344. Reverse String

Easy

Session 1: 24 November 2021

Agenda

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   2. Prettier
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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

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"]
```
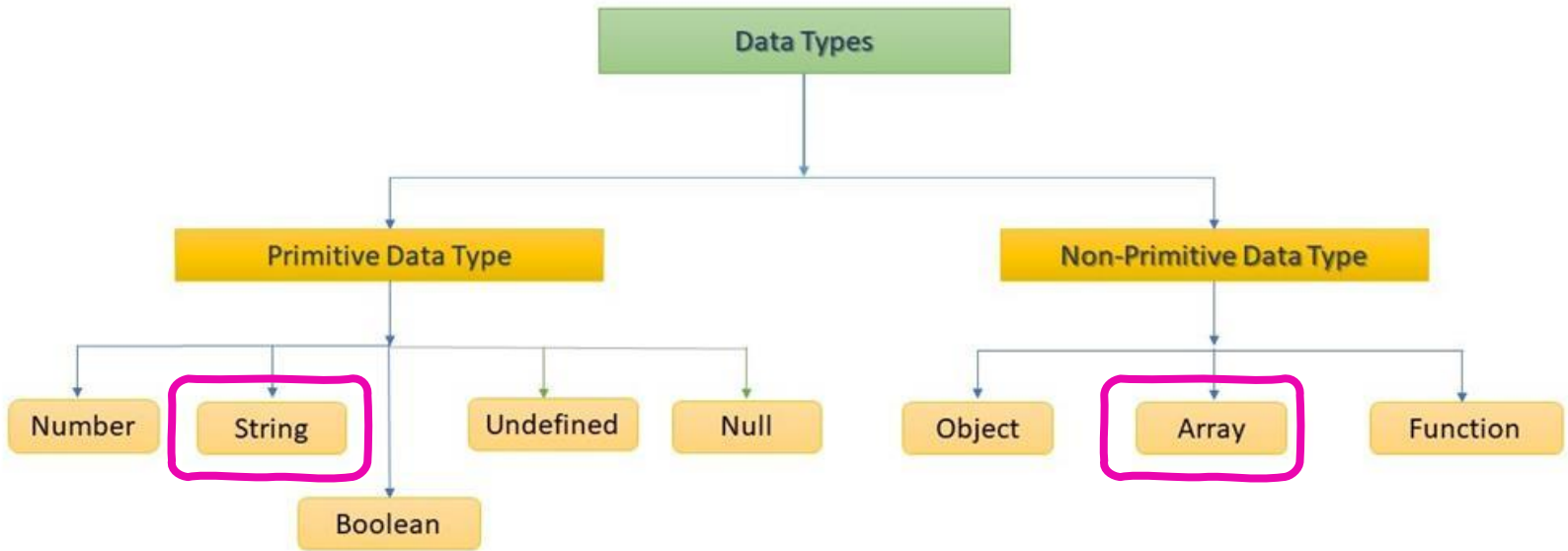
Example 2:

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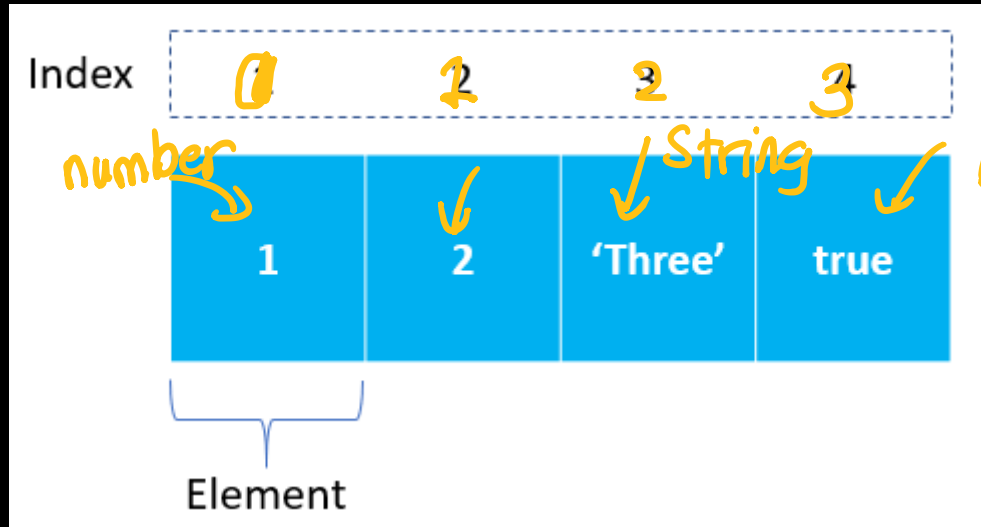
Types

Types of Houses

House, Hut, Hotel, Building, Farmhouse, Barn, Dormitory, Log cabin, Lighthouse, Nursing home, Castle

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T V P R O G R A M M E S

film, cartoon, nature programme, drama, music programme, news, chat show, quiz show, opera, police drama, documentary, romcom (romantic comedy), sports programme, comedy programme, weather forecast, western, horror, soap opera, reality show, ballet

JavaScript Data Types

Array

Index

	0	**1**	**2**	**3**
number	1	2	'Three'	true
			String	Boolean → True, false

Element

String

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

Food containers vs Computer memory
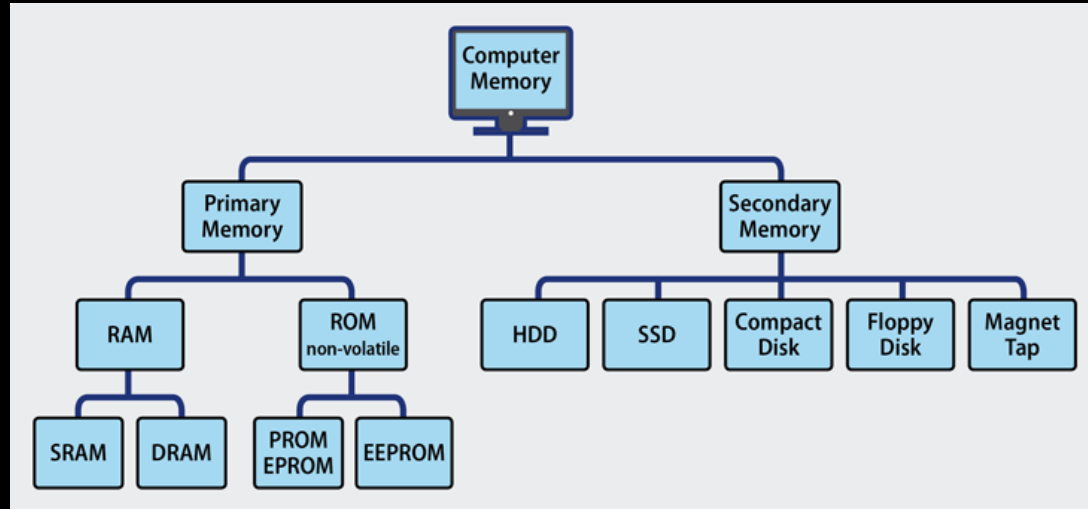
Method: 1 - Using in built methods
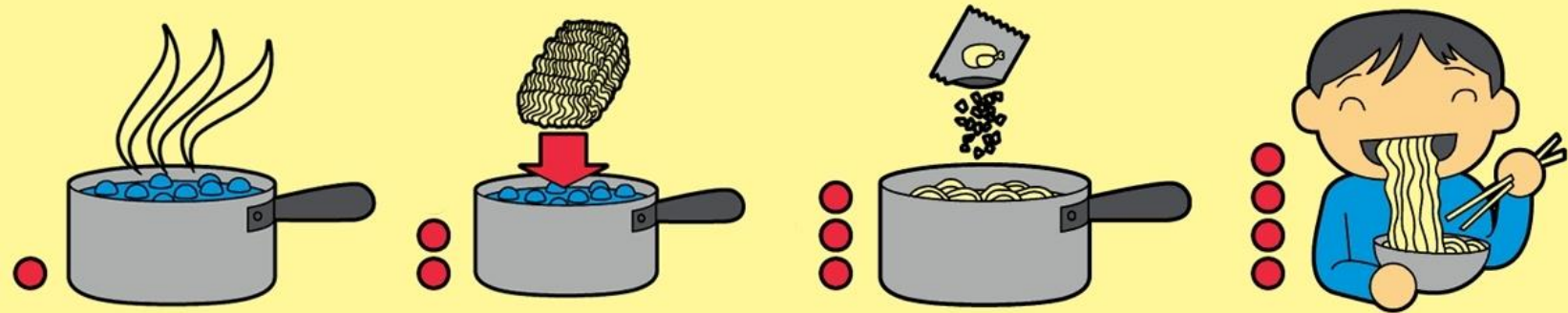
Method – 1: Using in built methods

JavaScript Build in Methods

split()
→ reverse()
join()

Method – 1: Using in built methods

```javascript
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

```javascript
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
2. https://www.w3schools.com/jsref/jsref_join.asp
3. https://leetcode.com/problems/reverse-string/