Instabug Product Analytics Task

Challenge #1: Database

Our Customer Success Team is running a campaign to proactively reach customers who are at risk of churn. Based on historical data, if the number of dashboard visits made by an active user during the last 30 days drops by more than 50% compared to the average number of visits they made during the 3 months prior to that, they will probably churn. An active user is a user who makes more than 500 visits per month.

Database Scheme

'Companies' table

id	name
1	Amazon
2	Microsoft
3	Google

'Companys members' table

member_id	company_id	name	email	is_owner
1	3	Mark	mark@google.com	TRUE
2	1	Sam	sam@amazon.com	FALSE
3	1	David	dav@amazon.com	TRUE

'Members visits' table

visit_id	member_id	created_at
1	1	8/15/2021 16:46:07
2	2	8/15/2021 16:46:18
3	1	8/15/2021 16:46:20
4	3	8/15/2021 16:46:21

Given the Database scheme above, Using PostgreSQL or MySQL syntax, write a query that displays the following:

- 1. Company ID
- 2. Company Name
- 3. Company Owners Emails "concatenated with a comma"
- 4. Percentage of drop

- 5. Average Visits of previous 3 months
- 6. Visits last 30 days
- 7. Y/N Flag for is_at_risk_of_churn

Challenge #2: Automation

We want to uncover useful information about the apps that are using our platform. All we have is a CSV file that contains the following data:

Company Name
Verizon
Lyft
Paypal
Tinder
Houseparty
9gag

Using this input CSV file, write an automation code script that reads this file and outputs another CSV file with all the apps belongs to the company with the following details:

- 1. Company Name
- 2. Application name
- 3. The number of downloads
- 4. App Store URL
- 5. App Store Reviews rating

Notes

- 1. You can use any programming language you prefer.
- 2. It's preferable to write and share the code via https://replit.com/ or any similar service.