Task 1- Identify at least 3 real-world applications and specify:

- Which type of database they use (SQL / NoSQL / In-memory)
- Why that database is suitable

Real World Case - 1: Checking real time status - like online/offline(whatsapp), live delivery tracking, typing..(whatsapp,telegram,etc.)

Database: In-Memory like Redis
Why:
- ☐ **Live updates in milliseconds**
- ☐ **Provides almost no latency in data**
- ☐ **Easy to store live states and automatically deletes when active sessions expires**

Real World Case - 2: College Examination Management

Database: SQL(structured data)

Why:
- ☐ **Structured Data of every student present**
- ☐ **Easy to perform Join operations**
- ☐ **Easy calculation of Grades, Top -10 students**
- ☐ **Proper connection and join operations in multiple tables and required complex queries which nosql lacks**

Real World Case - 3: Player Selection(can be used by IPL Teams to check whether player suits the team or not)

Database: SQL(structured data) + NoSql (for json records like feedbacks from coach, player impact on team)

Why:

- ☐ **Structured player stats like total matches, runs, economy, etc.**
- ☐ **Helps in complex queries like player consistency, performance against specific teams, and season-wise comparisons**
- ☐ **Schema flexibility asNoSQL allows adding new evaluation metrics without making changes in existing tables**