

1. Two Sum

```
var twoSum = function(nums, target) {  
  const prev = {};  
  for (let i in nums) {  
    if (prev[target - nums[i]]) {  
      return [prev[target - nums[i]], i];  
    } else {  
      prev[nums[i]] = i;  
    }  
  }  
};
```

3. Longest Substring Without Repeating Characters

```
/**  
 * @param {string} s  
 * @return {number}  
 */  
var lengthOfLongestSubstring = function(s) {  
  const memo = {};  
  let longestLength = 0, left = 0, right = 0;  
  while (right < s.length) {  
    if (!memo[s[right]] || memo[s[right]] === 0) {  
      if (memo[s[right]] == 0) {  
        memo[s[right]] += 1;  
      } else {  
        memo[s[right]] = 1;  
      }  
  
      } else {  
        longestLength = Math.max(longestLength, right - left);  
        while (s[left] !== s[right]) {  
          memo[s[left]] -= 1;  
          left += 1;  
        }  
        left += 1  
      }  
      right += 1;  
    }  
  }  
  longestLength = Math.max(longestLength, right - left);  
  return longestLength;  
};
```