**HDFC questions**:

* Questions were around LLM/RAG/Agentic AI/VectorDB
* Explain the entire architecture of your project and what was the starting point.
* Which RAG technique did you use. Explain HNSW.
* Mention how can we use tools without using any agentic framework, it should not be a direct API call.
* Explain ReAct, and how does it help in orchestration.
* Any practical challenges that you faced during RAG implementation.
* When multiple tools in the agentic framework return similar response how do you differentiate between them?
* Explain how embeddings are created and stored in vector DB.
* Explain vector dimension and what is the dimension of MiniLM.
* Context overflowing concept.
* How does chunking work. Which chunking mechanism you used?
* What brings you to GenAI Field from data engineering background.
* How securely and efficiently you can build a business solution by using GenAI.
* Explain the GenAI Projects that you have worked on like (Architecture, Functionality).
* What are LLM model you have used in projects and explain me what that LLM model will do.
* Explain how embeddings are created and stored in vector DB.
* What are the embeddings model that have used in your project.
* Discussion about the resume - questions from what you have written in it !
* Knowledge check on RAG and LLMs
* how I approached the projects mentioned in the resume - showed them using diagram and workflow and explained in detail
* +---------------+---------+  
  | Column Name   | Type    |  
  +---------------+---------+  
  | product\_id    | int     |  
  | purchase\_date | date   |  
  | units         | int     |  
  +---------------+---------+  
  This table may contain duplicate rows.  
  Each row of this table indicates the date, units, and product\_id of each product sold.  
    
    
  Write a solution to find the average selling price for each product. average\_price should be rounded to 2 decimal places. If a product does not have any sold units, its average selling price is assumed to be 0.  
    
  Return the result table in any order.
* Given a string s consisting of words and spaces, return the length of the last word in the string.

A word is a maximal   
substring  
consisting of non-space characters only.

Example 1:

Input: s = "Hello World"  
Output: 5  
Explanation: The last word is "World" with length 5.  
Example 2:

Input: s = "   fly me   to   the moon  "  
Output: 4  
Explanation: The last word is "moon" with length 4.  
Example 3:

Input: s = "luffy is still joyboy"  
Output: 6  
Explanation: The last word is "joyboy" with length 6.

* +-------------+---------+  
  | Column Name | Type    |  
  +-------------+---------+  
  | id          | int     |  
  | email       | varchar |  
  +-------------+---------+  
  id is the primary key (column with unique values) for this table.  
  Each row of this table contains an email. The emails will not contain uppercase letters.

Write a solution to delete all duplicate emails, keeping only one unique email with the smallest id.

For SQL users, please note that you are supposed to write a DELETE statement and not a SELECT one.

For Pandas users, please note that you are supposed to modify Person in place.

After running your script, the answer shown is the Person table. The driver will first compile and run your piece of code and then show the Person table. The final order of the Person table does not matter.

The result format is in the following example.

* Coding problem in Python: Using Online Python compiler, programiz, “Given a string s, find the first non-repeating character in it and return its index. If it does not exist, return -1”.  Example 1: Input: s = "leetcode" Output: 0. Explanation: The character 'l' at index 0 is the first character that does not occur at any other index. Example 2: Input: s = "loveleetcode" Output: 2. Example 3: Input: s = "aabb" Output: -1.

**Wellsfargo**

The below questions were asked.   
**Technical Interview:**  
Introduce yourself

**Python questions:**  
Difference between list and tuple.  
Generators and iterators.

**Coding round:**  
Write a short program that prints each number from 1 to 100 on a new line.   
For each multiple of 3, print "Wells" instead of the number.   
For each multiple of 7, print "Fargo" instead of the number.   
For numbers which are multiples of both 3 and 7, print "WellsFargo" instead of the number.

**Project based questions:**  
Finetuning in Japanese Data:  
What is Finetuning?  
Have you faced any context window problem?  
What is Catastrophic Forgetting?  
What is Hallucination?  
Could you explain about LoRA?

Automation of Sales order and Invoice data project: (Using Azure Open AI)  
Which LLM model did you use?  
What are the parameters used to control answers generated by LLM? (temperature, top\_p)   
What is the range of temperature and what happens for each value? (set to 0, 0.5, 1)

Explain about the RAG Project:  
What is RAG?

Explain about Automatic Ticket Classification project which was related to Banking and Financials domain.   
What is Kmeans?  
How did you choose top 5 clusters? (Elbow method)  
How did you evaluate unsupervised techniques or even Kmeans?

**Management Interview:**  
Explain about Finetuning project. (Very brief. Not getting too technical.)  
Other general questions.

a) Coding round: Python program to display all the prime numbers between  and 100

b) Text - to - SQL process explanation and the problems we encountered?

    How did we use AWS Knowledge Base for this?

c) How did we use LCEL?

d) Structure of a RAG based system?

e) Difference between embeddings and Vectors?

f) How to ensure JSON Responses as output?