JavaScript Array & String Methods – Complete Solutions

SECTION 1 – Array Methods

Task 1 – forEach()
```javascript
let subjects = ["Maths", "Science", "English", "History"];
let result = "";
subjects.forEach((sub, index) => {
  result += `Subject ${index + 1}: ${sub}\n`;
});
console.log(result);
```

Task 2 – map()
```javascript
let prices = [100, 200, 300, 400];
let newPrices = prices.map(price => price * 1.10);
```

Task 3 – filter()
```javascript
let passed = students.filter(student => student.marks > 50);
```

Task 4 – find()
```javascript
let firstPass = students.find(student => student.marks > 50);
```

Task 5 – reduce()
```javascript
let total = cart.reduce((sum, product) => sum + product.price * 1.05, 0);
```

Task 6 – some()
```javascript
let hasEven = numbers.some(num => num % 2 === 0);
```

Task 7 – every()
```javascript
let allAdults = ages.every(age => age > 18);
```

Task 8 – sort()
```javascript
let ascending = [...salaries].sort((a, b) => a - b);
let descending = [...salaries].sort((a, b) => b - a);
```

Task 9 – Conversion
```javascript
arr.toString();
arr.join("-");
```

SECTION 2 – String Methods

```
charAt(), charCodeAt()
slice()
toUpperCase(), toLowerCase()
trim()
includes()
split()
indexOf(), lastIndexOf()
replace()
startsWith(), endsWith()
repeat()
```

FINAL TEAM CHALLENGE – Employee Report System
map(), filter(), find(), reduce(), sort()