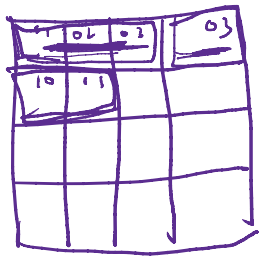
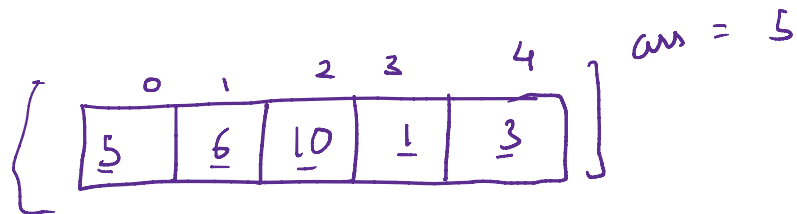


Array:

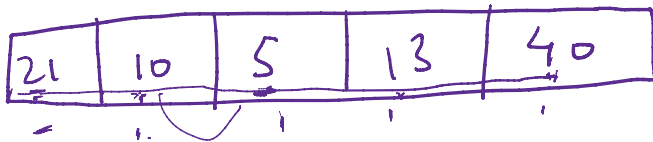


$a = 3$
 $b = 2$
 $c = 1$

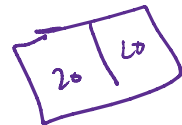
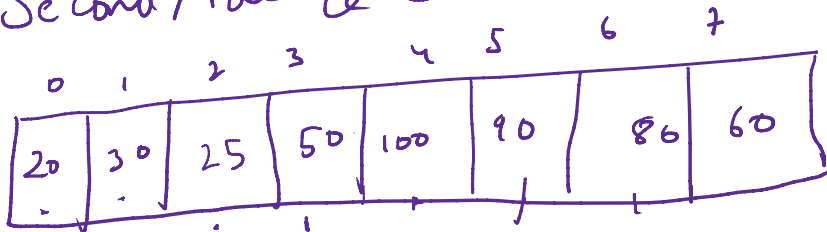
- Size is required for initialization
- Data type " "
- The indexing starts from zero



Find Max & min in an array



Second Max & Second min:

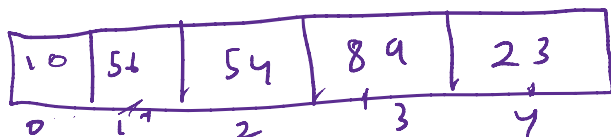


1st max = ~~20~~ ~~30~~ ~~25~~ ~~50~~ 100
 1st smin = ~~20~~ ~~30~~ ~~25~~ ~~50~~ 90
 $i = 1, 2, 3, 4, 5, 6, 7, 8$



Size = 7

max = ~~5~~ ~~8~~ ~~10~~ ~~11~~ 14
 smin = ~~5~~ ~~8~~ ~~10~~ ~~11~~ 12
 $i = 1, 2, 3, 4, 5, 6, 7$



```
public static void printSecondMinAndMax(int[] arr) {
    0 int max = arr[0];
    1 int smin = arr[0];
    2 for (int i = 1; i < arr.length; i++) {
    3     if (arr[i] > max) {
    4         smin = max;
    5         max = arr[i];
    6     } else if (arr[i] > smin) {
    7         smin = arr[i];
    8     }
    9 }
    10 System.out.println("Second max is " + smin);
}
```

```
1 int min = Integer.MAX_VALUE;
2 int smin = Integer.MAX_VALUE;
3 for (int i = 0; i < arr.length; i++) {
4     if (arr[i] < min) {
```

0 1 2 3 4

min: ~~10~~
smin: ~~10~~ ~~56~~ 2 3

i: ~~0~~ ~~1~~ ~~2~~ ~~3~~ ~~4~~ 5

```
1 int min = Integer.MAX_VALUE;  
2 int smin = Integer.MAX_VALUE;  
3 for (int i = 0; i < arr.length; i++) {  
4     if (arr[i] < min) {  
5         smin = min;  
6         min = arr[i];  
7     } else if (arr[i] < smin) {  
8         smin = arr[i];  
9     }  
10 }  
11 System.out.println("Second min is " + smin);
```