

# Travel Planner

## Array methods

Required methods for the following exercises: `map`, `filter`, `reduce`, `spread`, `destructuring`.

### 1. Retrieve Destinations

- **Input:** An array of travel destinations.
- **Task:** Return a new array that contains all the travel destinations.
- **Example:**
  - Input: `["New York", "London", "Paris"]`
  - Expected Output: `["New York", "London", "Paris"]`

### 2. Filter Flights by Destination

- **Input:** An array of flight objects, a destination string.
- **Task:** Return a new array containing only flights with the specified destination.
- **Example:**
  - Input:  

```
[{ destination: "New York" }, { destination: "London" }, { destination: "Paris" }], destination = "London"
```
  - Expected Output: `[{ destination: "London" }]`

### 3. Calculate Total Flight Duration

- **Input:** An array of flight objects.
- **Task:** Calculate and return the total duration of all flights.
- **Example:**
  - Input:  

```
[{ duration: "3h 30m" }, { duration: "2h 45m" }, { duration: "1h 15m" }]
```
  - Expected Output: `7560` (total duration in seconds)

“ Helper function for Exercise 3: Get Flight Duration in Seconds

```
const getFlightDurationInSeconds = duration => {
  const [hours, minutes] = duration.split("h ");
  return parseInt(hours) * 3600 + parseInt(minutes) * 60;
};
```

#### 4. Combine Flight Numbers and Destinations

- **Input:** An array of flight objects.
- **Task:** Return a new array with strings combining the flight number and the destination. Each string should be formatted as "{flightNumber} - {destination}".
- **Example:**
  - Input:
 

```
[{ flightNumber: "FL001", destination: "New York" }, {
  flightNumber: "FL002", destination: "London" }]
```
  - Expected Output: ["FL001 - New York", "FL002 - London"]

#### 5. Update Flight Duration

- **Input:** An array of flight objects, a new duration value, and a flight number.
- **Task:** Update the duration of the specified flight in the array and return the updated array.
- **Example:**
  - Input:
 

```
[{ flightNumber: "FL001", duration: "3h 30m" }, { flightNumber:
  "FL002", duration: "2h 45m" }], newDuration = "4h 15m",
  flightNumber = "FL001"
```
  - Expected Output:
 

```
[{ flightNumber: "FL001", duration: "4h 15m" }, { flightNumber:
  "FL002", duration: "2h 45m" }]
```

#### 6. Filter Flights by Duration

- **Input:** An array of flight objects, a minimum duration value.
- **Task:** Return a new array containing only flights with a duration equal to or greater than the provided value.
- **Example:**
  - Input:
 

```
[{ duration: "3h 30m" }, { duration: "2h 45m" }, { duration: "1h
  15m" }], minDuration = 180
```

- Expected Output: `[{ duration: "3h 30m" }, { duration: "2h 45m" }]`

## 7. Retrieve Flight Numbers

- **Input:** An array of flight objects.
- **Task:** Return a new array that contains all the flight numbers.
- **Example:**
  - Input:  
`[{ flightNumber: "FL001" }, { flightNumber: "FL002" }, { flightNumber: "FL003" }]`
  - Expected Output: `["FL001", "FL002", "FL003"]`

## 8. Sort Flights by Duration

- **Input:** An array of flight objects.
- **Task:** Return a new array sorted by flight duration in ascending order.
- **Example:**
  - Input:  
`[{ duration: "3h 30m" }, { duration: "2h 45m" }, { duration: "1h 15m" }]`
  - Expected Output:  
`[{ duration: "1h 15m" }, { duration: "2h 45m" }, { duration: "3h 30m" }]`

## 9. Retrieve Flight Destinations

- **Input:** An array of flight objects.
- **Task:** Return a new array that contains all the destinations of the flights.
- **Example:**
  - Input:  
`[{ destination: "New York" }, { destination: "London" }, { destination: "Paris" }]`
  - Expected Output: `["New York", "London", "Paris"]`