

# JavaScript Coding Challenge

## String Parsing & Normalization

### Context

You are building a search feature for a learning platform. Users often enter queries with extra spaces, inconsistent casing, and multiple keywords. Your task is to clean, parse, and analyze the search query using JavaScript string methods.

### Given Input

```
let searchQuery = " Learn JavaScript Functions Arrow IIFE ";
```

### Rules

- 1 Use only JavaScript string methods covered in class
- 2 Arrays, loops, and regular expressions are NOT allowed
- 3 Write clean, readable code with meaningful comments

### Challenges

- 1 Trim the input string and print the cleaned value and its length
- 2 Convert the cleaned string to lowercase and uppercase
- 3 Extract the word 'JavaScript' using `substring()` and `slice()`
- 4 Check whether the query contains: functions, arrow, and iife
- 5 Print the character at index 6 and the ASCII value of the first character
- 6 Perform a case-insensitive check for the word 'javascript'

### Bonus (Optional)

- 1 Why is trimming user input important in real-world applications?
- 2 What bug can occur if case normalization is skipped?
- 3 How does poor string parsing affect search accuracy and user experience?