**🧑‍💼 Managerial Round**

**1. Introduction**"Hello, I’m Kalparatna Mahajan, currently pursuing my B.Tech in Information Technology and expecting to complete my education in July 2025. I’m passionate about software development, especially backend and AI-based applications. I've worked on several academic and internship projects using Python, Django, Flask, and React. I’m also actively involved in hackathons and tech events, which have helped me build strong teamwork and problem-solving skills."

**2. Hobbies**"I enjoy coding, reading tech blogs, and exploring AI tools. Apart from that, I like playing chess and listening to music, which helps me stay focused and sharp."

**3. Favourite Subject**"My favorite subject is Artificial Intelligence. I enjoy understanding how intelligent systems work, and I’ve even implemented ML and DL models in my projects."

**4. Leadership Qualities**"I’ve demonstrated leadership during hackathons, where I often took initiative in planning tasks, assigning roles, and ensuring the team met deadlines. I also mentor juniors informally in my college, helping them understand projects and tech stacks."

**5. Why are you not going for post-graduation?**"Right now, I want to gain hands-on experience in the industry. I believe practical learning and real-world problem-solving will help me grow faster. However, I’m not ruling it out entirely for the future."

**6. Why haven’t you joined any society?**"I focused more on self-learning and building projects. I also participated in many external events and internships, which gave me good exposure. Though not in a formal society, I’ve collaborated on many tech initiatives with my peers."

**7. Have you worked in a team?**"Yes, I’ve worked in multiple teams during hackathons, internships, and college projects. I’m comfortable with both leading and collaborating, and I always try to maintain good communication and coordination."

**💻 Technical Round**

**1. Your Favourite Tech Stack?**"My favorite tech stack is Python-Django. I enjoy using React for frontend and Django for backend with MySQL or MongoDB as the database**."**

**2. What is AI?**"Artificial Intelligence is the simulation of human intelligence in machines that are programmed to think and learn. It involves tasks like problem-solving, reasoning, and pattern recognition."

**3. What is Gen AI?**"Generative AI refers to AI models like GPT or DALL·E that generate text, images, or code based on prompts. These models use large datasets and deep learning to produce creative and contextual outputs."

**4. Will AI take jobs in the future?**"AI will automate repetitive tasks, but it will also create new opportunities in AI development, maintenance, and ethical governance. It’s more of a shift in job roles than a complete replacement."

**5. What is ML?**"Machine Learning is a subset of AI where systems learn from data to make predictions or decisions without being explicitly programmed."

**6. What is DL?**"Deep Learning is a part of ML that uses neural networks with multiple layers to analyze complex data like images, audio, or text."

**7. What is SVM?**"Support Vector Machine is a supervised ML algorithm used for classification or regression. It finds the best hyperplane that separates data points into different classes."

**8. What is a Support Vector?**"Support vectors are the data points that lie closest to the decision boundary. They are critical in defining the position and orientation of the hyperplane."

**9. What is Overfitting?**"Overfitting occurs when a model learns not just the data patterns but also the noise, performing well on training data but poorly on unseen data."

**10. Ask one puzzle**(Example answer to a puzzle will depend on the question. Be calm and communicate your thought process.)

**11. What is Normalization?**"Normalization is the process of organizing data to reduce redundancy and improve data integrity by dividing data into related tables."

**12. ACID Properties**

* Atomicity: All operations in a transaction complete or none.
* Consistency: Database moves from one valid state to another.
* Isolation: Concurrent transactions don't interfere.
* Durability: Once committed, changes are permanent.

**13. Denormalization  
"**Denormalization is the process of combining tables to reduce joins and improve read performance, often at the cost of redundancy."

**14. Lost Update Problem**"It occurs when two transactions read the same data and update it, but the last write overwrites the other, leading to a lost update. This happens if proper concurrency control isn’t in place like locks or isolation levels."

**15. Code for BFS**

from collections import deque

def bfs(graph, start):

visited = set()

queue = deque([start])

while queue:

vertex = queue.popleft()

if vertex not in visited:

print(vertex)

visited.add(vertex)

queue.extend(neighbor for neighbor in graph[vertex] if neighbor not in visited)

**16. DFS vs BFS**

* **DFS explores as deep as possible before backtracking (uses stack or recursion).**
* **BFS explores neighbors first before going deeper (uses queue).**
* **BFS is better for finding shortest path, while DFS is useful in topological sorting or cycle detection.**

**17. SDLC and AGILE**

**18. Cloud Computing Related Questions(BASIC)**

**🧑‍💼 HR Round**

**1. Why do you think you should get Prime?  
"I’ve worked on real-time projects, AI-based systems, and participated in several hackathons. I’m proactive, quick to learn, and passionate about using technology to solve problems. The Prime role aligns perfectly with my skills and aspirations."**

**2. Are you okay with Digital?  
"Yes, I am completely open to any role that allows me to contribute and grow, including Digital. My focus is on learning and adding value to the organization."**

**3. What is TCS?  
"TCS (Tata Consultancy Services) is a global leader in IT services, consulting, and business solutions. With a strong presence in over 50 countries, it delivers innovative technology services across industries."**

**4. What do you know about TCS?  
"TCS is part of the Tata Group and one of the largest IT services companies globally. It’s known for its strong ethical values, learning environment, and technological leadership in AI, cloud, cybersecurity, and more. It has also been a consistent top employer and trusted partner for digital transformation worldwide."**

**✅ About TCS (Tata Consultancy Services)**

* **Full Form: Tata Consultancy Services**
* **Founded: 1968**
* **Founder: Faquir Chand Kohli (F.C. Kohli) (First Founder and CEO) and then JRD TATA**
* **Headquarters: Mumbai, Maharashtra, India**
* **CEO & MD: K. Krithivasan**
* **Parent Company: Tata Group**
* **Chairman: Natarajan Chandrasekaran**

**✅ Key Facts**

* **Employee Strength: Over 600,000 employees across 50+ countries (one of the largest IT workforces in the world)**
* **Global Presence: Offices in 46 countries with development centers in India, the USA, the UK, Europe, and Asia-Pacific**
* **Revenue: Around US$27 billion (FY 2023)**
* **Stock Listings: Listed on the Bombay Stock Exchange (BSE) and National Stock Exchange (NSE)**

**✅ Services Provided**

**TCS provides a wide range of services, including:**

* **IT services and consulting**
* **Business process outsourcing (BPO)**
* **Enterprise solutions (SAP, Oracle)**
* **Cloud services, AI & Machine Learning, IoT, Cybersecurity**
* **Application development and maintenance**
* **Data analytics and digital transformation**

**✅ Major Clients & Industries**

**TCS serves top clients in various sectors:**

* **Banking & Financial Services (BFSI)**
* **Healthcare**
* **Retail**
* **Telecom**
* **Energy**
* **Insurance**
* **Government & Education**

**✅ Achievements**

* **Ranked in the Top 3 most valuable IT services brands globally**
* **Frequently featured in Forbes, Fortune 500, and Brand Finance rankings**
* **Known for its employee-friendly policies, training programs, and career growth opportunities**
* **Runs TCS iON, an assessment and education platform used by many universities and government exams**

**✅ Why TCS is Preferred**

* **Strong work culture and job stability**
* **Extensive training programs (like TCS Xplore, TCS Elevate, TCS Ignite)**
* **Opportunity to work on cutting-edge technologies**
* **Global exposure and diverse work environment**
* **Commitment to innovation and sustainability**