Problem Domain

Accept an array of elements, reverse the elements, and output a new array with the elements in the reversed order.

Algorithm

1) Take the final element of an array
2) Place it in a new array at the next index position
3) Repeat steps 1&2 until all elements in the original array have been accounted for

Code

```
let originalArray = [1,2,3,4,5];
let reversedArray = [];

originalArray.map((element) => {
reversedArray.unshift(element);
})

console.log('reversed', reversedArray);
```

Edge Cases

--> Array with a single element
--> Empty array
--> An array of elements that contains a null element

Visual

[1, 2, 3, 4, 5] -> [5, 4, 3, 2, 1]

['cat', 'dog'] -> ['dog', 'cat']

[1, 'one', '1', '', ['two', 'three']] --> [['two', 'three'], '', '1', 'one', 1]

Pseudo Code

input: an array
output: a separate array of the first array in reverse order

declare originalArray <-- input
declare reversedArray <-- []

map over the originalArray unshifting each element into the reversedArray

Verification

```
5
5, 4
5, 4, 3
5, 4, 3, 2
5, 4, 3, 2, 1
```

Take any input array and expect a second array that is the reverse order.

Test an array of arbitrary length using variables for each of the elements expect the output to be the same variables in the reversed order.

Big O

Time: O(n)
Space: O(1)