

Ques 1 Find max of array

| | | | | | | |
|---|---|----|----|-----|----|---|
| 2 | 8 | -6 | 10 | -12 | 13 | 1 |
|---|---|----|----|-----|----|---|

↑
i

max = ~~-6~~ ~~2~~ ~~8~~ ~~10~~ 13

Ques min

Ques sum all

Ques span of array

→ difference bw max and min

| | | | | | | |
|---|---|----|----|-----|----|---|
| 2 | 8 | -6 | 10 | -12 | 13 | 1 |
|---|---|----|----|-----|----|---|

$$13 - (-12)$$

$$\Rightarrow 25$$

Ques sum odd and even index

| | | | | | | |
|---|---|----|----|-----|----|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 2 | 8 | -6 | 10 | -12 | 13 | 1 |

Ques

1 | 4 | 2 | 4 | 3 | 5

$n = 4$

is Element Repeated

Ques

6 | 3 | 4 | 5 | 1 | 2 | 5

repeated Element

Ques Reverse an array

→

| | | | | | |
|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 |
| 1 | 2 | 5 | 4 | 3 | 6 |

→

| | | | | | |
|---|---|---|---|---|---|
| 6 | 3 | 4 | 5 | 2 | 1 |
|---|---|---|---|---|---|

| | | |
|-------|--|-----|
| a_2 | | a |
| 5 | | 0 |
| 4 | | 1 |
| 3 | | 2 |
| 2 | | 3 |
| 1 | | 4 |
| 0 | | 5 |

| | | | | | |
|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 | 1 |
|---|---|---|---|---|---|

```
int a2[] = new int [a.length];  
for(int i = 0; i < a.length; i++) {  
    a2[n-1-i] = a[i];  
}  
return a2;
```

| | | | | | |
|---|---|---|---|---|---|
| 6 | 3 | 4 | 5 | 2 | 1 |
|---|---|---|---|---|---|

$\uparrow \quad \uparrow$
 $a \quad b$

Swap

$$a = b$$

$$b = a$$

$$a = 20$$

$$b = \cancel{20} \quad 20$$

$$\text{int temp} = a;$$

$$a = b;$$

$$b = \text{temp};$$

Ques → inverse array

arr

| | | | | | | |
|---|---|---|---|---|---|---|
| i | 0 | 1 | 2 | 3 | 4 | 5 |
| | 5 | 1 | 3 | 0 | 4 | 2 |

$$\textcircled{1} 0 \leq a[i] < n$$

$\textcircled{2}$ No repetition

\Rightarrow res

| | | | | | | |
|--|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 |
| | 3 | 1 | 5 | 2 | 4 | 0 |

$$\text{res}[\text{arr}[i]] = i;$$

Ques Print all pairs whose sum is k

k=10

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|----|----|
| 4 | 5 | 7 | 3 | 2 | 1 | 6 | 3 | 5 | 8 | 7 | 9 |

Console

| | |
|-----|-----|
| 4 6 | 2 8 |
| 5 5 | 1 9 |
| 7 3 | 3 7 |
| 7 3 | |
| 3 7 | |

$$\frac{n \times (n-1)}{2} \Rightarrow 78$$

k=5

i ↓

| | | | |
|---|---|---|---|
| 2 | 3 | 1 | 4 |
|---|---|---|---|

| | | | |
|------------|---|---|------------|
| <u>2 3</u> | 3 | 1 | <u>1 4</u> |
| 2 1 | 3 | 4 | |
| 2 4 | | | |

Ques Print all triplets whose sum is k

t=9

| 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 4 | 8 | 1 | 6 | 5 | 3 | 2 |

