## **Thoughtworks**

**Role:** Graduate application developer / Application Developer - Graduate

Consultant

CTC: 11.10 LPA

#### **Selection Rounds:**

1. HackerRank Test (60 minutes)

- 2. Code Pairing round (75-90 minutes)
- 3. Technical presentation (60-75 minutes)
- 4. Leadership & Cultural Alignment Interview (60 minutes)

### 1. Problem Solving Assessment:

- 4 coding challenges were given on Hackerrank platform (2025 batch).
- Previous years, they asked 15 MCQ puzzles and 3 coding challenges. Most questions were asked from the Algorithms/Problem-solving section of Hackerrank.
- For me, all the 4 coding questions were based on Strings only.

# Coding Questions asked in my test:

#### 1) Stupid Al Bot:

I had to code a solution for a Stupid AI bot to respond to specific queries shown in the provided picture. Example: if the user asks "What's your name?", the AI returns "I am Stupid AI.".

If the user asks a question beginning with "Should I XXXX?", the Al should return "You should follow your heart.".

If the user's question is longer than 10 words, the Al should say its too stupid to answer the query.

# 2) Vowels Carousel:

You have joined a new client office and in their canteen, the menu displays a list of foods (eg. cauliflower, apple, avocado). On the counter there's a carousel displaying - a, e, i, o, u, a. In order to order the food, you need to reverse the name of the food item, and replace all the vowels with the next vowel in the carousel.

Eg. "cauliflower" becomes "riwuflolaec".

"unicorn" becomes "nrucona"

#### 3) Overall Class Grade:

Input is a string containing the grades of all students in a class. Your task is to compute the overall grade of the class.

Precedency: A > B > C > D > E > F

Example 1:

Grades = "AAABBCDDEEFF" 123 12 1 12 12 12

Here, the overall class grade is "A".

Sometimes, you may find two grades having an equal score, in that case choose the Grade which has greater precedence as the result.

Example 2:

Grades = "AABBBCDDDEEFF" 12 123 1 123 12 12

Here, "B" > "D", so the overall class grade is "B".

# 2. Code Pairing Interview:

- They will give you a problem statement 15-30 mins before the interview → You need to design a solution/system.
- This round tests your ability to do:-
  - Collaborative Thinking
  - Coding clarity → they expect clean, maintainable and extensible code solutions.

(Pro-tip: use Standard Naming Conventions)

- Apply OOPs and functional modularity
- Teamwork, Logic, and Problem-solving in action
- Simulates everyday coding.
- You will be paired with 1 or 2 Thoughtworkers and given a problem and/or codebase to code a solution.

- For the last 2 years, they have been providing a GitHub repo with some To-Dos which you need to clone and work on in your preferred IDE.
- They will see how you think and approach the solution. This
  round is mainly to test your OOPs knowledge and SOLID
  Principles.
- Take 10-15 mins to understand the given codebase → open each of the class files → Try to think aloud as you go through the code.
  - Ask the interviewer if you can run the code and observe the output for further understanding.
- Requirement Clarification: Ask clarifying questions to the interviewer to fully understand the functional requirements of the codebase, and what kind of solution you need to implement.
- Think aloud & Discuss approach.
- Add a new feature → coding.
- Test-Driven Development (TDD): add Unit Tests (For java, you can use JUnit library) → Not necessary
- Verify program execution.

# Topics to brush up:

- 1. Strong knowledge of OOPS concepts is required classes, objects, inheritance, polymorphism, abstraction, encapsulation.
- 2. Good to have knowledge of design patterns like MVC (Model View Controller), Factory Design Pattern.
  - **Pro-tip:** practice problems with **5-6 design patterns** so that you can solve the given problem using a design pattern to really impress them.
- 3. Knowledge of SOLID principles is a plus but not mandatory.
- 4. Use as many technical terms as you know to impress them. Eg. Single Responsibility Principle, encapsulation.

### My Code-Pairing Round Experience:

- I received the Problem Statement through mail in a google doc with the solution requirements and a few sample test cases. (Python, Java & C++ only)
- The interview panel had two Thoughtworkers and was scheduled for 90 minutes. I had to share my screen and code my solution on any IDE of my choice. I used VS code.
- I had to code the entire solution from scratch → No GitHub codebase provided.
- My problem statement was "Twiggy A food delivery app" where I
  basically had to input the item codes of the user's order and
  compute the total bill by conditionally applying the Restaurant
  Service charges based on the total Order Amount.
- The interviewers allowed me to refer to Java documentation while coding when I got confused with the syntax. They were very friendly and provided feedback to help me understand and improve my solution's class structure.
- Few OOPS questions were also asked at the end like:
  - Access Modifiers in Java (public, private, protected, and default).
  - I explained the difference between the 4 types. Then one of the interviewers drew a multi-level file hierarchy on the screen with two public classes located in different directories (under a common parent directory), and asked me if one of the classes can be accessed by the other class → correct answer is Yes
  - Qn on package private modifier.

#### Resources:

 Engineerhoon video: https://youtu.be/3ExEbFJYC6k?si= BVaNX3 u38r1gSC
 2. KN Academy:

https://youtu.be/QxQ7k-bh5AQ?si=1MN5ZoBPhlly42ib

3. Hire Me Plz:

https://youtu.be/OW4teQfyXDw?si=FaAEjg8spR0LRMI5

#### 3. Technical Interview:

• Duration: 90 minutes

- There were two interviewers in the panel. They started by introducing themselves then asked for my introduction. Try to keep your introduction to 1-2 minutes.
- Discussion on your projects and internship experience + Other resume-based questions (like certifications).
- Usually they will give 2 puzzles → Practice from GeekForGeeks. Try
  to solve the given puzzle, don't say that you don't know.
   I didn't get any puzzles in my interview.
- Write a few **DB queries** using **SQL**.
- They will give one or more problem statements and ask you to identify the classes + maybe design or code a solution for it.
- While solving, be sure to mention all the OOPs concepts (if applicable) and try to use technical terms to impress them.
- Coding questions or DSA-based Qns may be asked. Eg. how to reverse a Linked List, how to traverse a tree?
- They may ask for your favourite subject in your curriculum → 2 marks Qs will be asked based on that (CN, DBMS, OS, CD)
- **Important:** Be prepared with 2 questions to ask the interviewers at the end.

## My Tech Interview Questions:

1) Write a SQL query to select the second highest marks from a student table.

2) Given an employees table with joining\_date as a field, write a SQL query to select all the employees who joined the office in the last 30 days.

### 3) Domain Modeling (Scenario-based Qn):

**Car Showroom** → create a platform to buy cars, get to know the car models and features.

They asked me to identify the classes/entities for the above problem statement with their attributes.

I identified: Show Room → consists of cars

Car → model name, features (steering wheel, mileage)

Customers

**Employees** 

#### 4. Cultural Alignment & Leadership Interview:

 This round is mainly to test your leadership ability and check your cultural fit/alignment with Thoughtworks as a company.

Thoughtworks is a very diverse and inclusive company that values equality, diversity and equity.

- They will display a grid of digital Cards in 3 different colours → there are 3 categories of questions → You need to pick at least one card from each category in your interview and answer it based on your own experience or personal view.
- The focus areas will be
  - Cultivation
  - Social change
  - Collaboration
- If you are uncomfortable with answering any of the questions, just say so, they will give you a chance to pick another card instead.
- Qns can be based on your leadership skills, how you work under pressure, how well you work in a team, how you handle failure, how you overcame challenges in your projects or internships etc.

- They may ask about your project experience or internships (if you have any).
- How you adapt, and you should give examples from your real life, how you learn or adapt yourself to any new information you receive.
- Be aware of social issues like Caste Reservation in India, Women Safety, discussions on LGBTQ community → express your personal opinion or views on the given topic.
- Usually, the cultural round just checks how to look into gender perspectives and how you work under a team..it is more of a conversation..than an interview.
- You need to be confident in your answers. Go through the companies website for what they do currently based on gender.
- Questions can come regarding LGBTQ community or some current affairs.
- It's not necessary that you should know everything completely but it's good to have an idea about these topics.
- Show curiosity in learning if you don't know about the question asked.
- **Important:** Keep one or two questions for the interviewer at the end.

# My Cultural Round Interview Qns:

- Is there any technology that you feel is Harmful or impacts society/social media in a negative way?
- Can you think of a mistake that you learnt from and What did you learn from it?
- Can you think of a situation where you felt your team was wrong and how did you handle it?
- What was the biggest compromise that you had to make in your workspace? How did you handle it / What did you learn from it?