

# Travel Planner

## Array Methods - Extra

### 1. Group Trips by Destination

- **Input:** An array of trip objects, where each object has properties: id, traveler, destination, days, and cost.
- **Task:** Write a function to group trips by their destination. Return an object where keys are destinations and values are arrays of trips going to that destination.
- **Example Input:**

```
[
  {id: 1, traveler: 'John Doe', destination: 'Paris', days: 5,
  cost: 1200},
  {id: 2, traveler: 'Jane Doe', destination: 'Paris', days: 7,
  cost: 1400},
  {id: 3, traveler: 'John Doe', destination: 'London', days: 3,
  cost: 900}
]
```

- **Example Output:**

```
{
  'Paris': [
    {id: 1, traveler: 'John Doe', destination: 'Paris', days: 5,
    cost: 1200},
    {id: 2, traveler: 'Jane Doe', destination: 'Paris', days: 7,
    cost: 1400}
  ],
  'London': [
    {id: 3, traveler: 'John Doe', destination: 'London', days: 3,
    cost: 900}
  ]
}
```

### 2. Find Longest Trip

- **Input:** An array of trip objects.
- **Task:** Write a function to find the trip with the maximum number of days.
- **Example Input:** The same as Exercise 1.
- **Example Output:**

```
{id: 2, traveler: 'Jane Doe', destination: 'Paris', days: 7, cost: 1400}
```

### 3. Find Most Expensive Trip

- **Input:** An array of trip objects.
- **Task:** Write a function to find the trip with the maximum cost.
- **Example Input:** The same as Exercise 1.
- **Example Output:**

```
{id: 2, traveler: 'Jane Doe', destination: 'Paris', days: 7, cost: 1400}
```

### 4. Count Trips by Traveler

- **Input:** An array of trip objects.
- **Task:** Write a function to return an object where keys are traveler names and values are the number of trips they have.
- **Example Input:** The same as Exercise 1.
- **Example Output:** { 'John Doe': 2, 'Jane Doe': 1 }

### 5. Find All Unique Destinations

- **Input:** An array of trip objects.
- **Task:** Write a function to return an array of all unique destinations from the trips.
- **Example Input:** The same as Exercise 1.
- **Example Output:** ['Paris', 'London']