

Array – That store a type of data type

## ✦ JavaScript Concepts for Expense Tracker

### 1 Arrays (To store multiple expenses)

- **Definition:** An array is a list that holds multiple values.
- **Example:** Storing expenses in an array.

javascript

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```
let expenses = [100, 200, 300];  
console.log(expenses[0]); // Output: 100 (first expense)
```

### 2 Objects (To store detailed expense information)

- **Definition:** An object holds multiple properties inside `{ }`.
- **Example:** Store amount, category, and date inside an object.

javascript

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```
let expense = { amount: 100, category: "Food", date: "2025-02-13" };  
console.log(expense.category); // Output: "Food"
```

Foreach – array me loop

**3 foreach (To loop over expenses)**

- **Definition:** Runs a function on every array element.
- **Example:** Show all expenses in the console.

```
javascript Copy Edit  
  
expenses.forEach(function(expense) {  
  console.log(expense);  
});
```

**Output:**

```
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100  
200  
300
```

Map – array me har index me jake koi operation karna works like loop

**4 map (To modify all expenses)**

- **Definition:** Creates a new array by changing each element.
- **Example:** Increase all expenses by 10%.

```
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let updatedExpenses = expenses.map(expense => expense * 1.1);  
console.log(updatedExpenses);
```

**Output:**

```
csharp Copy Edit  
  
[110, 220, 330]
```

Filter – it filter works like if

#### 5 filter (To keep only certain expenses)

- **Definition:** Returns a new array with specific elements.
- **Example:** Get only expenses greater than 150.

javascript

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```
let highExpenses = expenses.filter(expense => expense > 150);  
console.log(highExpenses);
```

Output:

csharp

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```
[200, 300]
```

Reduce-find sum of the array

#### 6 reduce (To calculate total expenses)

- **Definition:** Reduces an array to a single value.
- **Example:** Calculate total expenses.

javascript

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```
let total = expenses.reduce((sum, expense) => sum + expense, 0);  
console.log(total);
```

Output:

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```
600
```