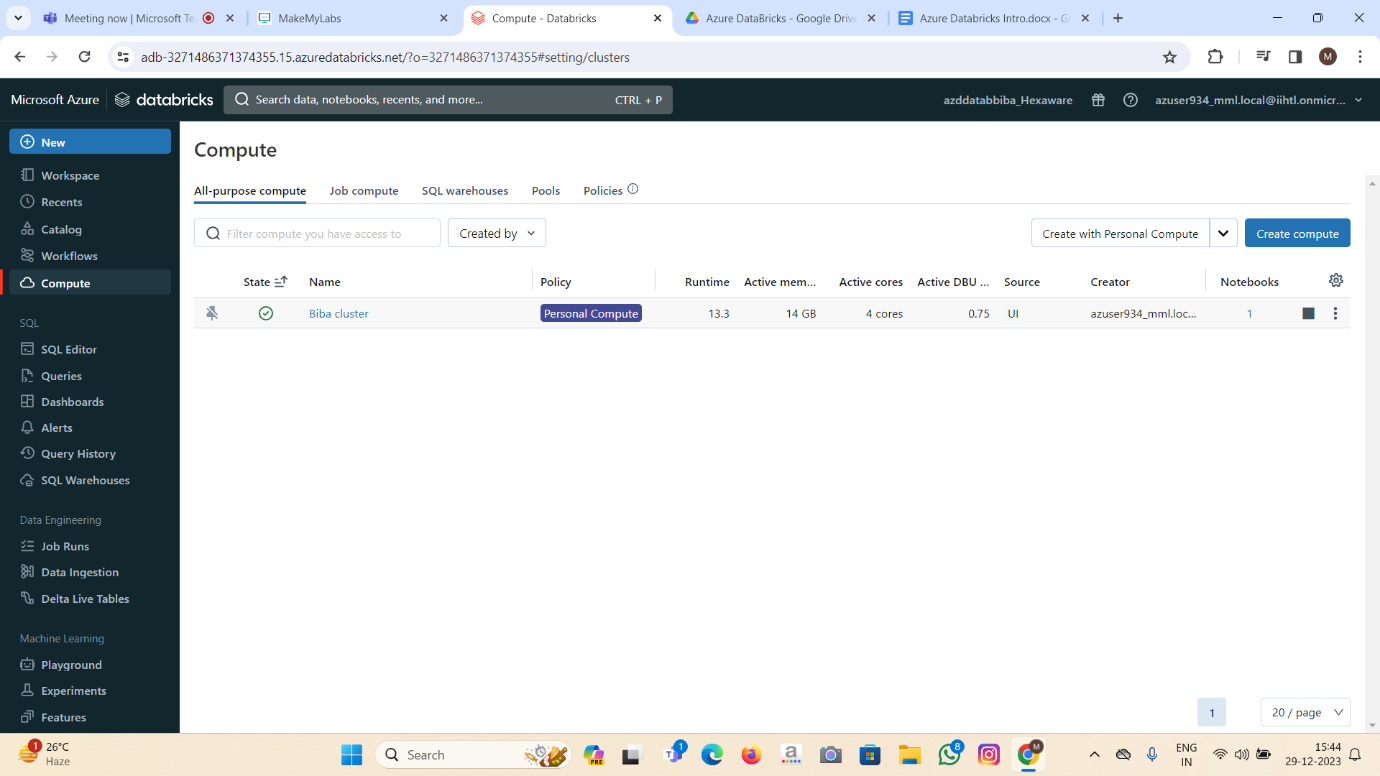
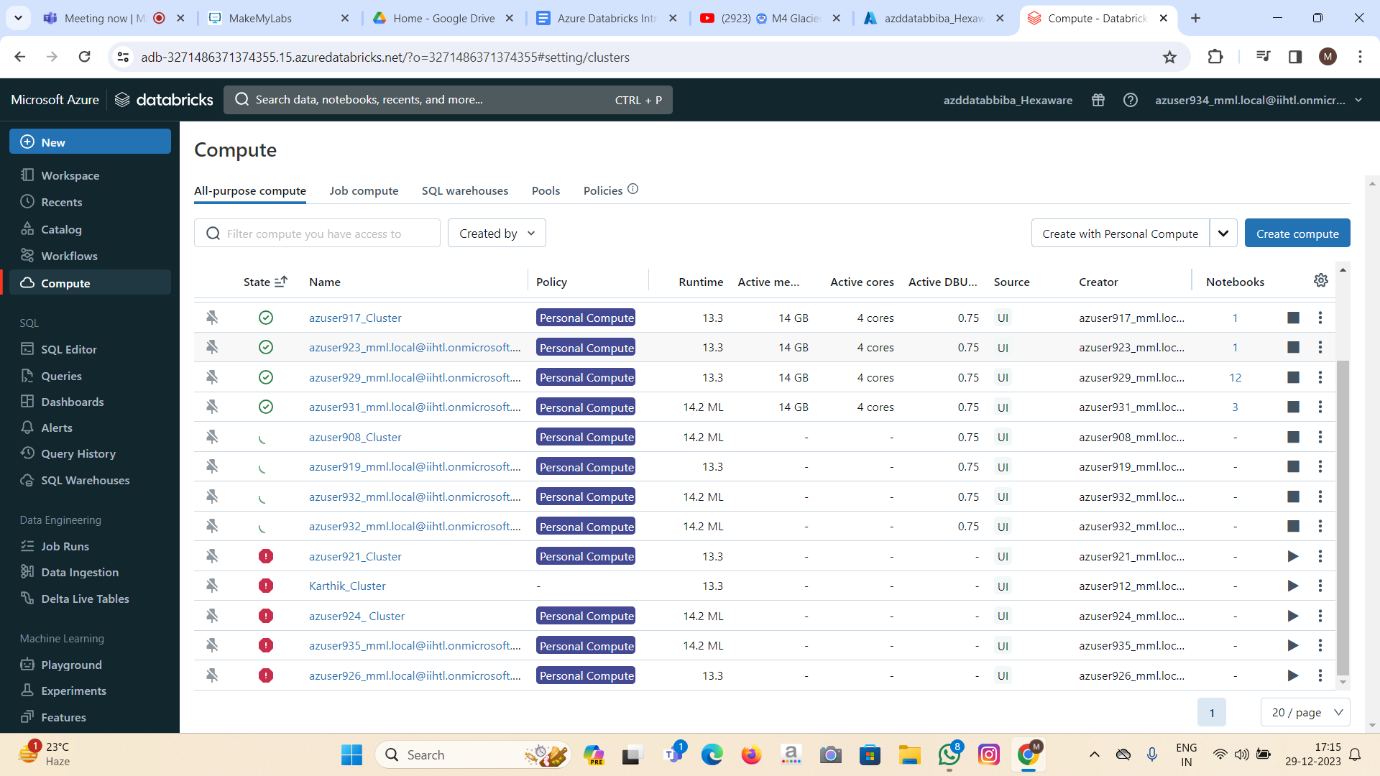
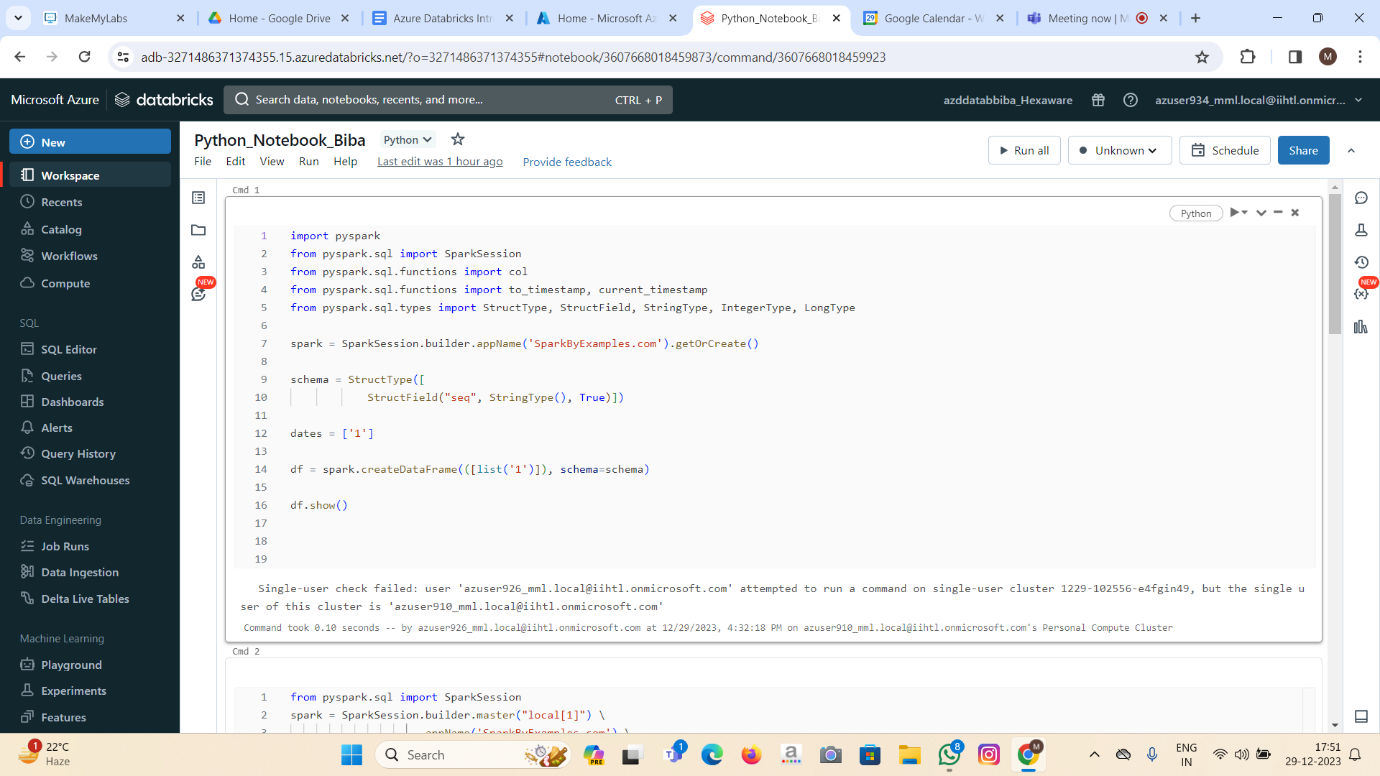
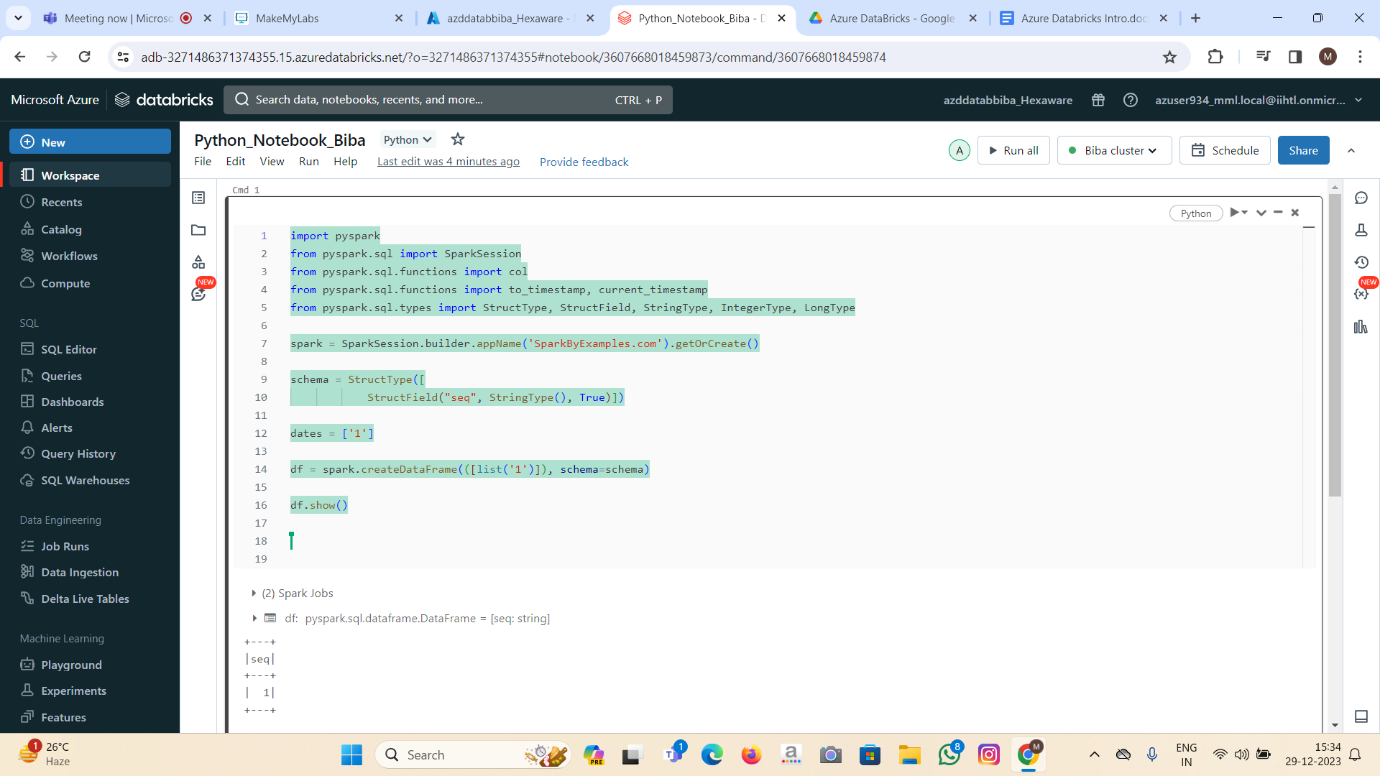
**ASSIGNMENT DATE-29-12-2023**

Creating a cluster in Azure Databricks involves several steps. A cluster is a set of virtual machines on which Databricks runs. Here's a step-by-step guide on how to create a cluster:

1. **Access your Azure Databricks Workspace:**
   * Navigate to the Azure Portal.
   * Find your Databricks workspace and click on it to open the workspace.
2. **Navigate to Clusters:**
   * In the left sidebar, click on "Clusters" to access the Clusters page.
3. **Create a New Cluster:**
   * Click on the "Create Cluster" button.
4. **Configure Cluster Settings:**
   * **Cluster Name:** Provide a unique name for your cluster.
   * **Cluster Mode:**
     + Standard: For general-purpose workloads.
     + High Concurrency: If you have many concurrent users.
   * **Databricks Runtime Version:** Choose the Databricks runtime version. You can select the latest stable version.
5. **Configure Node Settings:**
   * **Node Type:** Choose the type of virtual machine for your cluster nodes. Different node types have varying amounts of CPU and memory.
   * **Number of Worker Nodes:** Specify the number of worker nodes. You can adjust this based on the processing power you need.
6. **Advanced Options (Optional):**
   * Adjust other settings such as auto termination, custom libraries, etc., based on your requirements. You can leave these as default for a basic setup.
7. **Spark Config:**
   * Add any additional Spark configurations if needed.
8. **Permissions and Networking:**
   * Configure permissions and networking settings if you have specific requirements.
9. **Initialization Script (Optional):**
   * If you have custom initialization scripts, you can add them in the initialization script section.
10. **Auto Termination:**
    * Set the auto-termination time if you want the cluster to automatically terminate after a period of inactivity.
11. **Tags (Optional):**
    * Add any tags if needed for better organization.
12. **Review and Create:**
    * Review your settings to ensure they are accurate.
    * Click the "Create Cluster" button.
13. **Wait for Cluster to Start:**
    * The cluster creation process may take a few minutes. You can monitor the progress on the Clusters page.
14. **Access the Cluster:**
    * Once the cluster is running, you can start using it. You can run notebooks, jobs, and other tasks on the cluster.

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