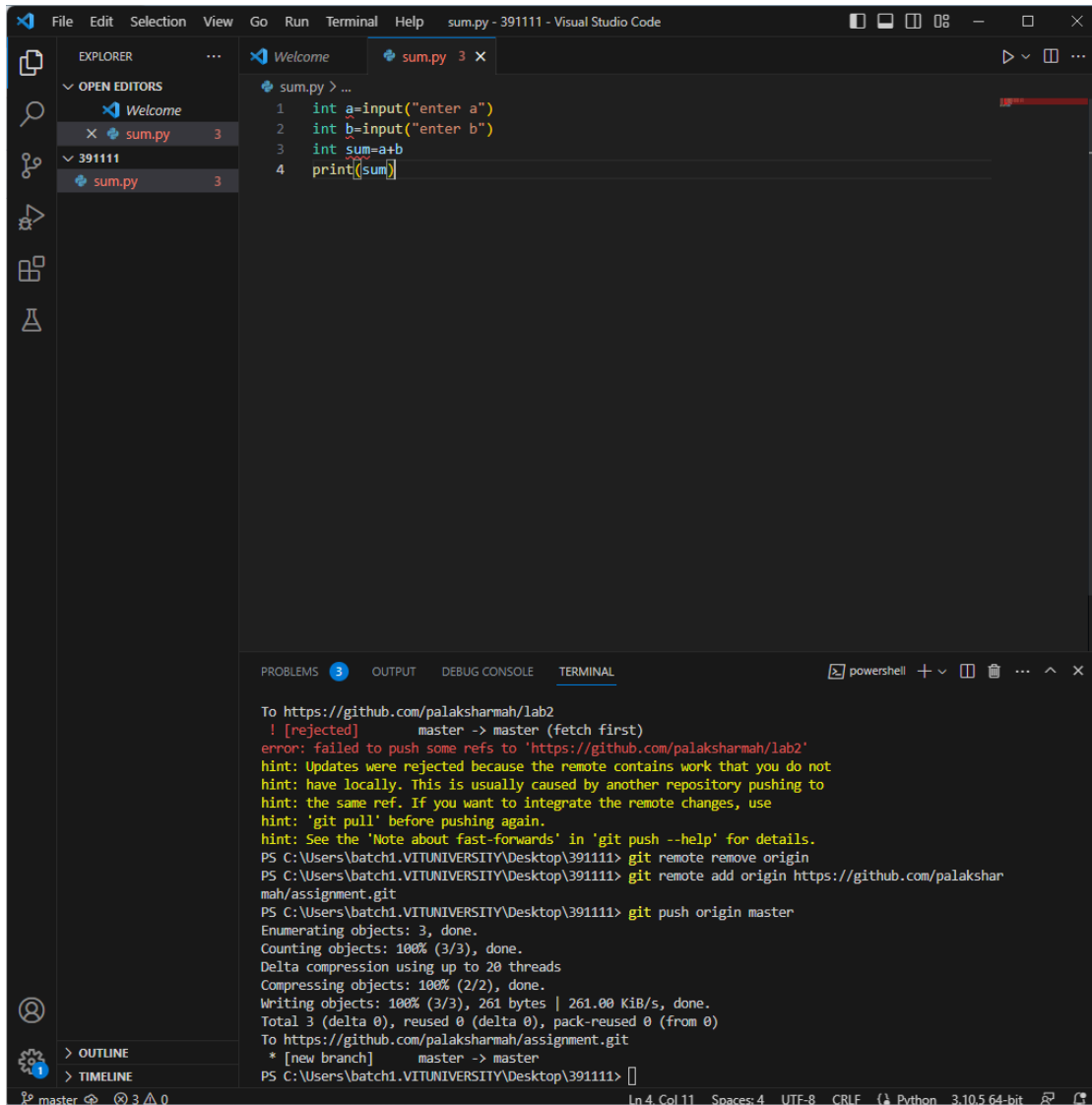


Case Study 1: New Project Version Control Setup Scenario: You are assigned to develop a Library Management System. Before coding, your team decides to enable version control. Tasks: - Create a project folder and open it in VS Code - Initialize a Git repository - Create a Python file and track it using Git - Commit the initial version



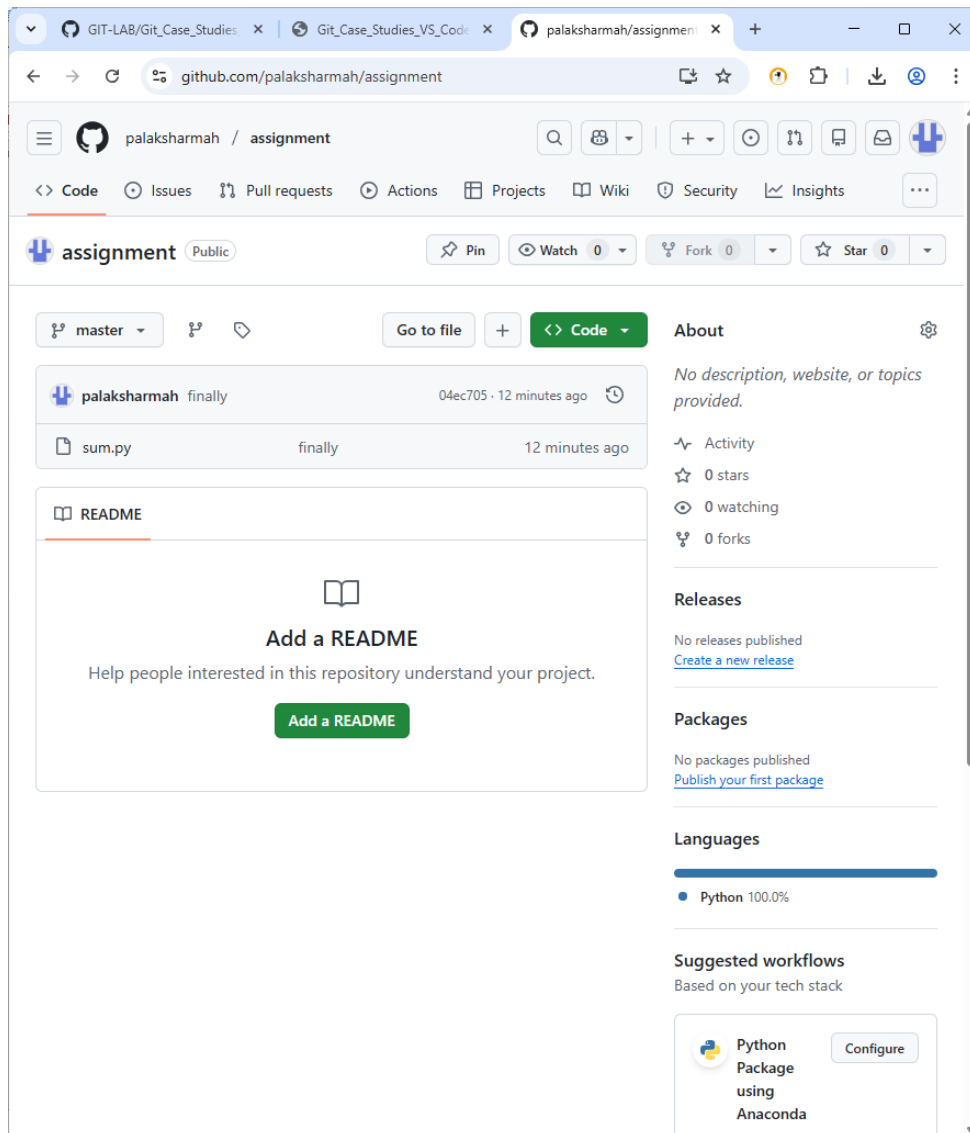
The screenshot shows the Visual Studio Code interface. The Explorer panel on the left shows a project folder named '391111' containing a file 'sum.py'. The Editor panel shows the content of 'sum.py':

```
1 int a=input("enter a")
2 int b=input("enter b")
3 int sum=a+b
4 print(sum)
```

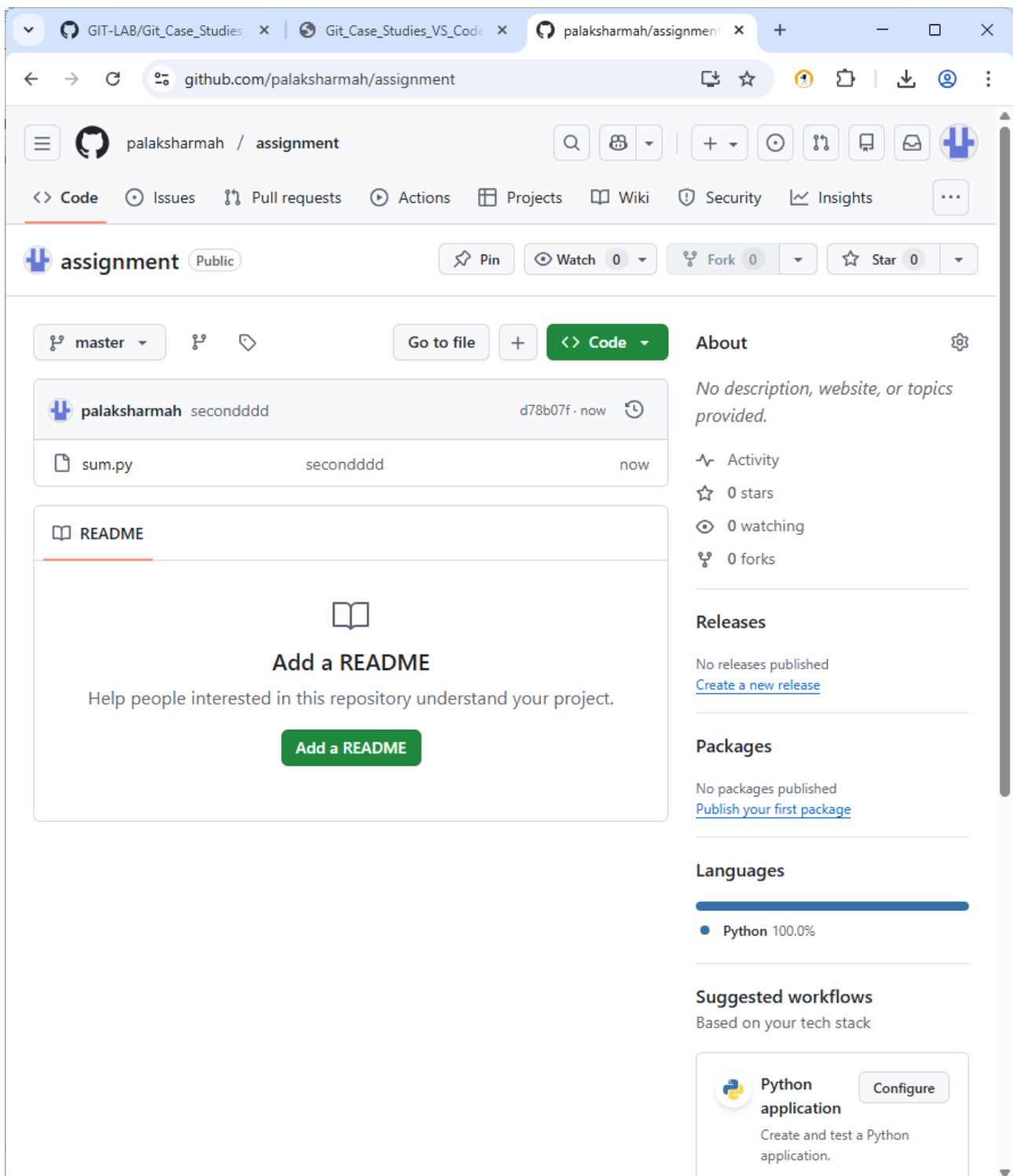
The Terminal panel at the bottom shows the output of the following commands:

```
PS C:\Users\batch1.VITUNIVERSITY\Desktop\391111> git remote remove origin
PS C:\Users\batch1.VITUNIVERSITY\Desktop\391111> git remote add origin https://github.com/palaksharmah/assignment.git
PS C:\Users\batch1.VITUNIVERSITY\Desktop\391111> git push origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 20 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 261 bytes | 261.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/palaksharmah/assignment.git
 * [new branch] master -> master
PS C:\Users\batch1.VITUNIVERSITY\Desktop\391111>
```

The status bar at the bottom indicates the current branch is 'master' and shows 3 files and 0 changes.



Case Study 2: Tracking Daily Code Changes Scenario: You are working on a Student Registration Module. You make small updates daily and need to record them. Tasks: - Modify an existing file - Check file differences - Stage and commit changes - View commit history



Case Study 3: Feature Development Using Branches Scenario: A new Login feature must be developed without disturbing main code. Tasks: - Create a new branch - Add login-related code - Commit changes - Switch between branches

The screenshot shows the GitHub interface for the repository 'palaksharmah / assignment'. The 'Branches' tab is selected, displaying a list of branches. The 'master' branch is the default branch, updated 5 minutes ago. The 'login' branch is listed under 'Your branches' and 'Active branches', updated 'now', and is 0 behind and 1 ahead of the master branch. A 'New branch' button is located in the top right corner.

Branch	Updated	Check status	Behind	Ahead	Pull request
master	5 minutes ago				Default
login	now		0	1	
login	now		0	1	

Case Study 4: Merging Feature into Main Code Scenario: The login feature is tested and approved.
 Tasks: - Switch to main branch - Merge feature branch - Verify merged content

