



VERSION 2

MAKING YOU
DEPLOYMENT
READY

DEMUX ACADEMY



GREETINGS OF THE SEASON FROM <DEMUX ACADEMY>

We are glad you trusted us with this important phase of your career. In this series, we are trying to list down the interview process and most frequently asked questions of most sought after companies. This data is compiled specifically for people who are sitting for placements in the next **2-3 months.**



ABOUT US

Demux is the country's **first incubator** for college students and we have students only from top **IITs/NITs/BITs**. We don't hesitate in boasting **98% conversion** from our previous batches and are now working in companies like **Google, Amazon, Microsoft, Flipkart etc.**

MEET OUR INSTRUCTORS



Manvi Garg
IIT Kharagpur
Google



Somil Gupta
NIT Allahabad
Google



Sunny Dhamnani
IIT Kharagpur
Adobe



Sanket Kedia
IIT Kharagpur
ORACLE



Sudhanshu Bahety
IIT Kharagpur
salesforce



Varun Garg
NIT Allahabad
Flipkart 



> APPLICATION



ONLINE
TEST



TECH
INTERVIEW 1



TECH
INTERVIEW 2



MULTIPLE
ROUNDS POSSIBLE



REJECTION



OFFER

■ ONLINE TEST QUESTIONS



- 01. Online Assessment Set 1
- 02. Online Assessment Set 2
- 03. Online Assessment Set 3



■ INTERVIEW CODING QUESTIONS

- 01. Number of squares formed by perpendicular lines
- 02. Tiling a rectangle with the fewest squares
- 03. Jumping Numbers
- 04. N-ary Tree Reconstruction
- 05. Permutations of an array which yield the same BST



DIRECTi



Participate in various competitions held on CodeChef regularly and clear CCDSAP exams to get some advantage.



■ ONLINE TEST QUESTIONS



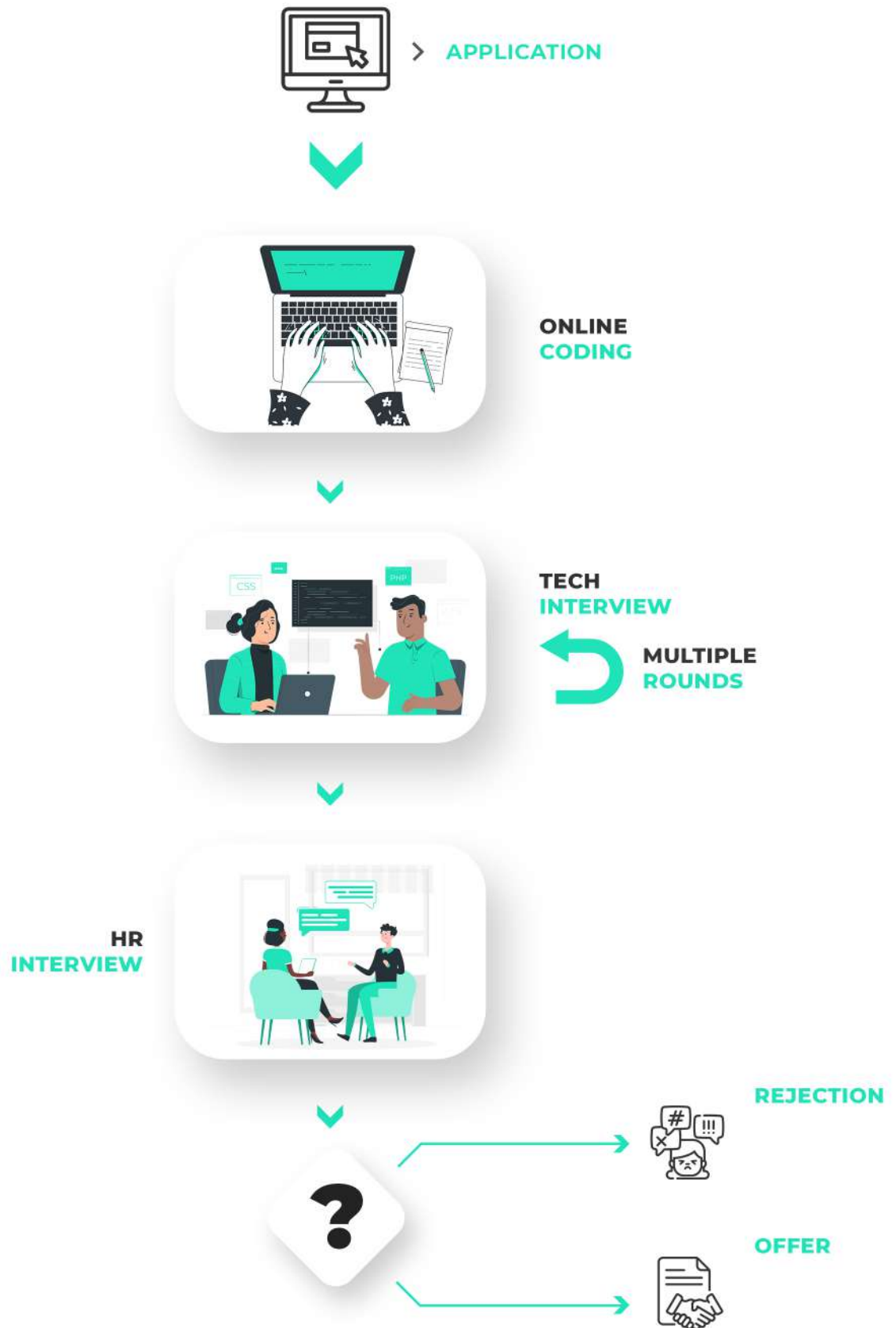
- 01. Maximum path sum in complete binary tree
- 02. Largest Square in a Binary Matrix with at most K 1s for multiple Queries



■ INTERVIEW PROCESS

- 01. Online Coding
- 02. Algorithm Round - Over Skype
- 03. Algorithm Round - Over Skype
- 04. Technical Interview

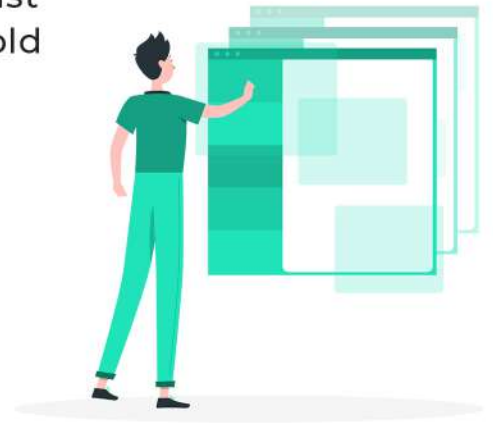




■ ONLINE TEST QUESTIONS

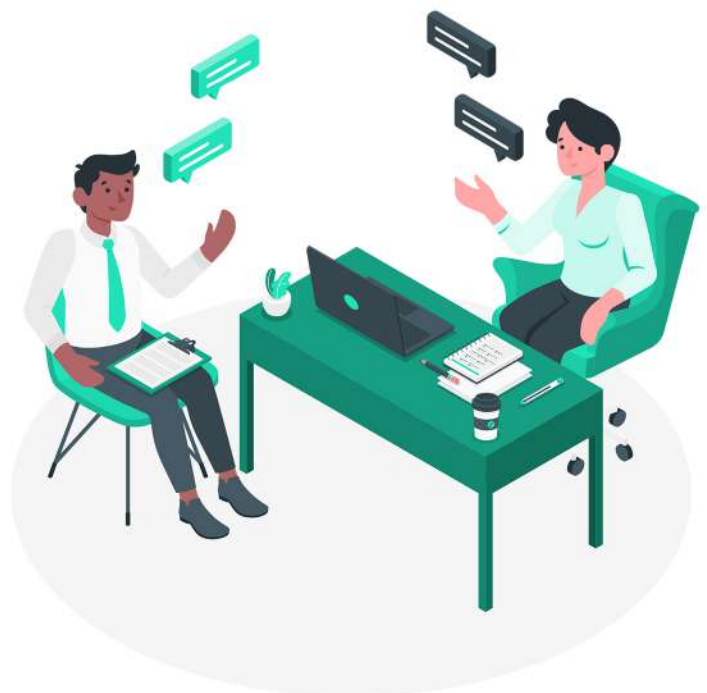


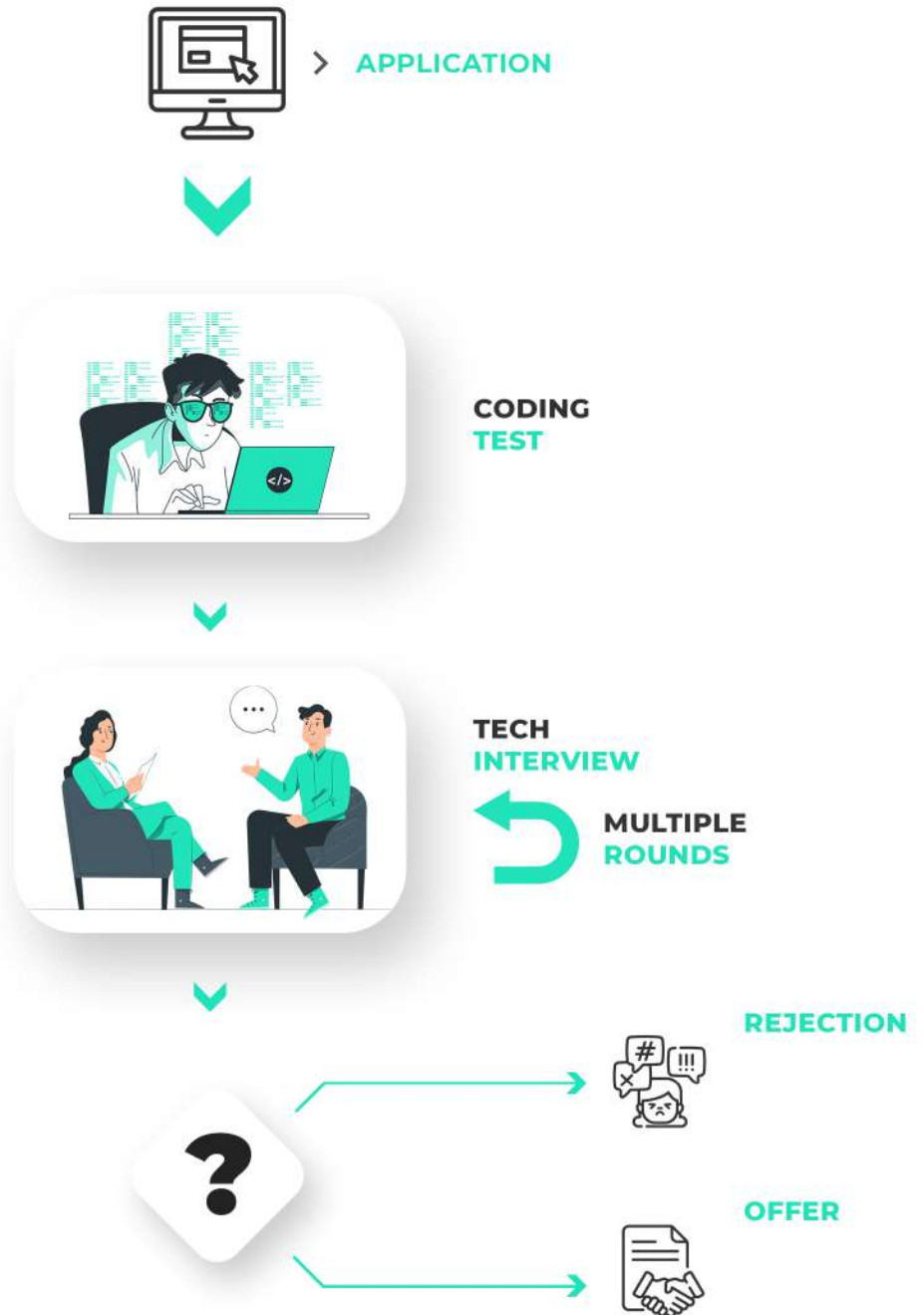
01. Create k group using n members
02. Problem of minimum divisor
03. Subsequence with max sum under K
04. Number of ways to remove chocolate
05. Given preorder traversal of a Binary Tree in the form of an array, check if it is a BST or not.
06. Delete Nodes with odd value in a linked list
07. Find the Smallest Divisor Given a Threshold
08. Find Median from Data Stream
09. Sudoku Solver
10. Sort Characters By Frequency



■ INTERVIEW CODING QUESTIONS

01. Merge the overlapping intervals.
02. Find max sum of subarray
03. Pascal Triangle using Recursion





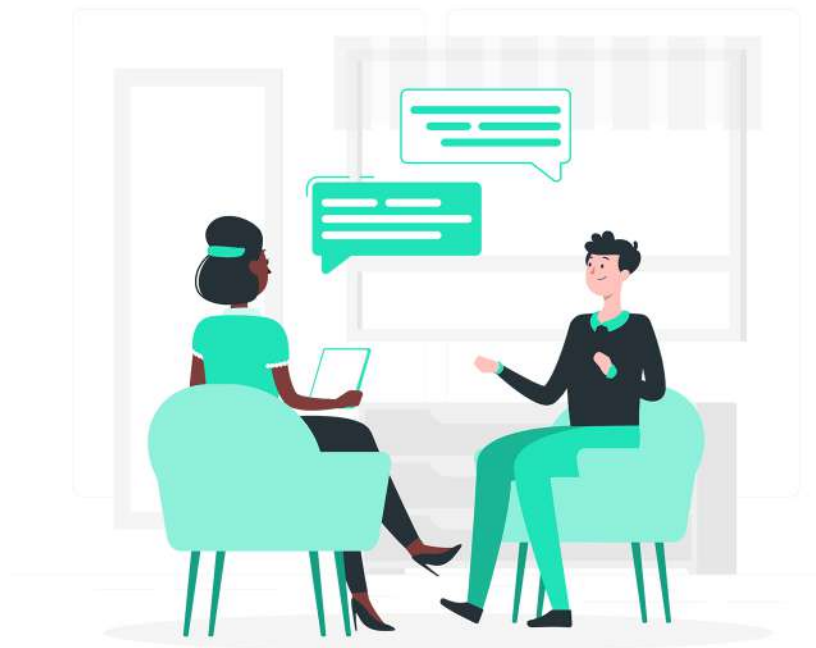
■ ONLINE TEST QUESTIONS

01. Photo Album
02. Meetup Schedule
03. Distinct Characters Count
04. Maximum Streak
05. Find the number of islands
06. Maximum profit by buying and selling a share at most twice



■ INTERVIEW CODING QUESTIONS

01. Find the point where maximum intervals overlap
02. Check whether an Array is Subarray of another Array
03. Missing number in array
04. Reverse actual bits of the given number





■ ONLINE TEST QUESTIONS

01. Happy Number
02. Valid Parentheses
03. Valid Parentheses
04. Coin Change
05. Trapping Rain Water
06. Reverse and Add Function



■ INTERVIEW PROCESS

01. Online Test - Aptitude and Technical MCQs, Coding questions
02. Technical Interview(s) - Discussion from resume, basic CS questions, coding.
03. Interview with HR





> APPLICATION



ONLINE
TEST



TECH
INTERVIEW



MULTIPLE
ROUNDS



GROUP
ACTIVITY



HR
INTERVIEW



REJECTION



OFFER



■ ONLINE TEST QUESTIONS

01. Selection of team based on conflicts
02. Sort an array of 0s, 1s and 2s
03. 0 - 1 Knapsack Problem
04. Minimum element in a sorted and rotated array
05. Maximum sum increasing subsequence
06. Level order traversal Line by Line
07. Implement Atoi
08. Largest subarray of 0's and 1's
09. Remove duplicate elements from sorted Array
10. Clone a linked list with next and random pointer



■ INTERVIEW CODING QUESTIONS

01. Write a function to find the mirror image of binary tree
02. WAP to find the character which occurred maximum times in the character array
03. Given a 2d matrix find an element in a matrix which is 0 and make the entire row and column to 0
04. Find the minimum element in the rotated array of integers
05. Find highest length substring such that there are equal number of 0's and 1's in array of 1's and 0's only





> APPLICATION



**CODING
TEST**



**TECH
INTERVIEW**



**MULTIPLE
ROUNDS**



**HR
INTERVIEW**



REJECTION



OFFER

■ ONLINE TEST QUESTIONS



01. Ropes
02. Find the minimum number of CPU required
03. Non-decreasing array after 1 or less swap
04. Longest Increasing Subsequence
05. Next larger element
06. Permutations of a given string
07. Finding middle element in a linked list
08. Root to leaf path sum
09. Detect Loop in linked list
10. Left View of Binary Tree



■ INTERVIEW CODING QUESTIONS

01. Fair distribution of Oil wells
02. Count number of bits to be flipped to convert A to B
03. Swap two nibbles in a byte
04. Total number of possible Binary Search Trees with n keys
05. Minimum Initial Points to Reach Destination
06. Find a triplet that sum to a given value
07. Largest Sum Contiguous Subarray
08. Next Greater Element







■ ONLINE TEST QUESTIONS

01. Find Leaves of Binary Tree
02. Time Based Key-Value Store
03. Lemonade Change
04. Maximum Average Subtree
05. Greatest Common Divisor of Strings
06. Shortest Distance to a Character
07. Boundary of Binary Tree
08. Letter Combinations of a Phone Number
09. Design Hit Counter
10. Peeking Iterator



■ INTERVIEW PROCESS

01. Online Coding Test
02. Technical Interview(s) - Coding and discussion
03. HR or Managerial Interview - Discussion from Resume

