

After Youtube >>

Topic: 2D Array

Topic Discussion

Video Watch the following video upto **01:52:51**

<https://drive.google.com/file/d/1JrdaMSDUzFW1I1qPCUImnDSeB1t9y0NZ/view?usp=sharing>

Assignment

Video (Problem Statement Explanation Video)

<https://drive.google.com/file/d/1DynofdgfriFzc-lez8vzK7kXlzCoZeKi/view>

Custom Problemset PDF:

https://docs.google.com/document/d/1G9zIm4WvoqyF8-UyrKiH8p0BjbWa_IWbCDmBMmISjU/edit?usp=sharing

Tasks:

- 1) Solve all the problems of this contest

Contest Link: <https://www.hackerrank.com/2d-array-2>

Solve Class

Video (Solve Class Video)

<https://drive.google.com/file/d/1ZiwT92tJ9Y6IDeDe9fzaAshv-07YnrvD/view>

Topic: 3D and multidimensional Array

Topic Discussion

Video Watch the following video from **01:52:51**

<https://drive.google.com/file/d/1JrdaMSDUzFW1I1qPCUImnDSeB1t9y0NZ/view?usp=sharing>

Topic: String

Topic Discussion (Part 1)

Video:

https://drive.google.com/file/d/1-i_6fbSM8IZn85PIDA7_vwwXpYaRIFo/view

Assignment (Part 1)

Tasks:

- 1) solve first 4 problems from newcomer sheet 4

[Newcomer sheet #4:

<https://codeforces.com/group/MWSDmqGsZm/contest/219856>]

Topic Discussion (Part 2)

Video:

https://drive.google.com/file/d/1Uky75GO6p6bP1OgNNUmnFLy_iGMZLD2p/view

Discussed contents:

- 1) String related functions: strcat, strcpy, strcmp
- 2) Sheet#4 Problem-D

[\[https://codeforces.com/group/MWSDmqGsZm/contest/219856/problem/D\]](https://codeforces.com/group/MWSDmqGsZm/contest/219856/problem/D)

- 3) Copying one string to another manually - issue regarding null character

Assignment (Part 2)

Tasks:

- 1) Sheet#4 - Problem E to Problem J

[Newcomer sheet #4:

<https://codeforces.com/group/MWSDmqGsZm/contest/219856>]

Topic: 2D String

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continue practicing 1D string

Topic Discussion

Video:

<https://drive.google.com/file/d/120EbAroZ-jCD36scHnbLx1pm-v6HyMXw/view>

Discussed contents:

- 1) Thinking 2D string as an array of strings. Each row as a string
- 2) Problem: Searching string in a list of strings
- 3) gets related issues
- 4) Thinking 2D string as a matrix
- 5) Sheet #3: Problem - X: 8 Neighbours

[\[https://codeforces.com/group/MWSDmqGsZm/contest/219774/problem/X\]](https://codeforces.com/group/MWSDmqGsZm/contest/219774/problem/X)

Assignment

Tasks:

1. Solve at least 15 problems from sheet #4 including P, Q, S and W
[Newcomer Sheet #4:

[https://codeforces.com/group/MWSDmqGsZm/contest/219856\]](https://codeforces.com/group/MWSDmqGsZm/contest/219856)

Solve Class

Video (Solve Class Video of Problem P, Q, S, W from Sheet #4)

<https://drive.google.com/file/d/1u6plfHocDEJ-g1iJD69LrXlpx31svfM/view>

Topic: Function (Part 2)

Topic Discussion

Video:

<https://drive.google.com/file/d/1j5VVeyGA9KaFTJ8KLW3GGHEwqqQt--Zd/view>

Topic: Recursion

Topic Discussion (Part 1)

Video:

https://drive.google.com/file/d/1yz7jkiWTd3_rlGEJvnpgG7nCJLQi-IsQ/view

Discussed contents:

- Recursion Basics
- Recursion Tree
- Printing from 1 to N, Fibonacci

Topic Discussion (Topic 2)

[Advanced Topic]

Video:

<https://drive.google.com/file/d/1zszDKy-nZKn2Yn8rn77Pg5-8qRcOk2nC/view>

Discussed contents:

- Drawing recursion tree- Solving Problems using recursion
- 5 steps to remember:
 1. Magical function
 2. Determining States
 3. Solving Sub problem
 4. Do necessary works for the current state

5. Base case

- Problem discussion: Printing Triangle from 1 to N, from N to 1, Digit Sum

Topic Discussion (Part 3)

[Advanced Topic]

Video:

<https://drive.google.com/file/d/1jKtmNCvcnudCA3jYsINK-Pi-xu3ltW9c/view>

Discussed contents:

- 1) Solving array/string related problems using recursion
- 2) Solving 2D array related problems using recursion
- 3) Problems: Array sum, string lowercase letter count, 2D array sum.

Topic: File Handling & Structure

Topic Discussion (Part 1)

Video:

https://drive.google.com/file/d/1CruWbmNeGhlfzkotfXkc7q_9ALrOPhkK/view

Discussed contents:

- 1) Reading from a file and "r" mode related issues
- 2) Problem - Reading two characters from a file and checking whether lowercase or not
- 3) Writing to a file and "w" mode related issues
- 4) Problem - reading two integers from a file and writing to another file
- 5) Saving high score in a file

Topic Discussion (Part 2)

Video:

https://drive.google.com/file/d/1ctQXf2IVzYLHxy9eD_ICwR_P--EFaAu/view

Discussed contents:

- 1) Concept of updating, deleting from a file
- 2) Basic CRUD Application
- 3) Benefits of using function

Topic Discussion (Part 3)

Video:

<https://drive.google.com/file/d/1d15cA6uckM3NAEbuBN4Oj1F0ySincnUI/view>

Discussed contents:

- 1) Structure and its benefits

Related CODE: <https://ideone.com/W2Cpe2>

Topic Discussion (Part 4)

Resource:

https://drive.google.com/file/d/1NJ-r6u-hQ_5mdfgOvVPNDmgaPo3EEoOY/view

Discussed contents:

- 1) File Handling with structure
- 2) A CRUD application and some standard practices

Related CODE: <https://ideone.com/YC9IE8>

Topic: Storage Class & Bitwise Operation

Topic Discussion

Video:

<https://drive.google.com/file/d/13U7fazWr5kMSj7ZfBKQN1xh7WJyIf-xi/view?usp=sharing>

Topic: Pointer

Topic Discussion (Part 1)

Video:

https://drive.google.com/file/d/1Ms5Te9dKHdZEzinroQJSEs77azoE_wDW/view

Discussed contents:

- 1) Pointer and its basics
- 2) Benefits of pointer - swap function and using & in scanf function
- 3) Pointer Arithmetic
- 4) Arrays are pointers!! (But less powerful)

Topic Discussion (Part 2)

Video:

<https://drive.google.com/file/d/12Ocyo3g9YEW71rMr8AmvNb0Sp2oEUXd9/view>

Discussed contents:

- 1) Creating dynamic sized arrays

Topic Discussion (Part 3)

Video:

<https://drive.google.com/file/d/1zcmWnLeWRndcglPPagiFqTVuvOFWjHE1/view>

Discussed contents:

- 1) Ways of returning multiple values from a function

Topic: Bitwise Operation & Macro

Topic Discussion

Video:

<https://drive.google.com/file/d/1cJStsqGGetVgWa3kG1xLpy2xCmT-XIQ5/view>