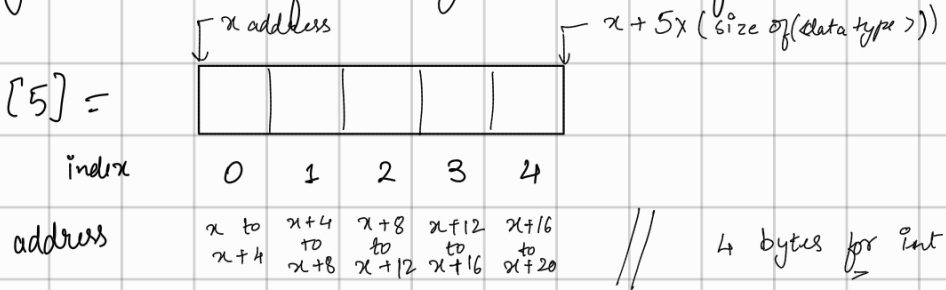


Arrays: contiguous block of memory allocated for a collection of data

Eg: `int arr[5] =`



in java

```
int[] marks = new int[];
```

↳ the array is stored in heap
but the address of storing of
marks is stored in stack

Random access

$\text{mark}[i] = \text{Base address} + i \times \text{size of one block.}$
↓
stored as
marks in stack
memory

In java, variables are always pass by value,
but changes made in heap are always present

① Span of array:

```
CODE: int maxVal = arr[0], minVal = arr[0];  
for (int i = 0; i < n; i++) {  
    maxVal = max(maxVal, arr[i]);  
    minVal = min(minVal, arr[i]);  
}  
return maxVal - minVal;
```

