JavaScript 50 Q&A: Objects & Arrays

Q1 [Interview] What is an object in JavaScript?

Ans: A collection of key-value pairs.

```
let person = { name: 'John', age: 30 };
```

Q2 [Interview] How do you access object properties?

Ans: Using dot or bracket notation.

```
obj.name or obj['name']
```

Q3 [Interview] What is an array?

Ans: A list-like object that stores multiple values.

```
let arr = [1, 2, 3];
```

Q4 [Interview] How do you add a property to an object?

Ans: obj.key = value or obj['key'] = value;

Q5 [Interview] How do you loop through an array?

Ans: Use for, forEach, or for-of loops.

Q6 [DSA] Find the maximum number in an array.

Ans: Use Math.max with spread.

```
Math.max(...arr);
```

Q7 [DSA] Count keys in an object.

Ans: Use Object.keys().length

```
Object.keys(obj).length
```

Q8 [DSA] Sum all values in array.

Ans: Use reduce method.

```
arr.reduce((sum, val) => sum + val, 0);
```

Q9 [DSA] Merge two objects.

Ans: Use spread operator.

```
{...obj1, ...obj2}
```

Q10 [DSA] Convert object to array of keys.

Ans: Use Object.keys().

```
Object.keys(obj)
```

Q11 [LeetCode] typeof [] == 'object'?

Ans: Yes, arrays are objects.

Q12 [LeetCode] Array.isArray({})?

Ans: false

Q13 [LeetCode] [1,2] == '1,2'?

Ans: true (coerced to string)

Q14 [LeetCode] obj.key vs obj['key']?

Ans: Both work similarly.

Q15 [LeetCode] typeof null?

Ans: 'object' (legacy bug)

Q16 [Conceptual] Can object keys be numbers?

Ans: Yes, but coerced to strings.

Q17 [Conceptual] Can arrays have mixed types?

Ans: Yes, JS arrays are flexible.

Q18 [Conceptual] Is an array a type of object?

Ans: Yes.

Q19 [Conceptual] Do arrays have length property?

Ans: Yes.

Q20 [Conceptual] Can objects contain arrays?

Ans: Yes, and vice versa.