PhonePe Data Analysis Project: Mock Q&A

1. Can you give a brief overview of your project?

This project analyzes PhonePe Pulse digital payment data to derive business insights. It involves extracting data from GitHub, storing it in a PostgreSQL database, analyzing it using Python, and visualizing the results through a Streamlit dashboard.

2. What business problem does your project solve?

It helps businesses understand transaction trends, user behavior, and insurance uptake, enabling better marketing, fraud detection, and product development strategies.

3. How did you extract and load the data?

I cloned the GitHub repository and wrote a Python script to traverse the folder structure, extract JSON data, and load it into structured PostgreSQL tables.

4. Why did you use PostgreSQL for storage?

PostgreSQL supports complex queries and is robust for structured data storage, making it ideal for analytical workloads.

5. How is your database structured?

The database has three main table types: Aggregated (user, transaction, insurance), Map (user, map, insurance), and Top (user, map, insurance) for detailed analysis.

6. What insights did your dashboard reveal?

It showed that southern states have high transaction volumes, urban pin codes are most active, and insurance product usage is rising post-pandemic.

7. What use cases did you cover?

Customer segmentation, fraud detection, user engagement, insurance analysis, and geographic transaction mapping.

8. Why did you choose Streamlit for dashboarding?

Streamlit allows for fast and interactive dashboard development with seamless integration of Python analysis and visualizations.

9. How can this project be extended?

By integrating real-time data, adding ML models for prediction, or deploying the dashboard on a cloud platform for access by business teams.

10. How would you explain this project to a non-technical stakeholder?

It's a tool that translates complex payment data into understandable visual insights to help with better decisions in marketing, operations, and strategy.