

## Day 1 Lab Assignments

1. Use `for...in` to iterate over an object's properties.
2. Use `for...of` to iterate over the values of an array.
3. Compare the behavior of `for...in` and `for...of` when used on an array.
4. Try spread operator with any array of your implementation.
5. print student data in the console using template literals in this format:
  - a. `{Std_name}` is a student in faculty of `{fac_name}` in university `{Uni_name}`  
And his final grad is `{grad}`.
6. Check if 'heloo' include a litter 'e'
7. Create an object and set a default value if null to any property using `??` operator
8. Write a program that accesses deeply nested properties in an object using regular property access. Show how this causes errors when some properties are missing. Refactor the code using optional chaining (`?.`) to safely access the same properties.
9. Demonstrate how to clone an object using the spread operator and modify properties in the cloned object without affecting the original.
10. Use this object and destructuring **title** and **localization\_tags**

```
const metadata = {  
  title: 'Scratchpad',  
  translations: [  
    {  
      locale: 'de',  
      localization_tags: ['de-gen', 'de-or'],  
      last_edit: '2014-04-14T08:43:37',  
      url: '/de/docs/Tools/Scratchpad',  
      titles: 'JavaScript-Umgebung'  
    }  
  ],  
};
```
11. Write a program that uses `Object.entries()` to convert an object into an array of key-value pairs. Iterate over the resulting array and perform operations like converting all keys to uppercase.
12. Create an object with a Symbol key to store a private value. Demonstrate that the Symbol key does not appear in `Object.keys()` or `for...in`.