**ASSIGNMENT-6**

**Installing and Using a Python Library in Google Colab**

**1. Install a Python Library (e.g., NumPy)**

To install NumPy in your Google Colab notebook, execute the following code in a new code cell:

```python

!pip install numpy

```

**2. Demonstrate Usage of the Installed Library**

**Write code to demonstrate basic operations with NumPy. For example, create an array and perform operations on it:**

```python

import numpy as np

Create a NumPy array

arr = np.array([1, 2, 3, 4, 5])

Calculate the mean of the array

mean = np.mean(arr)

print("Array:", arr)

print("Mean:", mean)

```

This code snippet creates a NumPy array `[1, 2, 3, 4, 5]` and calculates its mean using NumPy's `np.mean()` function.

**3. Invite a Classmate or Friend to Collaborate**

To invite someone to collaborate on your Google Colab notebook:

- Click on the "Share" button in the top right corner.

- Enter the email address of your classmate or friend.

- Choose their role (e.g., "Editor" for full access).

- Click "Send".

Ensure your collaborator has a Google account to access the notebook.

**4. Collaborate on a Python Code Project or Data Analysis Task**

Work together on a Python code project or data analysis task within the notebook. You can share tasks, edit code simultaneously, and discuss your findings in real-time.

**5. Save and Share Your Colab Notebook**

- Save the Colab notebook to your Google Drive by clicking on "File" > "Save a copy in Drive".

- Share the saved notebook with your instructor or peer by clicking on the "Share" button again, copying the link, and sending it to them.

Example Workflow

Follow these steps to install NumPy, demonstrate its usage, invite a collaborator, and share your work effectively. Google Colab provides a seamless environment for collaborative coding and data analysis tasks, leveraging its cloud-based features and integration with Google Drive for efficient project management and sharing.