

Sum 5 numbers → a b c d e → c

Sum 100 numbers → a b - - - 2 A B C - - - 2 A B C

Sum 100000000 numbers → $a_0, a_1, a_2, a_3, a_4, a_5, \dots, a_{99999}$

```
for(i=0; i <= 9999; i++) {
```

```
    cin >> ai >  
    } > a[i]
```

↓
Array

ai =

a[0] a[1] a[2] . . . - - a[9999]

Array
① If store same type of data Type.

② If Store at contiguous location

bool
char

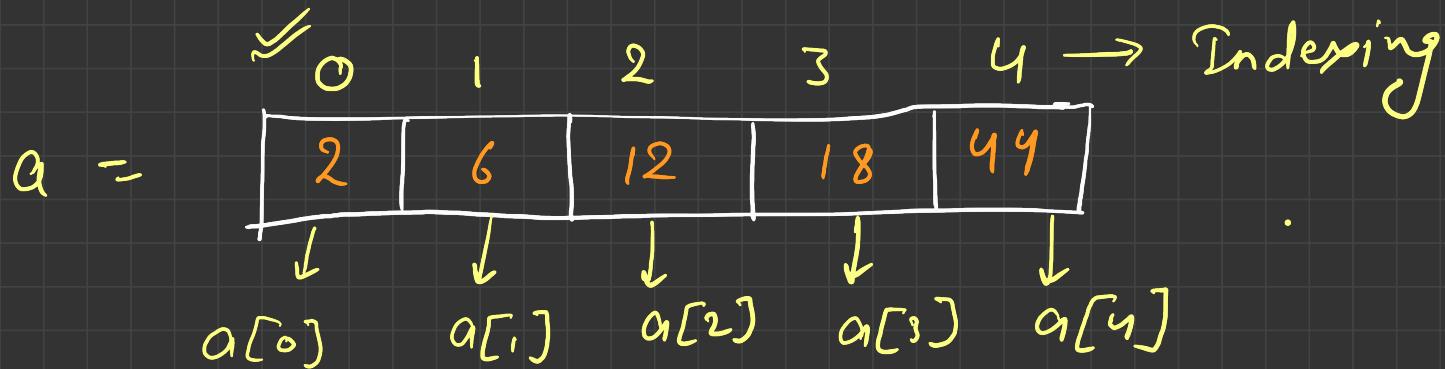
int

data

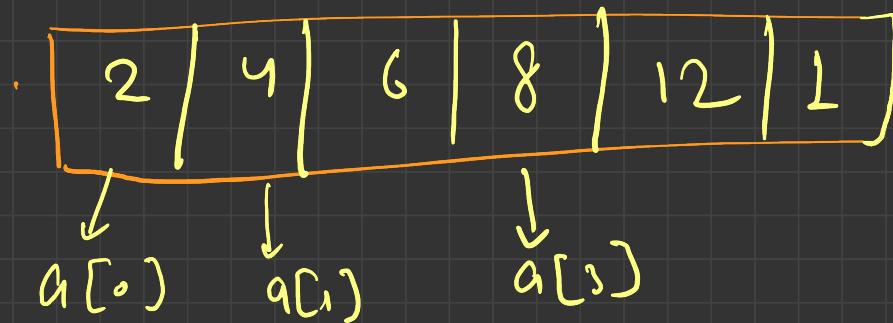
Type

Array Name
↑
a[10000] size of array

i) $\text{int } a[5] = \{2, 6, 12, 18, 44\}$



② $\inf \ a[] = \{2, 4, 6, 8, 12, 1\}$



$$\therefore a[3] \approx 8$$

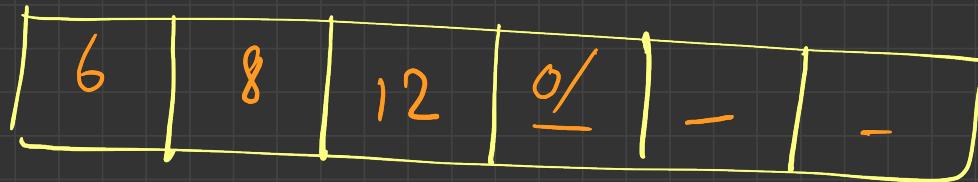
③

```
int arr[10];  
for (i=0 ; i<10 ; i++){  
    cin >> arr[i]
```

0	1	2	3	4	5	6	7	8	9
6	5	10	11	12	1	4	3	49	35

(4)

$$a[6] = \{6, 8, 12\}$$



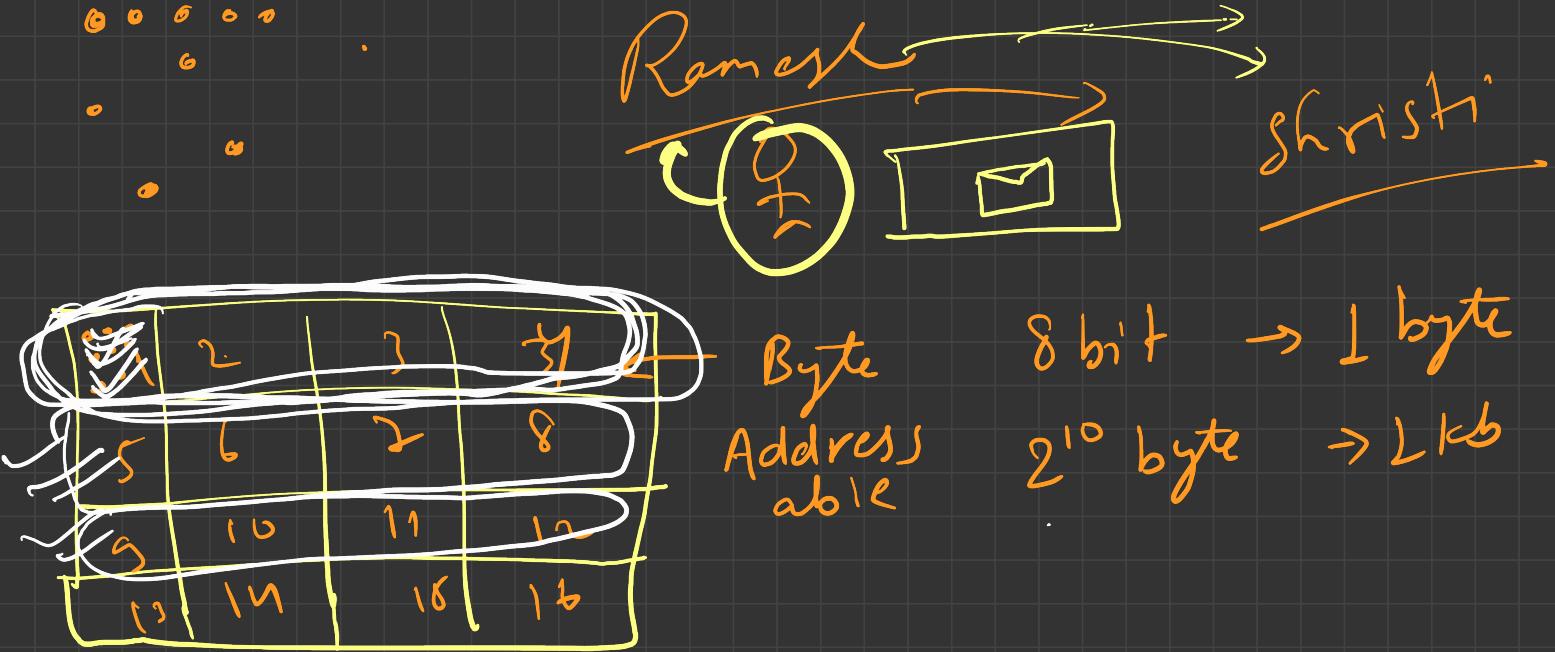
③

$$\text{int arr[4]} = \{0\} \cup \{1\}$$



$$\text{int arr[4]} = \{0, 12, 34, 18\}$$

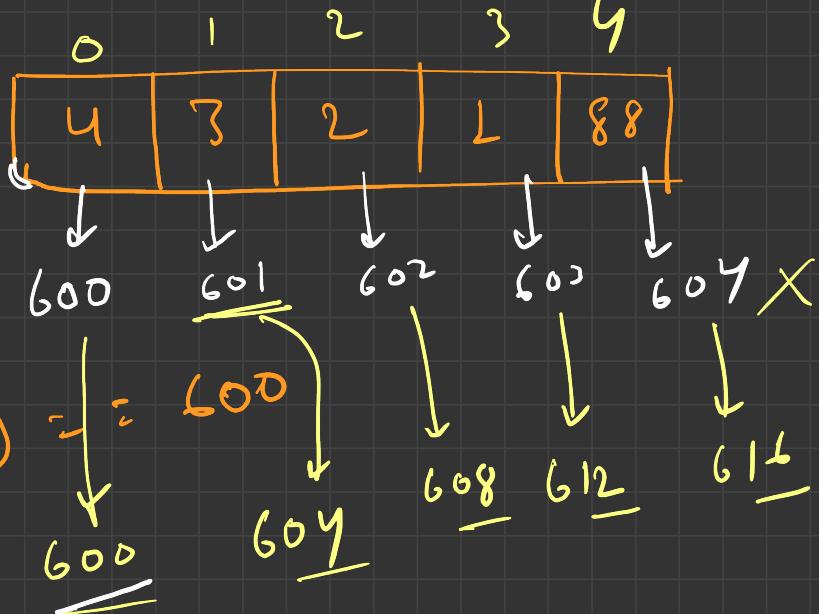
```
{ for (i=0; i<4; i++) {  
    cout << arr[i]  
}
```



int arr [5];

arr[0]

arr[0]



32 bit
4 byte

int a[5]	
2	4
0	1
	Add 4 5

a[0] a[1]

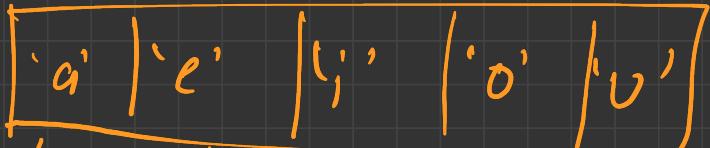
$$(5 + 2 \times 4)$$

addr of index = arr +
 index \times size of data
 type

index -1

char a2 [5];

1



add = 100

101

102

103

104

32-bit
64-bit

add

(1000, 10) → size

 $\text{arr}[5] = \{-18, 64, 32, 10, 12\}$

$\text{int } \underline{\text{ans}} = \text{INT_MIN}$

$\text{for } (i=0; i < 5; i++) \{$

$\text{if } (\text{arr}[i] > \text{ans})$

$\text{ans} = \text{arr}[i]$

$\}$