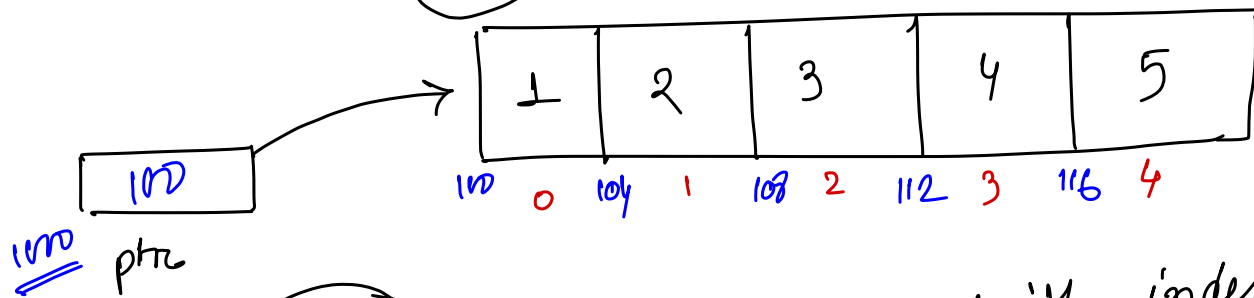


Subscripting Pointer Variable

array \rightarrow Constant Pointers



$ptr + i$ \rightarrow Address of i th index.

$*(ptr + i)$ \rightarrow value of i th index.

Pointer Array

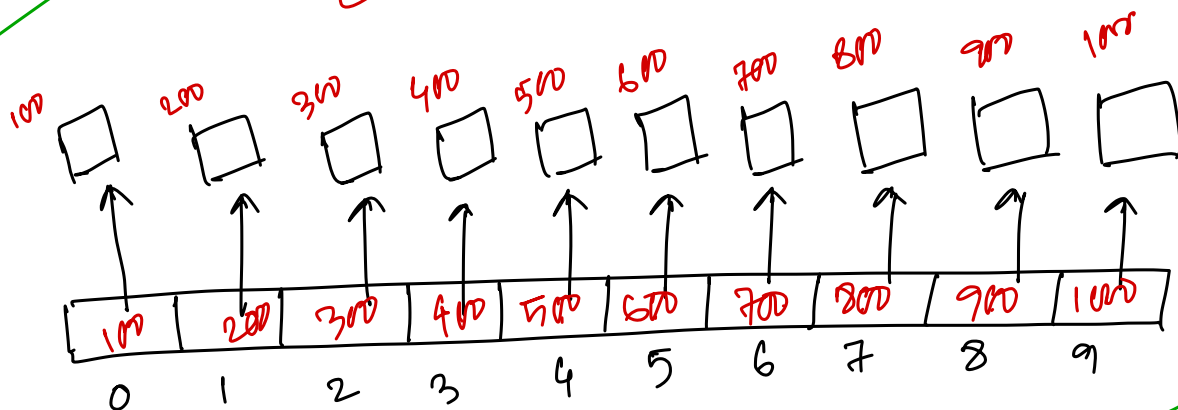
int $(*ptr)[10];$

ptr is a pointer which points to an array of 10 integers.

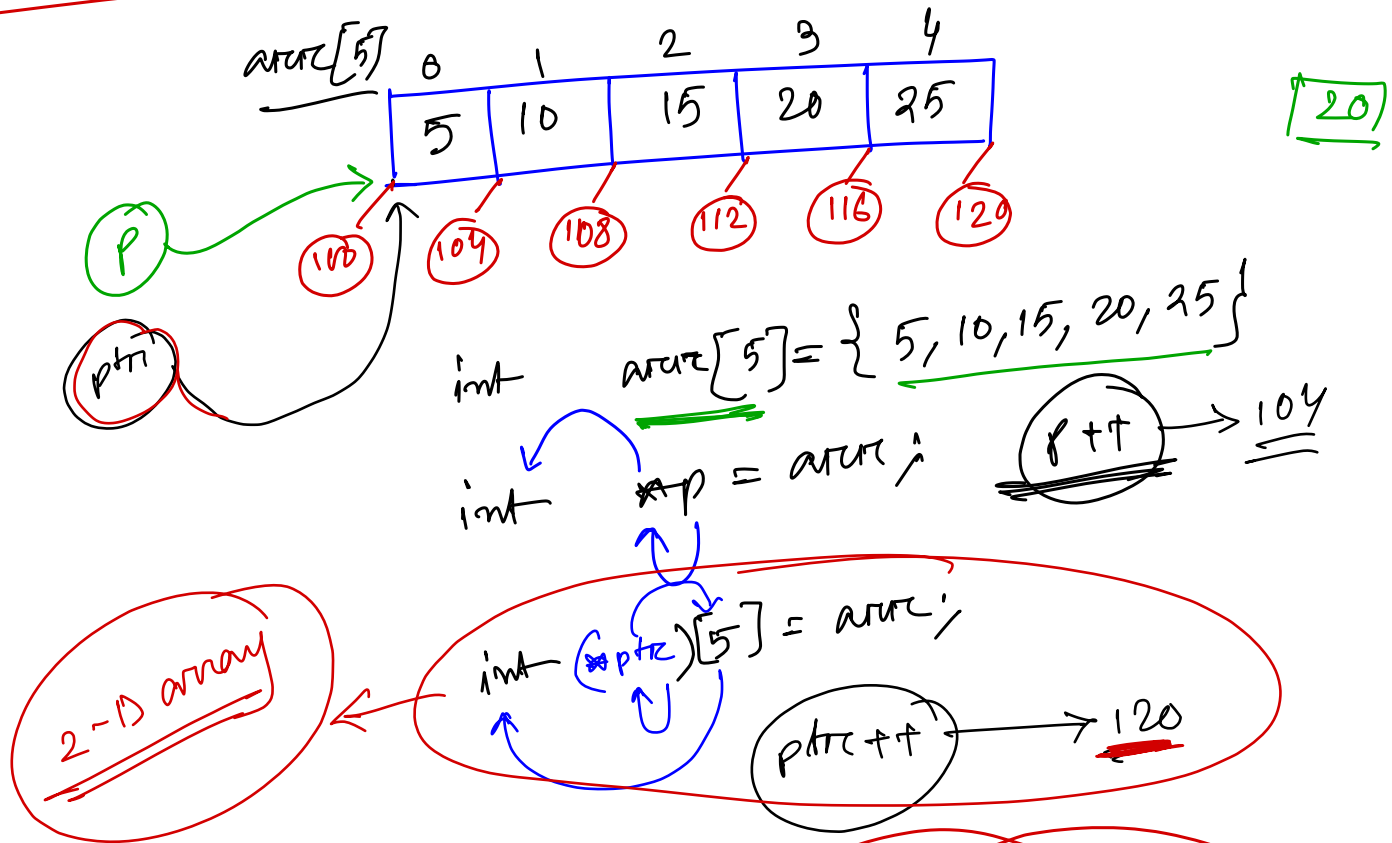
Array of pointers

int $*ptr[10];$

ptr is an array of 10 elements which are pointer to an integer.



Difference betⁿ pointer to integers and pointer to array



Pointer and Function

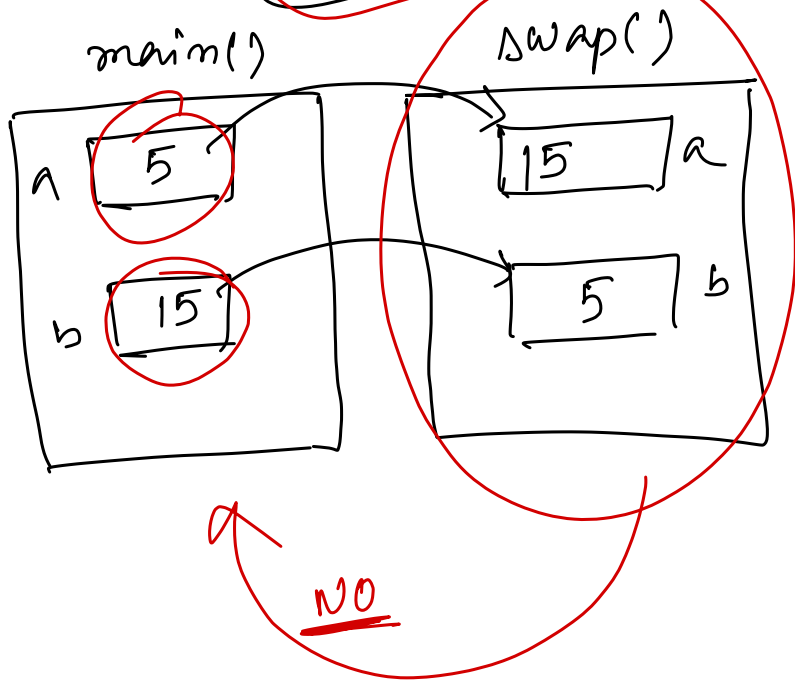
Call by Reference

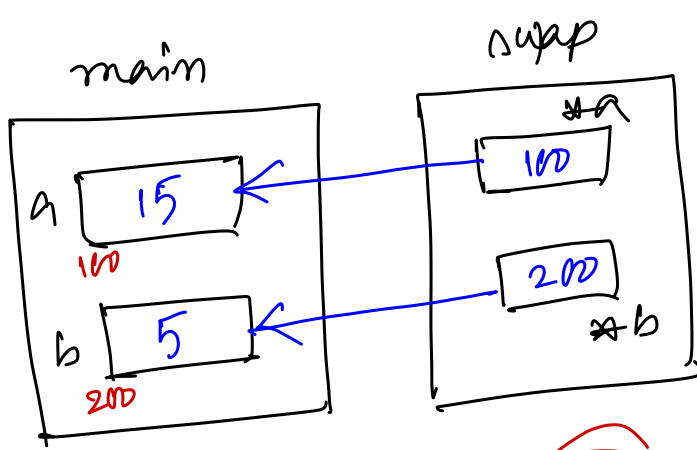
main → swap(&a, &b)

```
void swap(int *a, int *b)
{
    *a = *a ^ *b;
    *b = *a ^ *b;
    *a = *a ^ *b;
}
```

```
void swap(int a, int b) {
    a = a ^ b;
    b = a ^ b;
    a = a ^ b;
}
```

swap(a, b)





swap(&a, &b)

void swap(int *a, *b)

int *a = &a;
int *b = &b;

a, b

x = a
y = b

xy