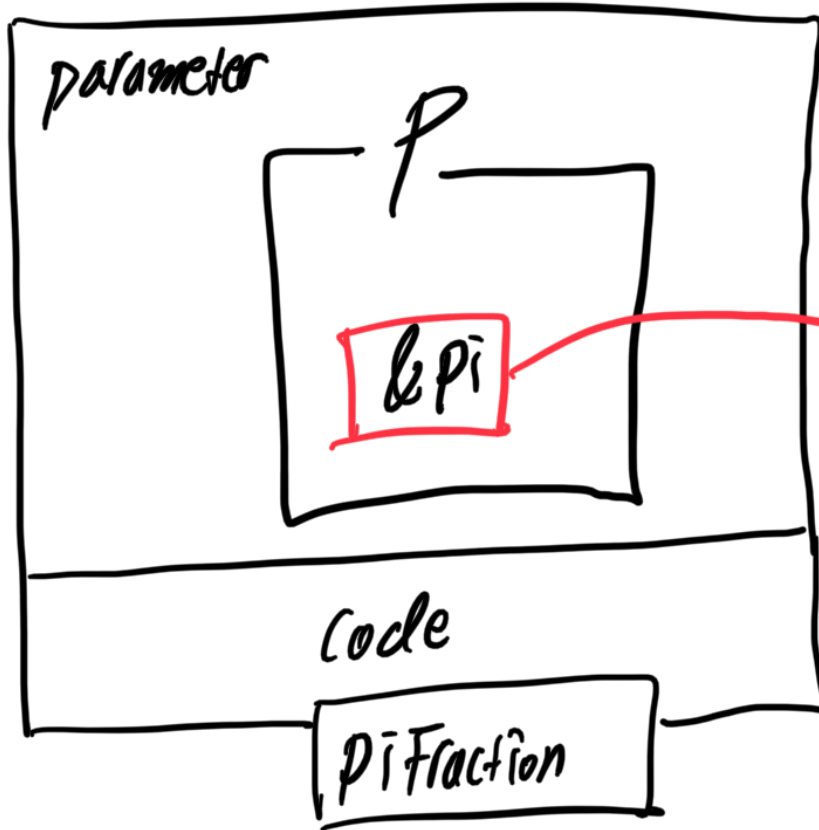
→ : access memory address

→ : access data using pointer (*)

ex) $*pi = 1$

$*(pi+1) = 4$

$\vdots$

$*(pi+9) = 5$