Problem 1:

Create a Map in JavaScript and perform the following operations.

- **❖** Add key-value pairs to the Map
- Check if a specific key exists
- **Retrieve the value associated with a given key**
- **❖** Iterate through all key-value pairs.

Answer:

```
// 1. Creating a new Map
const myMap = new Map();
1. Adding key-value pairs to the Map
myMap.set('name', 'Rajkamal Yadav');
myMap.set('age', 25);
myMap.set('country', 'India');
console.log("Map after adding key-value pairs:");
console.log(myMap);
2. Checking if a specific key exists
const hasAge = myMap.has('age');
console.log(`Does the key 'age' exist?: ${hasAge}`); // Outputs: true
const hasGender = myMap.has('gender');
console.log(`Does the key 'gender' exist?: ${hasGender}`); // Outputs: false
3. Retrieving the value associated with a given key
const name = myMap.get('name');
console.log('Value for key 'name': ${name}'); // Outputs: Rajkamal Yadav
const age = myMap.get('age');
console.log('Value for key 'age': ${age}'); // Outputs: 25
```

4. Iterating through all key-value pairs

```
console.log("Iterating through all key-value pairs in the Map:");
myMap.forEach((value, key) => {
  console.log(`${key}: ${value}`);
});
```

Out Put:

Does the key 'gender' exist?: false

module34.js:21 Value for key 'name': Rajkamal Yadav

module34.js:24 Value for key 'age': 25

module34.js:27 Iterating through all key-value pairs in the Map:

module34.js:29 name: Rajkamal Yadav

module34.js:29 age: 25

module34.js:29 country: India