

# LeetCode Summer

May 24th - Whenever

**Cadence:** Everyday aim for 1-2 problems

Pre-reqs:

445 (highly recommended)

1501 (less necessary)

Understanding Runtime

Know how to use Hash Tables

Content:

Mix of Blind 75 + my own list. Each week we'll have 6 problems from Blind and 1 problem from my own collection.

Distribution:

Either create a channel in the discord or make a branch. Each week send a message. Ask people which problem they want me to solve.

Additional Resources:

<https://www.teamblind.com/post/New-Year-Gift---Curated-List-of-Top-100-LeetCode-Questions-to-Save-Your-Time-OaM1orEU>

# Problems

## Week 1 - Arrays

Contains Duplicate - <https://leetcode.com/problems/contains-duplicate/>

Two Sum - <https://leetcode.com/problems/two-sum/>

Buy & Sell Stock - <https://leetcode.com/problems/best-time-to-buy-and-sell-stock/>

Product of Array Except Self - <https://leetcode.com/problems/product-of-array-except-self/>

Maximum Subarray - <https://leetcode.com/problems/maximum-subarray/>

Maximum Product Subarray - <https://leetcode.com/problems/maximum-product-subarray/>

**Game of Life (Bonus)** - <https://leetcode.com/problems/game-of-life/>

## Week 2 - Arrays + Intervals

Min Rotate Sort Array - <https://leetcode.com/problems/find-minimum-in-rotated-sorted-array/>

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Container w Most Water - <https://leetcode.com/problems/container-with-most-water/>

Insert Interval - <https://leetcode.com/problems/insert-interval/>

Merge Intervals - <https://leetcode.com/problems/merge-intervals/>

**Happy Number (Bonus)** - <https://leetcode.com/problems/happy-number/>

## Week 3 - Intervals + Matrix

Non-overlapping Intervals - <https://leetcode.com/problems/non-overlapping-intervals/>

Meeting Rooms I - <https://www.lintcode.com/problem/meeting-rooms/>

Set Matrix Zeroes - <https://leetcode.com/problems/set-matrix-zeroes/>

Spiral Matrix - <https://leetcode.com/problems/spiral-matrix/>

Rotate Img - <https://leetcode.com/problems/rotate-image/>

Word Search - <https://leetcode.com/problems/word-search/>

**Sliding Window Max (Bonus)** - <https://leetcode.com/problems/sliding-window-maximum/>

## Week 4 - Linked Lists

Reverse Linked List - <https://leetcode.com/problems/reverse-linked-list/>

Linked List Cycle - <https://leetcode.com/problems/linked-list-cycle/>

Merge 2 Sorted Lists - <https://leetcode.com/problems/merge-two-sorted-lists/>  
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Remove Nth Node - <https://leetcode.com/problems/remove-nth-node-from-end-of-list/>  
Reorder List - <https://leetcode.com/problems/reorder-list/>  
**Sort Colors (Bonus)** - <https://leetcode.com/problems/sort-colors/>

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Valid Parentheses - <https://leetcode.com/problems/valid-parentheses/>  
Valid Palindrome - <https://leetcode.com/problems/valid-palindrome/>  
Group Anagrams - <https://leetcode.com/problems/group-anagrams/>  
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<https://leetcode.com/problems/longest-palindromic-substring/>  
Palindromic Substrings - <https://leetcode.com/problems/palindromic-substrings/>  
**Odd Even Linked List (Bonus)** - <https://leetcode.com/problems/odd-even-linked-list/>

## Week 6 - String + Trees

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Max Depth of Binary Tree - <https://leetcode.com/problems/maximum-depth-of-binary-tree/>  
**Bonus** - Do all the Tree traversal problems iteratively  
**Find Duplicate Number (Bonus)** -  
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Design Add + Search Words Data Structure -

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**University Career Fair (Bonus)** -

<https://cdn.discordapp.com/attachments/758353765174083595/840082064090595388/chg7Bod.png>

## Week 9 - Graphs

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All Paths from Src - <https://leetcode.com/problems/all-paths-from-source-to-target/>

Word Search II - <https://leetcode.com/problems/word-search-ii/>

Clone Graph - <https://leetcode.com/problems/clone-graph/>

Course Schedule - <https://leetcode.com/problems/course-schedule/>

Pacific Atlantic Water Flow - <https://leetcode.com/problems/pacific-atlantic-water-flow/>

**Longest Common Prefix (Bonus)** - <https://leetcode.com/problems/longest-common-prefix/>

## Week 10 - Graphs

Number of Connected Comps in Graph -

<https://protegejj.gitbook.io/algorithm-practice/leetcode/graph/323-number-of-connected-components-in-an-undirected-graph>

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Find Median from Data Stream -

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**Daily Temp (Bonus)** - <https://leetcode.com/problems/daily-temperatures/>

## Week 11 - Dynamic Programming

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House Robber - <https://leetcode.com/problems/house-robber/>

House Robber II - <https://leetcode.com/problems/house-robber-ii/>

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Longest Common Subsequence -

<https://leetcode.com/problems/longest-common-subsequence/>

**BST Iterator (Bonus)** - <https://leetcode.com/problems/binary-search-tree-iterator/>

## Week 12 - Dynamic Programming

Unique Paths - <https://leetcode.com/problems/unique-paths/>

Jump Game - <https://leetcode.com/problems/jump-game/>

Decode Ways - <https://leetcode.com/problems/decode-ways/>

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Word Break - <https://leetcode.com/problems/word-break/>

Combination Sum IV - <https://leetcode.com/problems/combination-sum-iv/>

**Max Area of Island (Bonus)** - <https://leetcode.com/problems/max-area-of-island/>

## Week 13 - Binary

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Counting Bits - <https://leetcode.com/problems/counting-bits/>

Missing Number - <https://leetcode.com/problems/missing-number/>

Reverse Bits - <https://leetcode.com/problems/reverse-bits/>

### **Developer-Tester Integration (Bonus) -**

<https://leetcode.com/discuss/interview-question/882739/Snowflake-or-Summer-2021-Internship-OA-or-Developer-Tester-Integration>

## Week 14 (Bonus) - Recursion and Backtracking

Permutations - <https://leetcode.com/problems/permutations/>

Letter Combos of Phone Number -

<https://leetcode.com/problems/letter-combinations-of-a-phone-number/>

Sudoku Solver - <https://leetcode.com/problems/sudoku-solver/>

Subsets - <https://leetcode.com/problems/subsets/>

Generate Parentheses - <https://leetcode.com/problems/generate-parentheses/>

Palindrome Partitioning - <https://leetcode.com/problems/palindrome-partitioning/>

### **Flatten Nested List Iterator (Bonus) -**

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## Week 15 (Bonus) - Binary Search

<https://leetcode.com/discuss/general-discussion/786126/Python-Powerful-Ultimate-Binary-Search-Template.-Solved-many-problems>

First Bad Version - <https://leetcode.com/problems/first-bad-version/>

Sqrt(x) - <https://leetcode.com/problems/sqrtx/>

Search Insert Position - <https://leetcode.com/problems/search-insert-position/>

Capacity to Ship Packages within D Days -

<https://leetcode.com/problems/capacity-to-ship-packages-within-d-days/>

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Koko Eating Bananas - <https://leetcode.com/problems/koko-eating-bananas/>

**Range Sum Query (Bonus) -** <https://leetcode.com/problems/range-sum-query-immutable/>

**Range Sum Query 2d Immutable (Bonus) -**

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# Solutions

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Contains Duplicate - <https://youtu.be/4oZsPXG9B94>

Two Sum - <https://youtu.be/Ivyh3V4QoIA>

Buy & Sell Stock - <https://youtu.be/mj7N8pLCJ6w>

Product of Array Except Self - <https://youtu.be/khTiTSZ5QZY>

Maximum Subarray - <https://youtu.be/jnoVtCKECmQ>

Maximum Product Subarray -

<https://leetcode.com/problems/maximum-product-subarray/discuss/48276/Python-solution-with-detailed-explanation>

**Game of Life (Bonus)** - <https://youtu.be/YZ-W5DrKPQ0>

## Week 2 - Arrays + Intervals

Min Rotate Sort Array - [https://youtu.be/IzHR\\_U8Ly6c](https://youtu.be/IzHR_U8Ly6c)

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Container w Most Water - <https://youtu.be/TI3e-17YAlc>

Insert Interval - <https://youtu.be/eeTToT5JUUY>

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**Happy Number (Bonus)** - <https://youtu.be/gW4hSbRoQoY>

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Spiral Matrix - <https://youtu.be/BdQ2AkaTgOA>

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# Communication

## Weekly Message:

This week is [x]! [comments on this week's problems] I tried my best to sort the problems from easiest to hardest. Please let me know which problems you want me to review!

## Intro Message (Markdown):

Hey y'all! As I mentioned in the "How to Spend Your Summer" video, I'll be sending weekly LeetCode problems starting this Monday (5/24). **Before we start I recommend you learn about Hash Tables and Learn Python**. You can solve the problems in whatever language you want but Python is great for LeetCode problems and the summer is a great time to learn a new language (should be intuitive if you're familiar with Java). Also, if you are unfamiliar with **Big O notation**, I recommend you study up.

\_\_Here are some recommended resources:\_\_

**Learn Python** - <https://learnxinyminutes.com/docs/python/>

**Big O in 5 minutes** - [https://youtu.be/\\_\\_\\_vX2sjlpXU](https://youtu.be/___vX2sjlpXU)

**Tom Scott on Big O** - [https://youtu.be/RGuJga2Gl\\_k](https://youtu.be/RGuJga2Gl_k)

**Finding Big O of Code Snippets** - [https://youtu.be/CB8JPjg\\_3cM](https://youtu.be/CB8JPjg_3cM)

**Hash Tables** - <https://youtu.be/shs0KM3wKv8>

LeetCode is much easier when we all work together. Please send any questions you have on the LeetCode problems/theory/anything and we'll answer them!