# INTERVIEW ROADMAP

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### PROBLEM SOLVING PLATFORMS THAT CAN BE USED

#### **GEEKSFORGEEKS**

https://practice.geeksforgee
ks.org/explore/?page=1

#### **LEETCODE**

https://leetcode.com/proble
mset/all/

#### **HACKERRANK**

https://www.hackerrank.com/dashboard

#### **HACKEREARTH**

https://www.hackerearth.co
m/practice/

#### **ONLINE ITERATOR**

http://pythontutor.com/visual
ize.html#mode=edit



### PROBLEM SOLVING

TOPICS	PROBLEMS	DAYS	LINKS
Arrays	Atleast 100 problems	10 - 15 days	https://practice.geeksforgeeks.org/expl ore/?problemStatus=unsolved&page=1 &category%5B%5D=Arrays
Searching algorithms	2 problems	1 day	https://practice.geeksforgeeks.org/explore/ ?problemStatus=unsolved&page=1&categor y%5B%5D=Sorting&category%5B%5D=Searc
Sorting algorithms	5 problems	1 - 2 days	hing&category%5B%5D=Binary%20Search&category%5B%5D=Merge%20Sort&category  %5B%5D=radix%20sort%20
Strings	Atleast 100 problems	10 - 15 days	https://practice.geeksforgeeks.org/explore/ ?problemStatus=unsolved&page=1&categor y%5B%5D=Strings&category%5B%5D=Java- Strings
Recursion	Atleast 40 problems	4 - 7 days	https://practice.geeksforgeeks.org/explore/ ?problemStatus=unsolved&page=1&categor y%5B%5D=Recursion

### ALGORITHMS

#### **SEARCHING ALGORITHMS**

- 1. Linear search
- 2. Binary search
- 3. Circular binary search

### SORTING ALGORITHMS

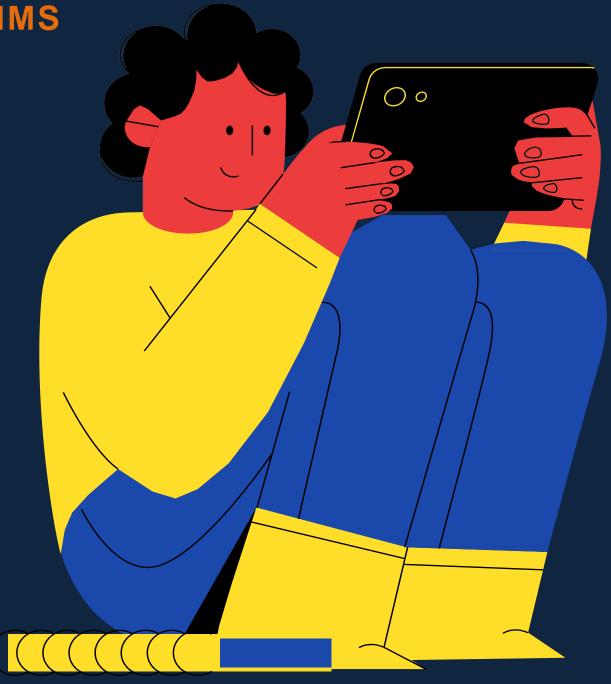
- 1. Selection sort
- 2. Bubble sort
- 3. Insertion sort
- 4. Merge sort
- 5. Quick sort

#### searching

https://www.youtube.com/watch?v=4GPdGsB3OSc&ab\_channel=GeeksforGeeks https://www.youtube.com/watch?v=P3YID7liBug&ab\_channel=HackerRank https://www.youtube.com/watch?v=uufaK2uLnSI&ab\_channel=mycodeschool

#### Sorting

https://youtu.be/pkkFqlG0Hds



### DATA STRUCTURES

Few Resources
<a href="https://youtu.be/sDKplO2HGq0">https://youtu.be/sDKplO2HGq0</a>
<a href="https://youtu.be/ec72AqFRB7U">https://youtu.be/81PpYQ0AN</a> w

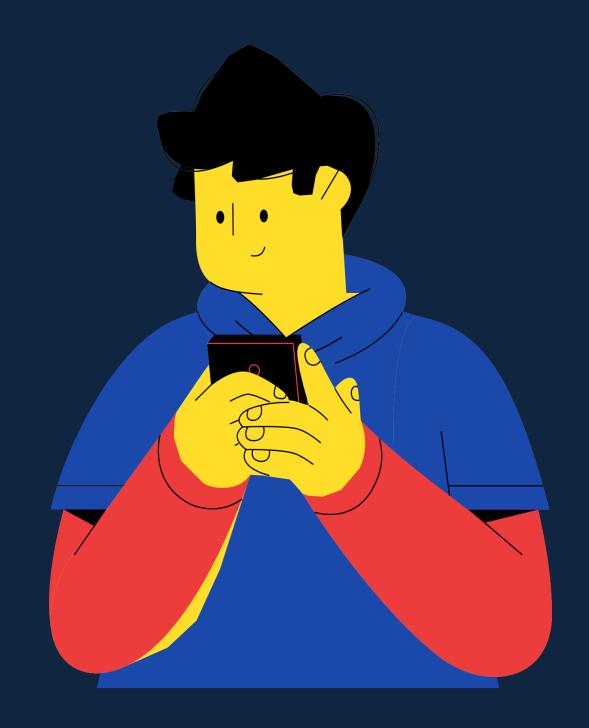
TOPICS	PROBLEMS	DAYS	LINK
Singly Linked list	Atleast 40 problems	7 - 10 days	https://practice.geeksforgeeks.org/explore/?problemStatus=unsolved&page=1&category%5B%5 D=Linked%20List&category%5B%5D=doubly-linked-list&category%5B%5D=circular-linked-list&category%5B%5D=circular%20linked%20list
Doubly Linked list	Atleast 30 problems	4 - 7 days	
Circular Linked list	Atleast 15 problems	2 - 4 days	
Queue	Atleast 20 problems	5 - 8 days	https://practice.geeksforgeeks.org/explore/?problemStatus=unsolved&page=1&category%5B%5D=Queue
Stack	Atleast 40 problems	7 - 10 days	https://practice.geeksforgeeks.org/explore/?problemStatus=unsolved&page=1&category%5B%5D=Stack
Binary Trees	Atleast 40 problems	7 - 14 days	https://practice.geeksforgeeks.org/explore/?problemStatus=unsolved&page=1&category%5B%5D=Tree&category%5B%5D=Binary%20Search%20 Tree&category%5B%5D=AVL-Tree
Binary Search Trees	Atleast 50 problems	7 - 14 days	
AVL Tree	2 problems	1 - 2 days	
Hash	Atleast 20 problems	3 - 5 days	https://practice.geeksforgeeks.org/explore/?problemStatus=unsolved&page=1&category%5B%5D=Hash
Heap 2021	Atleast 10 problems	3 - 5 days	https://practice.geeksforgeeks.org/explore/?problemStatus=unsolved&page=1&category%5B%5D=Heap

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### ADVANCED DATA STRUCTURES

### **GRAPH (15-30 Days)**

- BFS
- DFS
- DIJIKSTRA'S ALGORITHM
- FLOYD WARSHALLS'S ALGORITHM
- PRIM'S ALGORITHM
- KRUSKAL'S ALGORITHM
- STRONGLY CONNECTED COMPONENTS
- CRITICAL CONNECTION IN A NETWORK
- DFS & BFS BASED PROBLEMS
- SOLVING PROBLEMS ON GRAPH



https://practice.geeksforgeeks.org/explore/?problemStatus=unsolved&page=1&category%5B%5D=Graph

### PROBLEM SOLVING TECHNIQUES

TOPICS	PROBLEMS	DAYS	LINK
Backtracking	Atleast 20 problems	7 - 10 days	https://practice.geeksforgeeks.org/explore/?proble mStatus=unsolved&page=1&category%5B%5D=Back tracking
Dynamic Programming	Atleast 50 problems	10 - 20 days	https://practice.geeksforgeeks.org/explore/?proble mStatus=unsolved&page=1&category%5B%5D=Dyna mic%20Programming
Divide & Conquer	Atleast 20 problems	3 - 5 days	https://practice.geeksforgeeks.org/explore/?proble mStatus=unsolved&page=1&category%5B%5D=Divid e%20and%20Conquer
Greedy Algorithm	Atleast 20 problems	5 - 8 days	https://practice.geeksforgeeks.org/explore/?proble mStatus=unsolved&page=1&category%5B%5D=Gree dy

Few Resources <a href="https://youtu.be/f19e">https://youtu.be/f19e</a> ofbydc



## THEORY CONCEPTS

OPERATING SYSTEMS

5 - 10 DAYS

#### 1. Jenny's lecture

https://youtube.com/playlist?list=PLdo5W4Nhv31a5ucW S1K3-x6ztBRD-PNa

#### 2. Roadmap Cheat sheet:

https://whimsical.com/operating-system-cheatsheet-by-love-babbar-S9tuWBCSQfzoBRF5EDNinQ@2Ux7TurymNF5kNjPYez1

#### Roadmap Cheat sheet notes:

https://drive.google.com/file/d/1FAxjhyllsGGoulyCPyR3xqKVgU7mhEmQ/view

#### 3. Javatpoint

yCPyR3xqKVgU7mhEmQ/view

https://www.javatpoint.com/os-tutorial

### DATABASE MANAGEMENT SYSTEMS

5 - 10 DAYS

### 1. Roadmap Cheat sheet:

https://whimsical.com/dbms-roadmap-by-lovebabbarFmUi8ffVop33t3MmpVxPCo

### 2. Beginners book

https://beginnersbook.com/2015/04/dbms-tutorial/

### 3. Javatpoint

https://www.javatpoint.com/dbms-tutorial



### OBJECT ORIENTED PROGRAMMING

3 - 7 DAYS

### 1. Javatpoint

https://www.javatpoint.com/java-oops-concepts



### MYSQL

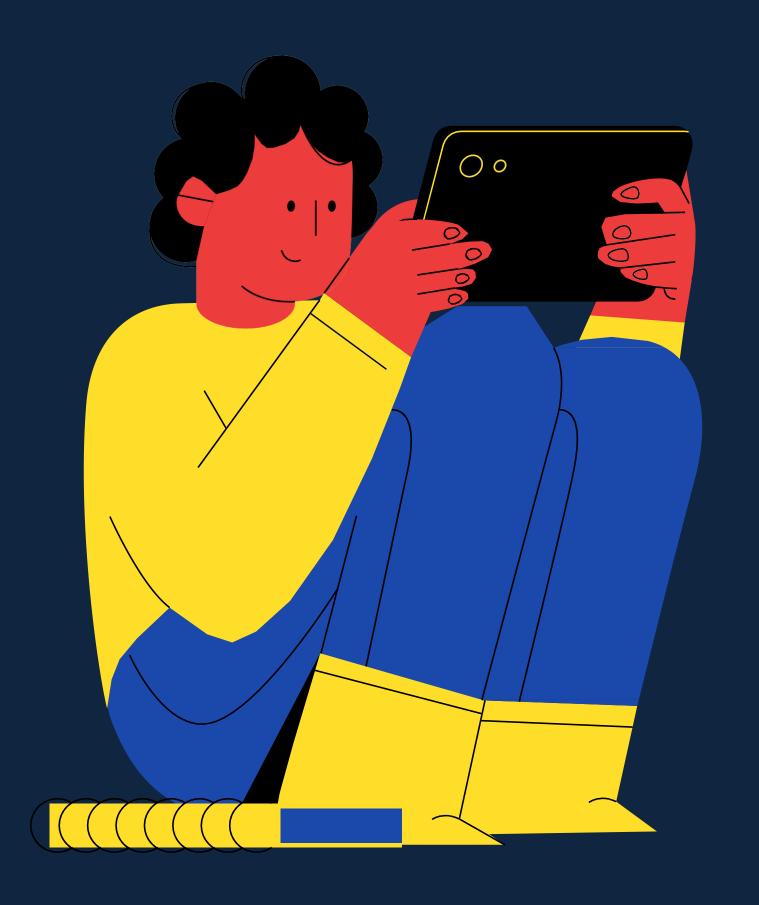
1 - 2 DAYS

### 1. W3SCHOOLS

https://www.w3schools.com/sql/

### 2. Practice:

https://play.google.com/store/apps/details?id=randomappsinc.com.sqlpracticeplus



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CORE JAVA & MULTITHREADING

5 - 8 DAYS

#### 1. CORE JAVA

https://www.javatpoint.com/java-tutorial

### 2. MULTITHREADING

https://www.javatpoint.com/multithreading-in-java

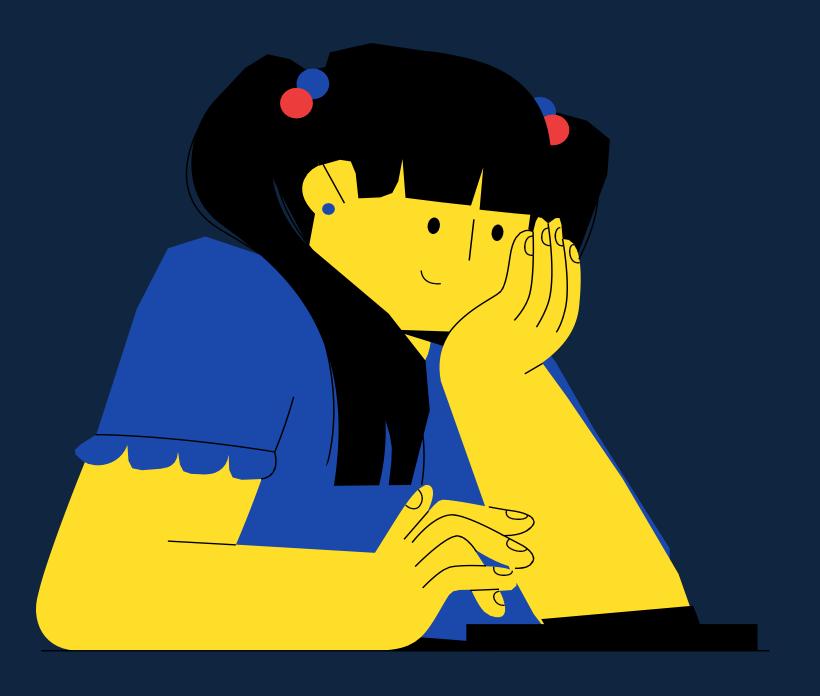


### COMPUTER NETWORKS

3 - 7 DAYS

#### 1. Cheat sheet

https://whimsical.com/networking-cheatsheet-by-love-babbar-FcLExFDezehhfsbDPfZDBv



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### TIME COMPLEXITY ANALYSIS

#### 1 - 2 DAYS

- 1. <a href="https://www.google.com/amp/s/www.geeksforgeeks.org/understanding-time-complexity-simple-examples/amp/">https://www.google.com/amp/s/www.geeksforgeeks.org/understanding-time-complexity-simple-examples/amp/</a>
- 2. <a href="https://www.google.com/amp/s/www.geeksforgeeks.org/analysis-of-algorithms-set-4-analysis-of-loops/amp/">https://www.google.com/amp/s/www.geeksforgeeks.org/analysis-of-algorithms-set-4-analysis-of-loops/amp/</a>
- 3. <a href="https://yourbasic.org/algorithms/time-complexity-explained/">https://yourbasic.org/algorithms/time-complexity-explained/</a>
- 4. https://www.studytonight.com/data-structures/time-complexity-of-algorithms
- 5. <a href="https://adrianmejia.com/most-popular-algorithms-time-complexity-every-programmer-should-know-free-online-tutorial-course/">https://adrianmejia.com/most-popular-algorithms-time-complexity-every-programmer-should-know-free-online-tutorial-course/</a>
- 6. https://www.bigocheatsheet.com/
- 7. <a href="https://www.hackerearth.com/practice/notes/sorting-and-searching-algorithms-time-complexities-cheat-sheet/">https://www.hackerearth.com/practice/notes/sorting-and-searching-algorithms-time-complexities-cheat-sheet/</a>



### BASIC WEB TECHNOLOGY

10 - 15 DAYS

#### 1. HTML

https://www.w3schools.com/html/

2. CSS

https://www.w3schools.com/css/

3. JAVASCRIPT

https://www.w3schools.com/js/

4. JQUERY



### APTITUDE

#### 15 - 20 DAYS ( 2 Topics / day)

- 1. BOATS
- 2. TRAINS
- 3. TIME, SPEED, DISTANCE
- 4. HEIGHT & DISTANCE
- 5. TIME & WORK
- 6. SEATING ARRANGEMENTS
- 7. CLOCK
- 8. CALENDAR
- 9. DIRECTION
- 10. PERMUTATION
- 11. COMBINATION
- 12. PROBABILTY



- 13. BLOOD RELATION
- 14. AGES
- 15. PROFIT & LOSS
- 16. PERCENTAGE & DISCOUNTS
- 17. SIMPLE INTEREST
- 18. COMPUND INTEREST
- 19. WORKER WAGES
- 20. HCF & LCM
- 21. RATIO & PROPOSITION
- 22. AVERAGE
- 23. CIRCLE
- 24. TRIANGLE



## FINAL PREPARATION

### PUZZLES (1-2 Days)

- 1. https://www.geeksforgeeks.org/category/puzzles/
- https://www.interviewbit.com/puzzles/
- 3. <a href="https://medium.com/afteracademy/top-50-puzzles-commonly-asked-during-the-interview-132af8ccbf7a">https://medium.com/afteracademy/top-50-puzzles-commonly-asked-during-the-interview-132af8ccbf7a</a>
- 4. <a href="https://youtu.be/d6Ed1-TGER8">https://youtu.be/d6Ed1-TGER8</a>

### BASIC LINUX COMMANS (1 day)

https://maker.pro/linux/tutorial/basic-linux-commands-for-beginners

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### RESUME PREPARATION (1 day)

- 1. https://www.canva.com/resumes/templates/
- https://resumebuild.com/
- 3. <a href="https://novoresume.com/">https://novoresume.com/</a>
- 4. <a href="https://resume.io/">https://resume.io/</a>

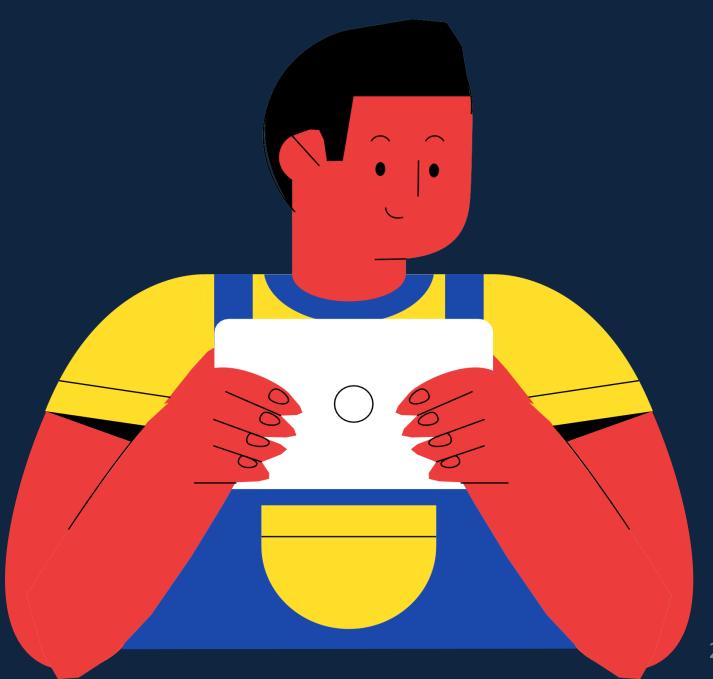
### PROJECTS (1 day)

Revision on database used, logics, tech stack & implementation



## SELF INTRODUCTION & GENERAL INTERVIEW QUESTIONS (1 day)

- 1. <a href="https://youtu.be/EzGH3hZuJVk">https://youtu.be/EzGH3hZuJVk</a>
- https://youtu.be/Ji46s5BHdr0
- https://youtu.be/1mHjMNZZvFo



### TOTAL NO OF DAYS = 279

### **Approximately 10 months**

