Experiment 6	
Name	Pratik Manish Patil
Roll No	40
DOP	
DOS	
Sign	
Grade	

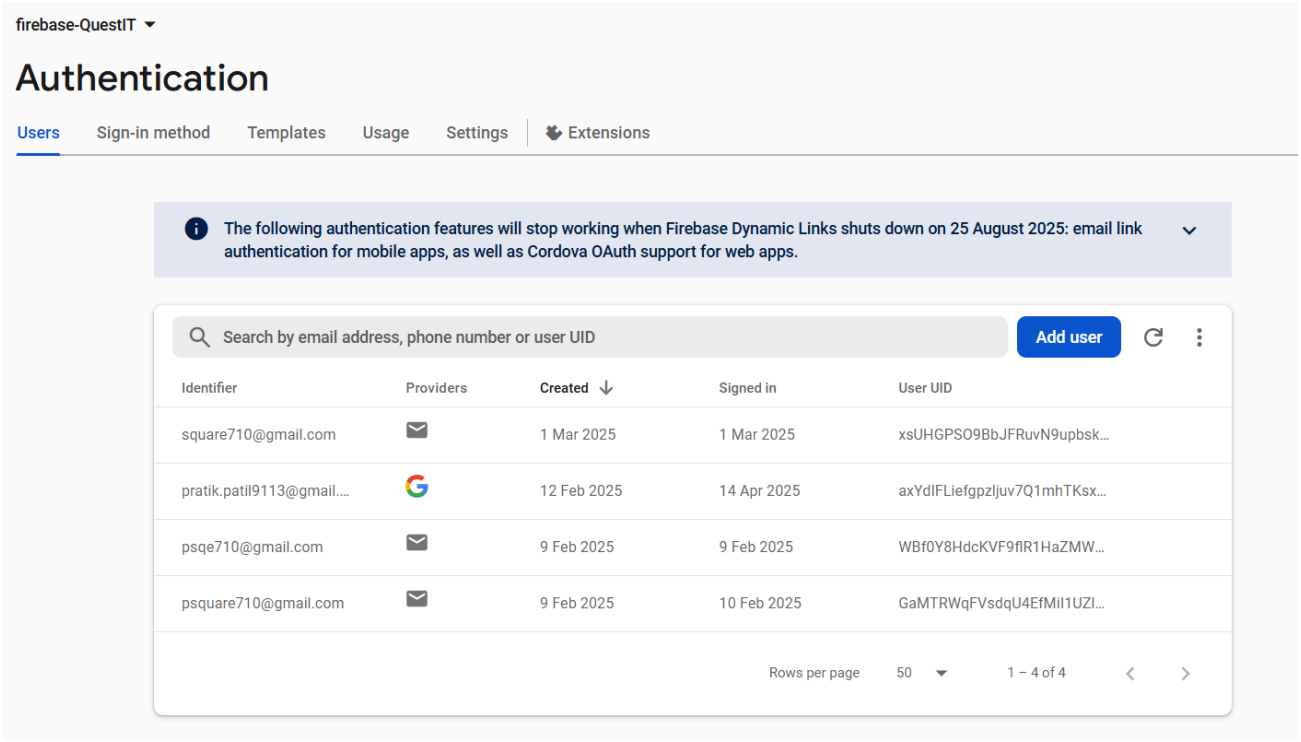
Aim: To connect flutter UI with firebase database

Theory:
Connecting a Flutter application to a Firebase database allows for seamless real-time data storage and retrieval, making apps dynamic and responsive. Firebase offers two main database services: Cloud Firestore (a flexible, scalable NoSQL cloud database) and Realtime Database (a tree-structured JSON database for real-time syncing).

In Flutter, Firebase integration is achieved using the firebase_core and cloud_firestore (or firebase_database) packages. After initializing Firebase in the app, data can be added, read, updated, and deleted directly through Firebase methods. Flutter widgets can be connected to database streams, ensuring that any changes in the database are instantly reflected in the UI.

This integration enhances app functionality by enabling persistent data storage, user-specific content, and real-time updates, making it essential for building modern mobile applications.

Output:



Conclusion:

This experiment successfully demonstrates how to integrate Firebase services with a Flutter application. By implementing user signup, login, and data submission features, we explored the use of Firebase Authentication for secure user management and Cloud Firestore for real-time database storage. The flow between screens and backend interaction highlights the power and simplicity of using Firebase in Flutter apps, making it an ideal choice for building scalable and responsive mobile applications.