L11 (C++)
Arrays Problem Solving

Recap

1. Pointers ✓
2. Arrays as pointers ✓
3. Pointer to pointer ✓
4. Dynamic arrays ✓ (memory allocation)

```
int a
int *ptr;
ptr = &a;
int **ptrPtr;
ptrPtr = &ptr;
```

```
int *a = new int
```


```
int arr[10] = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10};
```

```
int * const arr;   → error
```

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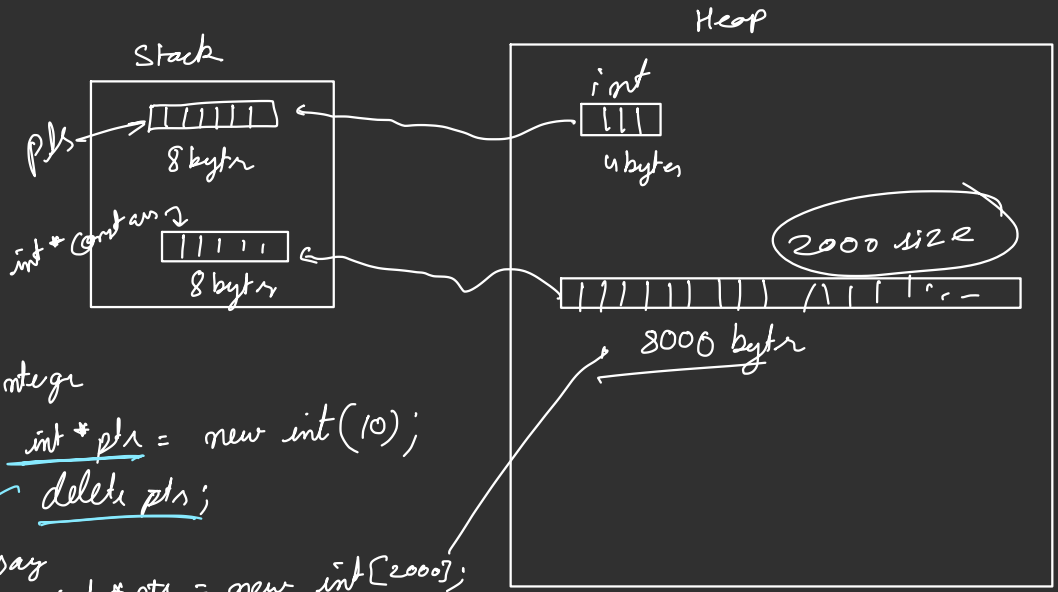
```
arr++;   ×
arr = arr+1   ×
```

arr + 1



Integer

```
int * ptr = new int(10);
delete ptr;
```

Array

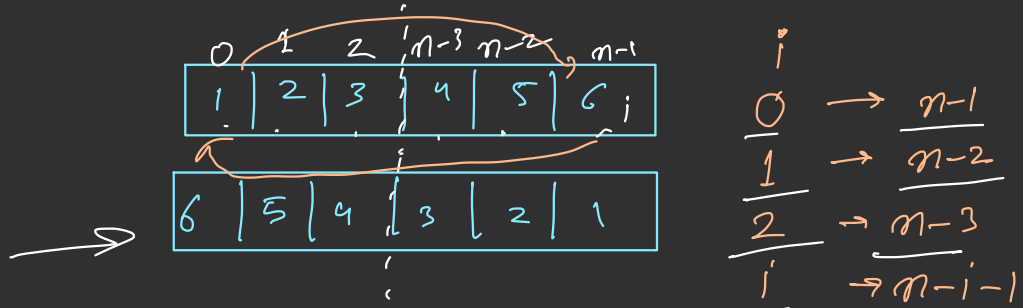
```
int * pts = new int[2000];
int * const pts
delete [] pts;
```

first_min = 2

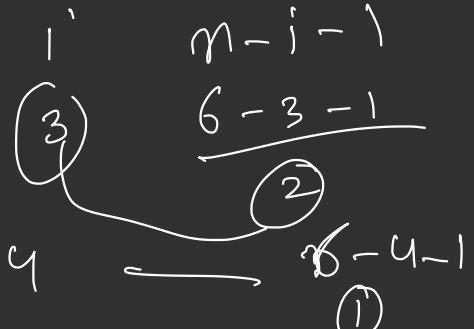
secon_min = 5

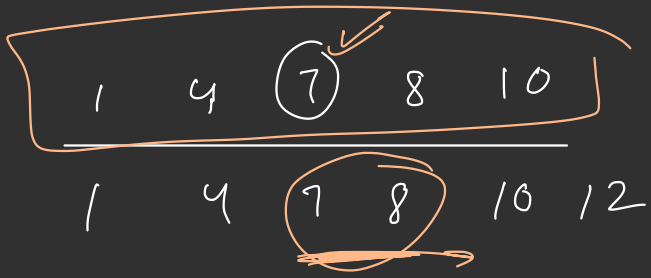
Find the smallest & the second smallest element
in a given Array

Print reverse of a given Array.



Okay, now actually reverse the given array.





Find the Median of a given sorted array

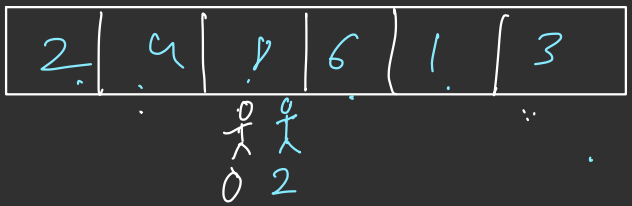
Size	number
n	1
$n-1$	2
$n-2$	3
$n-3$	4
$n-4$	5
$n-5$	6

Print all subarrays of a given array

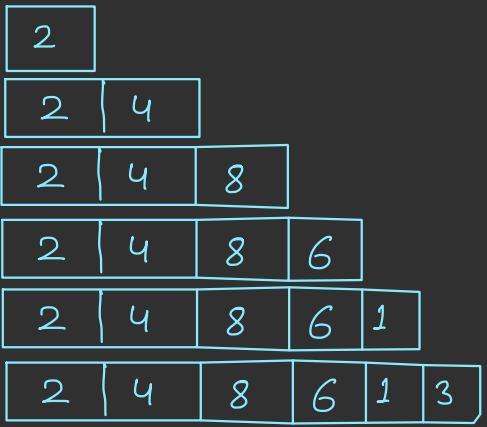
$1+2+3+4+5+6$

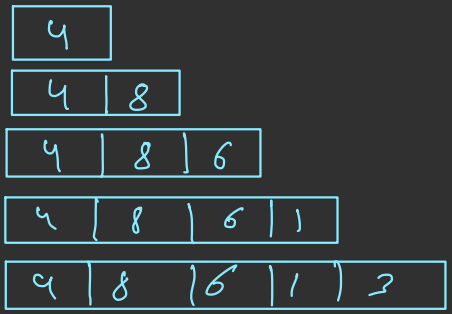
$1 \ldots\ldots\ldots n$

$\frac{n*(n+1)}{2}$



Print all subarrays of a given array





Separate out even and odd elements
in 2 different arrays

Thank You!

(Reminder: Keep Practicing)