

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

```
// 1. length
```

```
console.log("Length:", arr.length);
```

```
// 2. push()
```

```
arr.push(6);
```

```
console.log("push(6):", arr);
```

```
// 3. pop()
```

```
arr.pop();
```

```
console.log("pop():", arr);
```

```
// 4. unshift()
```

```
arr.unshift(0);
```

```
console.log("unshift(0):", arr);
```

```
// 5. shift()
```

```
arr.shift();
```

```
console.log("shift():", arr);
```

```
// 6. concat()
```

```
let arr2 = [6, 7];
```

```
let combined = arr.concat(arr2);
```

```
console.log("concat([6, 7]):", combined);
```

```
// 7. join()
```

```
console.log("join('-'):", arr.join('-'));
```

```
// 8. slice()
```

```
console.log("slice(1, 3):", arr.slice(1, 3));
```

```
// 9. splice()

arr.splice(2, 1, 99); // Replace item at index 2

console.log("splice(2, 1, 99):", arr);


// 10. indexOf()

console.log("indexOf(4):", arr.indexOf(4));


// 11. lastIndexOf()

arr.push(2);

console.log("lastIndexOf(2):", arr.lastIndexOf(2));


// 12. includes()

console.log("includes(3):", arr.includes(3));


// 13. reverse()

console.log("reverse():", arr.reverse());


// 14. sort()

let alpha = ['b', 'c', 'a'];

console.log("sort():", alpha.sort());


// 15. map()

let squared = arr.map(x => x * x);

console.log("map(x => x * x):", squared);


// 16. filter()

let even = arr.filter(x => x % 2 === 0);

console.log("filter(even):", even);


// 17. reduce()

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

console.log("reduce(sum):", sum);
```

```
// 18. reduceRight()

let sumRight = arr.reduceRight((acc, val) => acc + val, 0);

console.log("reduceRight(sum):", sumRight);


// 19. forEach()

arr.forEach((val, idx) => console.log(`forEach index ${idx}: ${val}`));


// 20. find()

console.log("find(x > 3):", arr.find(x => x > 3));


// 21. findIndex()

console.log("findIndex(x > 3):", arr.findIndex(x => x > 3));


// 22. some()

console.log("some(x > 3):", arr.some(x => x > 3));


// 23. every()

console.log("every(x > 0):", arr.every(x => x > 0));


// 24. flat()

let nested = [1, [2, [3, 4]]];

console.log("flat(2):", nested.flat(2));


// 25. flatMap()

let nums = [1, 2, 3];

console.log("flatMap():", nums.flatMap(x => [x, x * 2]));


// 26. fill()

let filled = new Array(5).fill(0);

console.log("fill(0):", filled);
```

```
// 27. copyWithin()

let copyArr = [1, 2, 3, 4, 5];

console.log("copyWithin(0, 3):", copyArr.copyWithin(0, 3));
```

```
// 28. toString()

console.log("toString():", arr.toString());
```

```
// 29. toLocaleString()

console.log("toLocaleString():", arr.toLocaleString());
```

```
// 30. Array.isArray()

console.log("Array.isArray(arr):", Array.isArray(arr));
```

```
// 31. from()

console.log("Array.from('123'):", Array.from('123'));
```

```
// 32. of()

console.log("Array.of(1, 2, 3):", Array.of(1, 2, 3));
```

```
// 33. entries()

for (let [index, value] of arr.entries()) {
  console.log(`entries: ${index} => ${value}`);
}
```

```
// 34. keys()

console.log("keys():", [...arr.keys()]);
```

```
// 35. values()

console.log("values():", [...arr.values()]);
```