



LeetCode

## 344. Reverse String

Easy

<https://leetcode.com/problems/reverse-string/>

Session 1: 24 November 2021

# Agenda

1. VS Code extension
  1. Code Runner
  2. Prettier
2. Problem Statement
3. Fridge : Food containers vs Computer Memory
4. JavaScript methods
  1. Split()
  2. Reverse()
  3. Join()
  4. Push()
5. Method 1
6. Method 2

# VS Code Set up

1. Create a JavaScript file
2. Install VS Code extension
  1. Code Runner
  2. Prettier
  3. `console.log("Hello World");`

## 344. Reverse String

Easy



3359



850



Add to List



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Write a function that reverses a string. The input string is given as an array of characters `s`.

You must do this by modifying the input array in-place with  $O(1)$  extra memory.

### Example 1:

**Input:** `s = ["h","e","l","l","o"]`

**Output:** `["o","l","l","e","h"]`

### Example 2:

**Input:** `s = ["H","a","n","n","a","h"]`

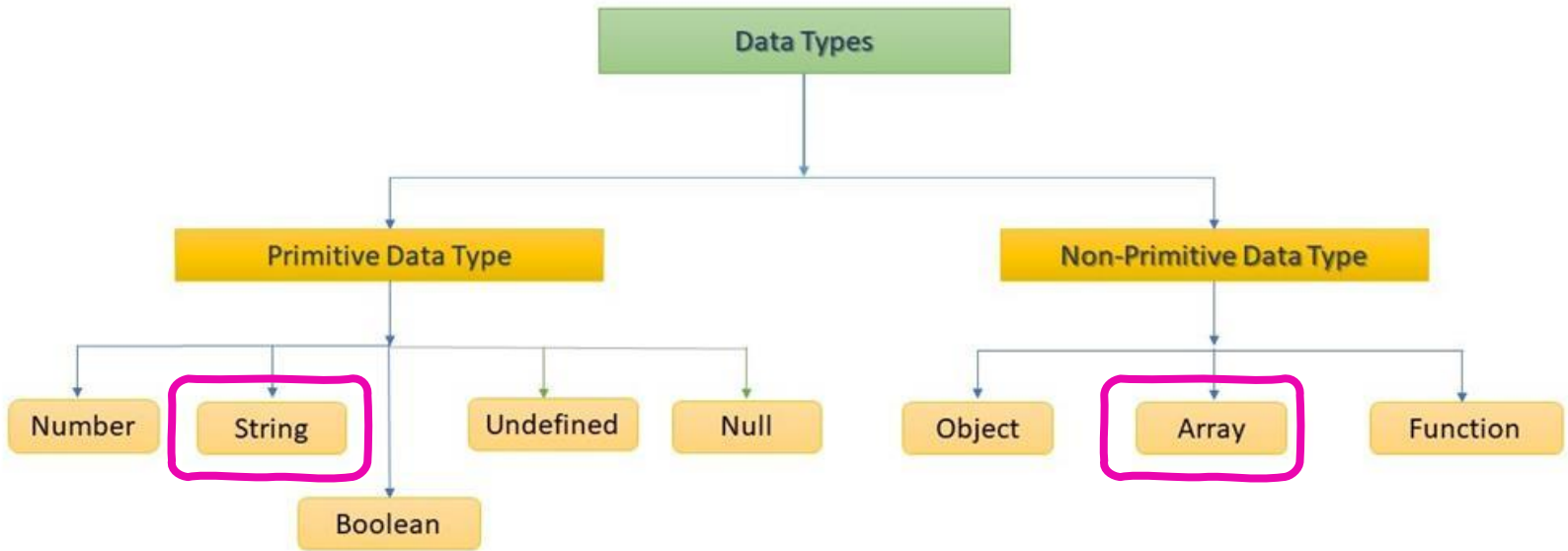
**Output:** `["h","a","n","n","a","H"]`

# Problem Statement

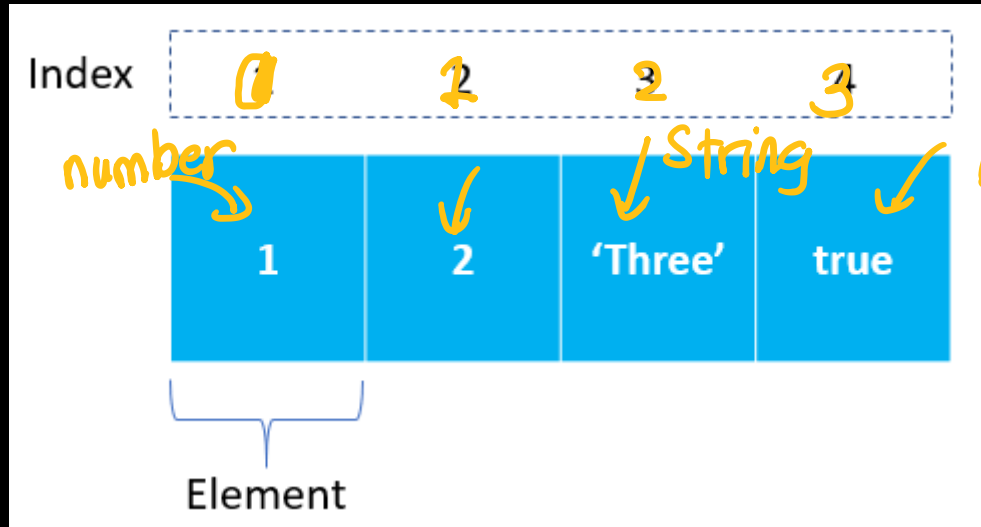
# Types



# JavaScript Data Types



# Array

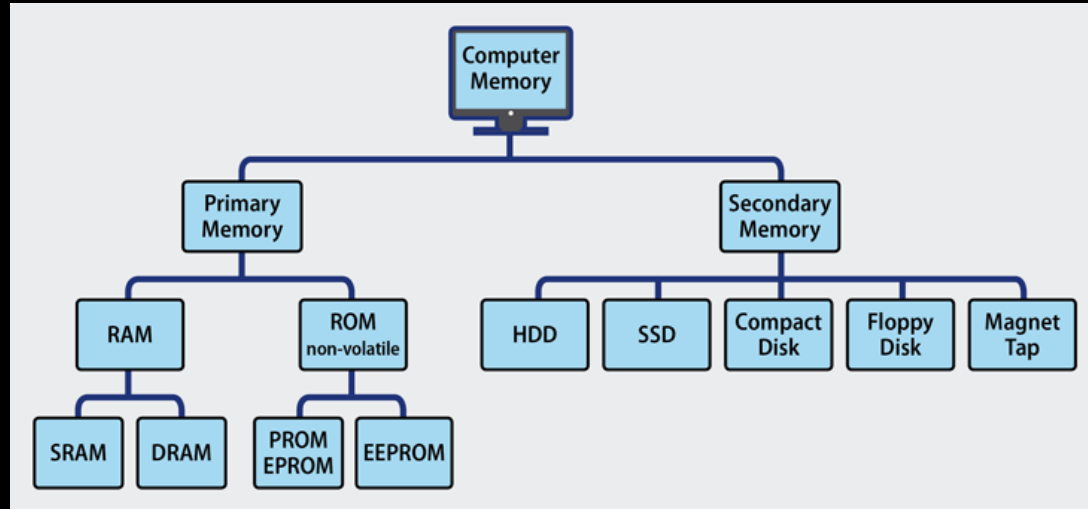


# String

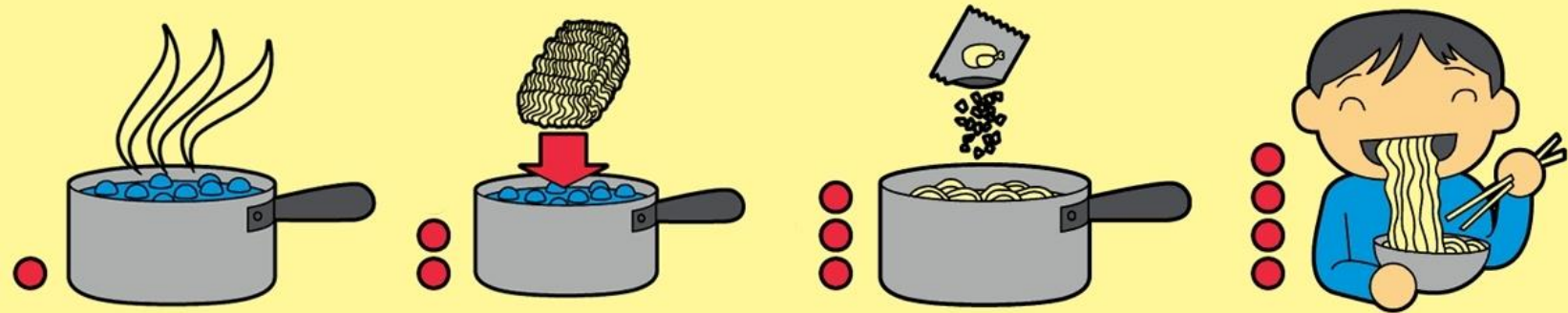
| Index  | 0   | 1   | 2   | 3   | 4   | 5   |
|--------|-----|-----|-----|-----|-----|-----|
| string | "h" | "e" | "l" | "l" | "l" | "o" |



# Food containers vs Computer memory



# Method: 1 - Using in built methods



# Method – 1: Using in built methods



## JavaScript Build in Methods

split()  
➔ reverse()  
join()

# Method – 1: Using in built methods

```
function reverseString(str) {  
  // Step 1. Use the split() method to return a new array  
  let splitString = str.split("");  
  // var splitString = "hello".split("");  
  let reverseArray = splitString.reverse();  
  let joinArray = reverseArray.join("");  
  return joinArray;  
}  
  
console.log(reverseString("hello"));  
  
//=====  
console.log("hello".split("").reverse().join(""));
```

## Method – 2 : Use Logic



## Method – 2 : Use Logic

```
var reverseString1 = function (string) {  
  const reversed = [];  
  const totalItems = string.length - 1;  
  for (let i = totalItems; i >= 0; i--) {  
    reversed.push(string[i]); // split()  
  }  
  return reversed.join("");  
};  
  
console.log(reverseString1("hello"));
```

# References

1. [https://www.w3schools.com/jsref/jsref\\_obj\\_string.asp](https://www.w3schools.com/jsref/jsref_obj_string.asp)
2. [https://www.w3schools.com/jsref/jsref\\_join.asp](https://www.w3schools.com/jsref/jsref_join.asp)
3. <https://leetcode.com/problems/reverse-string/>