### #ReviseWithArsh #6Companies30Days Challenge 2023 [Updated 26st JANUARY '23]

A Challenge to make sure you start with your goals today, don't procrastinate and don't let your college decide your future!

For complete details about the Challenge , go through the video (in Hindi) : https://linktw.in/z8l9wr

#### Benefits (For the ones who complete the Challenge):

- Top 90-100 most frequently asked and most important questions by most big tech companies will be done.
- The ones who complete this challenge will be given referrals for top tech companies and startups.
- A special surprise gift for top performers.
- Special 1 on 1 mentoring session on how to plan the things after this challenge related to projects, revision, CS Fundamentals, Interview Tips, etc.

#### Rules:

- Complete 1 company (15 Questions) in 5 days and try maintaining a github repository to store all the codes which can be later used as notes .You can name the repository as #6Companies30days or #ReviseWithArsh.
- The questions provided will be on a gap of 5 days for a new company i.e from 1st to 5th Jan,6th to 10th Jan and so on.
- Completing questions in these 5 days can be in any format 3 questions a day or maybe 6 questions a day.
- You need to start the challenge by putting in a post on LinkedIn, Instagram,
  Twitter with hashtag #6Companies30days and #ReviseWithArsh and tag "Arsh
  Goyal" so that your entry can be tracked and you are eligible for referrals and
  other benefits.
- Why wait to start- start it today!

# Challenge Company 1 : Microsoft

- 1. You are given an array of strings tokens that represents an arithmetic expression in a Reverse Polish Notation.
- 2. Combination Sum with a twist.
- 3. Bulls and Cows
- 4. <u>You are given an integer array nums of length n. Return maximum length of Rotation Function.</u>
- 5. Largest Divisible Subset.
- 6. How to find a perfect Rectangle.
- 7. Scheduling a Course.
- 8. Profitable Path in a Tree.
- 9. Number of Pairs satisfying Inequality.
- 10. Shortest Unsorted continuous Subarray
- 11. Number of ways to arrive at a Destination.
- 12. Longest Happy Prefix

- 13. Seat Arrangement in a SpiceJet Problem Online OA February '22
- 14. Deletions to make an array divisible.
- 15. Substrings containing all three Characters

# Challenge Company 2 : Goldman Sachs

- 1. Max Points on a Line
- 2. Valid Square
- 3. Factorial with Trailing Zeroes
- 4. Number of Boomerangs (Similar to peacocks question)
- 5. Split Array into Sequences
- 6. Minimum Consecutive Cards to pick up
- 7. Count Good Triplets in Array (Profits in a Startup Question)
- 8. Maximum Points in Archery Competition
- 9. Initial Public Offering
- 10 People and Secret
- 11. Invalid Transactions in an EMI
- 12. All elements of a binary Search Tree
- 13. Rhombus Sums in a GRID
- 14. Nice Pairs in Array (OTT Platforms and John)
- 15. Good People based on Statements

#### Company 3: Adobe

- 1. Fraction to a recurring Decimal
- 2. Increasing Triplet Sequence
- 3. Kth smallest in Lexographical Order
- 4. Magical String
- 5. Non Negative Integers without consecutive ones
- 6. Knight in a Chessboard
- 7. Matching Subsequences
- 8. Genetic Mutation
- 9. Count nodes equal to average of Subtree
- 10. Max matrix Sum
- 11. Stock Price Fluctuation
- 12. Shortest Unsorted Continuous Subarray
- 13. Game of Dungeon
- 14. People aware of secret
- 15. Kth smallest Trimmed number

#### Company 4 : Flipkart

- 1. Partition to K Equal Sum Subsets
- 2. Sale and Offers at Flipkart BBD
- 3. Remove Zero Sum Consecutive Nodes
- 4. Winner of the Game
- 5. Finding the Mountain Array

- 6. Number of ways to separate Numbers
- 7. City With the Smallest Number of Neighbors at a Threshold Distance
- 8. Closest Primes in Range
- 9. Top K frequent Words
- 10. Distant Barcodes\
- 11. The new game to Play
- 12. Check If a String Contains All Binary Codes of Size K
- 13. Max Area of Island
- 14. Custom String Sorting
- 15. House Robber Very Imp.

# Company 5: Google

- 1. Maximum Consecutive Floors Without Special Floors
- 2. Maximum Good People Based on Statements
- 3. Sort an array
- 4. Fruit into Baskets
- 5. Number of Closed Islands
- 6. Distinct Echo Substrings
- 7. K divisible Array Substrings
- 8. Random Pick with Weight (New Project at Google Play Services)
- 9. Maximum Numbers of Coins you can get
- 10. Network Delay Time
- 11. Matrix Block Sum
- 12. Restore IP Addresses
- 13. Swim in rising Water (Jeff and the rising hat)
- 14. Strictly Palindromic Number
- 15. Max Compatibility Score

#### Company 6: Amazon

- 1. Shuffle an array
- 2. Cheapest Flights with K stops (Flight system in Europe)
- 3. Split String into maximum number of Unique Substrings
- 4. Tweet Count per Frequency
- 5. Maximum sum of hourglass
- 6. Maximum Subarray Min Product (Amazon Fresh and the team)
- 7. Dota2 Senate
- 8. <u>Destroying Asteroids</u>
- 9. Most Popular Video Creator
- 10. <u>Number of Matching Subsequences</u> (The stewart and the puppy)
- 11. Number of ways to reach a position
- 12. Maximum Length of Repeated Subarray
- 13. Top K frequent words
- 14. Last Moment before all ants Fall out
- 15. Generate Random point in a circle

Go ahead! All the best :) Please do share your feedbacks on Linkedin tagging @Arsh Goyal , hope this challenge was helpful :)

Next steps will be there in a new video!

### College Club | Society | Training and Placement Cell Collaboration :

- If you are the Training Placement Coordinator | Coding Club or Society Head |
   Lead or CSE/IT Department and wish to take this initiative to your college, mail at
   <u>business.arshgoyal@gmail.com</u> with your college/club name and estimated
   participation and social media handles of the club/tpo (if any).
- If shortlisted, you help improve your college Coding culture and make a difference.
   A special customised video message will also be shared by 'Arsh Goyal' with your college/club name announcing this challenge for your college.
- Already collaborated with Thapar, IGDTUW, IIIT Pune, IIIT Guwahati, and 40+ more colleges last year - Let it be yours this time!