🧪 Lab 1 Overview: Collect, Process, and Store Data in BigQuery

⏱️ **Duration:** 1 hour 30 minutes
🎯 **Level:** Beginner
💳 **Credits:** 5
📌 **Attempts:** Limited to 5
💡 **Tip:** Take screenshots of each task for your portfolio.

🧭 Objective

Apply your knowledge of the **first three stages of the data journey**—**collect**, **process**, and **store**—using **BigQuery** to solve real business problems.

🏢 Scenario: TheLook Fintech

You've been hired as a **cloud data analyst** at a fintech startup that provides loans to online store owners. Your mission is to help the **Treasury department** track performance and growth by answering three key business questions:

1. **Cash Flow Monitoring**
   ➤ Is the money coming in from loan payments greater than the money going out?
2. **Loan Purpose Analysis**
   ➤ What are the top reasons customers take out loans?
3. **Geographic Loan Distribution**
   ➤ Where are borrowers located, and are loans evenly distributed?

🛠️ Tasks You'll Perform

- **Set up the BigQuery environment**
- **Explore loan data** to extract insights
- **Import and store a new classification file** as a standard table
- **Join tables** to prepare combined reports
- **Deduplicate loan purpose data**
- **Generate a report** showing total loans issued by day and year

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🧰 Skills You'll Apply

- SQL querying in BigQuery
- Data exploration and transformation

- Table joins and deduplication
- Aggregation and reporting
- Cloud data storage and processing

📁 Expected Outcome

By the end of the lab, you'll have created a **set of reports** that answer the Treasury department's questions and demonstrate your ability to:

- Work with real-world datasets
- Apply SQL for business insights
- Use BigQuery for cloud-based data analysis
- Build portfolio-ready work samples

⚙️ Setup Instructions

- Use **Chrome in Incognito mode** to avoid account conflicts
- Sign in with **temporary credentials** provided in the lab
- Do **not** use your personal Google Cloud account
- Once started, the **timer cannot be paused**
- Review **Lab Technical Tips** if needed