



5 Array-based DSA questions

Q-1: Find the Maximum Element in an Array

Q-2: Reverse an Array

Q-3: Search an Element (Linear Search)

Q-4: Find Sum of All Elements

Q-5: Find a Pair with Given Sum (Two Pointers)





Q-1: Find the Maximum Element in an Array

? Problem

```
let arr = [10, 25, 5, 40, 15];  
let max = arr[0];
```

```
for (let i = 1; i < arr.length; i++) {  
  if (arr[i] > max) {  
    max = arr[i];  
  }  
}
```

```
console.log(max);
```

Output - > 40





Q-2: Reverse an Array

? Problem

```
let arr = [1, 2, 3, 4, 5]
let start = 0;
let end = arr.length - 1;
```

```
while (start < end) {
  let temp = arr[start];
  arr[start] = arr[end];
  arr[end] = temp;
```

```
  start++;
  end--;
}
```

```
console.log(arr);
```

Output

[5, 4, 3, 2, 1]





Q-3: Search an Element (Linear Search)

? Problem

```
let arr = [5, 10, 15, 20]
```

```
let target = 15
```

```
let found = false;
```

```
for (let i = 0; i < arr.length; i++) {
```

```
  if (arr[i] === target) {
```

```
    found = true;
```

```
    break;
```

```
  }
```

```
}
```

```
console.log(found);
```

Output > true





Q-4: Find Sum of All Elements

? Problem

```
let arr = [2, 4, 6, 8]
```

```
let sum = 0;
```

```
for (let i = 0; i < arr.length; i++) {  
    sum += arr[i];  
}
```

```
console.log(sum);
```

Output > 20





Q-5: Find a Pair with Given Sum (Two Pointers)

? Problem

```
let arr = [1, 2, 3, 4, 5, 7]
```

```
let target = 9
```

```
let right = arr.length - 1;
```

```
let left = 0;
```

```
let result = false;
```

```
while (left < right) {
```

```
  let currentSum = arr[left] + arr[right];
```

```
  if (currentSum === target) {
```

```
    result = true;
```

```
    break;
```

```
  } else if (currentSum < target) {
```

```
    left++;
```

```
  } else {
```

```
    right--;
```

```
  }
```

```
}
```

```
console.log(result);
```

Output > true



I hope you find this post helpful.

Follow me on



<https://linkedin.com/in/satendracoder>



<https://www.instagram.com/satendracoder>



<https://www.youtube.com/@satendracoder>



<https://github.com/satendracoder>



Satendra Rajput
[@satendracoder](https://satendracoder.com/)

Visit it once

<https://satendracoder.com/>