**WEEK 1- ARRAYS AND SEARCHING(LINEAR AND BINARY SEARCH)**

**DAY 1- WHAT ARE ARRAYS, HOW TO INPUT USER DATA IN THEM AND FIND SUM. WHAT IS SEARCHING AND WHY IS IT IMPORTANT.**

taks:

1) https://leetcode.com/problems/two-sum-ii-input-array-is-sorted/

2) https://practice.geeksforgeeks.org/problems/missing-number/0

3) https://leetcode.com/problems/how-many-numbers-are-smaller-than-the-current-number/

**DAY 2- BINARY SEARCH , 2D ARRAYS**

tasks:

1) https://practice.geeksforgeeks.org/problems/who-will-win/0

2) https://leetcode.com/problems/count-negative-numbers-in-a-sorted-matrix/

**DAY 3- MORE PROBLEMS ON ARRAYS**

tasks:

https://practice.geeksforgeeks.org/problems/two-repeated-elements/0

https://practice.geeksforgeeks.org/problems/make-a-distinct-digit-array/0

https://leetcode.com/problems/transpose-matrix/description/

https://leetcode.com/problems/find-lucky-integer-in-an-array/

https://leetcode.com/problems/toeplitz-matrix/

**DAY 4- ------BREAK--------**

**DAY 5- BINARY SEARCH PROBLEMS**

tasks:

https://leetcode.com/problems/intersection-of-two-arrays/

https://leetcode.com/problems/kth-smallest-element-in-a-sorted-matrix/

https://leetcode.com/problems/first-bad-version/

https://leetcode.com/problems/search-insert-position/

**DAY 6 - ARRAY ROTATING AND OTHER ARRAY PROBLEMS**

tasks:

https://leetcode.com/problems/rotate-array/

given an array example ar= { 1,2,3,4,5} of size n

and q set of queries and x for each q. Queries can be of two types

1 - left rotate array by x times

2 - right rotate array by x times

return the array after perfroming q set of queries

Sample case 1:

ar = { 4,7,9,0,4}

q=3

1 3

2 8

1 9

2 2

1 2

Ans : {4,4,7,9,0}

https://leetcode.com/problems/search-in-rotated-sorted-array/

**DAY 7**

https://leetcode.com/problems/k-diff-pairs-in-an-array/

https://leetcode.com/problems/create-target-array-in-the-given-order/

https://leetcode.com/problems/shortest-unsorted-continuous-subarray/

**Bonus**

https://leetcode.com/problems/flipping-an-image/description/

**LEARNING RESOURCES:**

https://www.codeproject.com/Questions/5261969/Binary-search-with-duplicates-in-a-sorted-array

https://www.youtube.com/watch?v=pLT\_9jwaPLs

https://www.youtube.com/watch?v=QdVrY3stDD4