

Functional Practice Question Set 2

Instructions:

Make use of `.map()`, `.filter()` and `.find()` methods.

You can make use of basic methods such as `.length`, `toLowerCase()`, `toUpperCase()` if needed.

Do NOT use for-loops.

1. Given an array of objects representing people, write an ES6 function to return a new array containing only the names of the people.

```
const people = [
  { name: 'Raj', age: 28 },
  { name: 'Swapnil', age: 42 },
  { name: 'Anushka', age: 35 }
];
```

// Your code here

```
console.log(names); // Output: ['Raj', 'Swapnil', 'Anushka']
```

[COPY](#)

2. Given an array, write an ES6 function to return a new array with all the elements multiplied by 5.

```
const numbers = [1, 2, 3, 4];
// Your code here
```

```
console.log(multiplyByFive); // Output: [5, 10, 15, 20]
```

[COPY](#)

3. Given employee's data, write an ES6 function which greets them with a personalized message for onboarding.

```
const employeeData = [
  {name: "ram", dept: "marketer"},
  {name: "Radha", dept: "SDE"},
  {name: "shyam", dept: "finance professional"},
]
```

// Your code here

```
console.log(greetEmployeeMessages);
```

```
// Output: ['Hi ram we are glad to have you as a marketing', 'Hi Radha we are glad to hav
```

[COPY](#)

4. Write an ES6 function that takes an array of objects representing books and returns an array with only the titles of each book.

```
const books = [
  { title: 'The Great Gatsby', author: 'F. Scott Fitzgerald' },
  { title: 'To Kill a Mockingbird', author: 'Harper Lee' },
  { title: '1984', author: 'George Orwell' },
  { title: 'Pride and Prejudice', author: 'Jane Austen' },
]
```

```
];  
  
// Your code here  
  
const titles = getBookTitles(books);  
console.log(titles); // Output: ['The Great Gatsby', 'To Kill a Mockingbird', '1984', 'Pr
```

COPY

5. Write an ES6 function which takes out the names of the students whose first letter starts with 'A'.

```
const studentName = ["Ram", "Anjali", "Arpit", "Bhanu Kumar", "Jaya", "Ankit", "shayam"]  
// Your code here  
  
console.log(studentNames);  
// Output: ["Anjali", "Arpit", "Ankit"]
```

COPY

6. Write an ES6 function which filters out the products which have a price greater than 40.

```
const productData = [  
  {prodName: "Dairy Milk", price: 10},  
  {prodName: "Dairy Milk Silk", price: 70},  
  {prodName: "Five Star", price: 20},  
  {prodName: "Mars", price: 50}  
]  
// Your code here  
  
console.log(getProducts(productData, 40))  
// Output: [{prodName: 'Dairy Milk Silk', price: 70}, {prodName: 'Mars', price: 50}]
```

COPY

7. Write an ES6 function that takes an array of numbers and returns the first number that is divisible by 7.

```
const numbers = [1, 2, 3, 21, 14, 7];  
// Your code here  
  
console.log(isDivisibleBy7)  
// Output: 21
```

COPY

8. Write an ES6 function that takes an array of strings and returns the first string that is longer than 8 characters.

```
const names = ["Mohan", "Anjali", "Geetanjali", "Ankit", "Bhanu Kumar", "Ramakrishnan",  
// Your code here  
  
console.log(isNamesGreaterThan8(names));  
// Output: "Geetanjali"
```

COPY

9. Write an ES6 function that takes an array of objects representing students with properties name and grade. Return the first student object that has a grade of "A".

```
const students = [  
  { name: "John", grade: "B" },  
  { name: "Mary", grade: "A" },  
  { name: "Sam", grade: "C" },  
  { name: "Sarah", grade: "A" },  
];  
  
// Your code here
```

```
const studentWithGradeA = findStudentWithGradeA(students);
console.log(studentWithGradeA);
// Output: { name: "Mary", grade: "A" }
```

[COPY](#)

10. Write an ES6 function that takes an array of objects representing students with properties name, grade and scholarship. Return the first student object that has a grade of "A" or they are a scholarship student.

```
const students = [
  { name: "John", grade: "B", scholarship: false },
  { name: "Mary", grade: "B", scholarship: true },
  { name: "Sam", grade: "A", scholarship: false },
  { name: "Sarah", grade: "A", scholarship: true },
];

// Your code here

const student = findStudent(students);
console.log(student);
// Output: { name: "Mary", grade: "B", scholarship: true }
```

[COPY](#)

11. Write an ES6 function that takes an array of objects representing students with properties name and grade. Return the first student object that has a grade of "B" and they are also a scholarship student.

```
const students = [
  { name: "John", grade: "B", scholarship: false },
  { name: "Mary", grade: "A", scholarship: true },
  { name: "Sam", grade: "A", scholarship: false },
  { name: "Sarah", grade: "B", scholarship: true },
];

// Your code here

const student = findStudent(students);
console.log(student);
// Output: { name: "Sarah", grade: "B", scholarship: true }
```

[COPY](#)

12. Write an ES6 function that takes an array of objects containing Bollywood movie information (title, director, year, rating) and returns an array with only the movie titles that were made before 1990 and has a rating above 8.0. (Question Level: tough)

```
const bollywoodMovies = [
  { title: 'Sholay', director: 'Ramesh Sippy', year: 1975, rating: 8.2 },
  { title: 'Amar Akbar Anthony', director: 'Manmohan Desai', year: 1977, rating: 7.6 },
  { title: 'Namak Halaal', director: 'Prakash Mehra', year: 1982, rating: 7.4 },
  { title: 'Mr. India', director: 'Shekhar Kapur', year: 1987, rating: 7.8 },
  { title: 'Qayamat Se Qayamat Tak', director: 'Mansoor Khan', year: 1988, rating: 7.6 },
  { title: 'Parinda', director: 'Vidhu Vinod Chopra', year: 1989, rating: 8.1 },
  { title: 'Dil', director: 'Indra Kumar', year: 1990, rating: 7.8 }
];

// Your code here

const bestOldMovies = getBestOldBollywoodMovies(bollywoodMovies);
```

```
console.log(bestOldMovies); // Output: ['Sholay', 'Parinda']
```