Q1. A)

A **development team of 10 members** is given **3 months** (90 days) to develop a **Maha-Khumb Mobile App**.

Breaking Down the Work into User Stories

Key Features:
✓ **User Registration & Ticket Booking**
✓ **Live Event Streaming**
✓ **Navigation & Crowd Management**
✓ **Emergency Alerts & Notifications**

The team assigns **Story Points (SP)** using Planning Poker.

User Story	SP
User Registration	**5**
Ticket Booking	**13**
Live Streaming	**21**
Navigation	**8**
Emergency Alerts	**5**

Total Story Points=5+13+21+8+5=52

Calculate Team Velocity

Velocity is the **average number of story points completed per Sprint**.
Let's assume the team follows **2-week Sprints** and their velocity is **20 Story Points per Sprint**.

Number of Sprints=Total Story Points/Velocity

52/20=2.6≈3 Sprints

Since the team has **3 months (6 Sprints)**, they can complete the app within time.

Estimating Sprint Duration

Each Sprint is **2 weeks (14 days)**.

Total Duration Required=Number of Sprints × Sprint Duration

=3×14=42 days

This means the team will **finish development within 42 days**, and the remaining time can be used for **testing and bug fixes**.

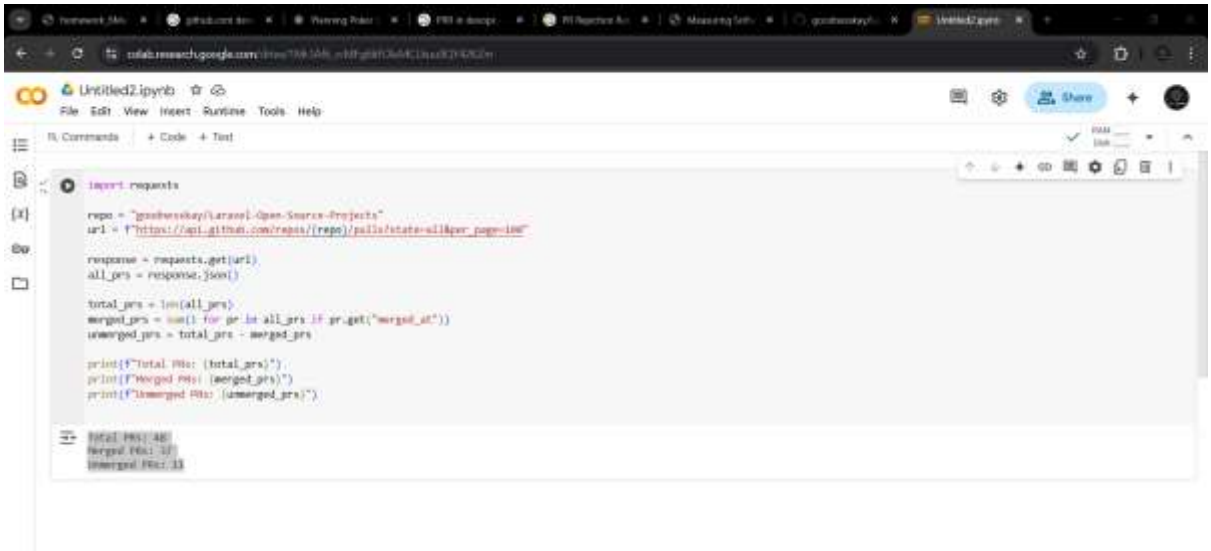
Q2. A)

PR Rejection Rate (PRR) for the repository **Laravel-Open-Source-Projects** using the formula:

PRR=Unmerged PRs/Merged PRs

This will help determine the level of software development waste due to unused PRs. I'll fetch the necessary data and provide the results. Stay tuned! ☺

I have analyzed the Pull Request Rejection Rate (PRR) for the GitHub repository Laravel-Open-Source-Projects. This metric indicates the proportion of pull requests (PRs) that were not merged into the main project, highlighting potential inefficiencies or unused contributions.



Data Overview:

- **Total PRs:** 48
- **Merged PRs:** 37
- **Unmerged PRs:** 11

Calculation:

Using the formula:

PRR=Unmerged PRs/Merged PRs
=11/37= 0.29 ≈29.7%

This results in a PRR of approximately **30 %**.