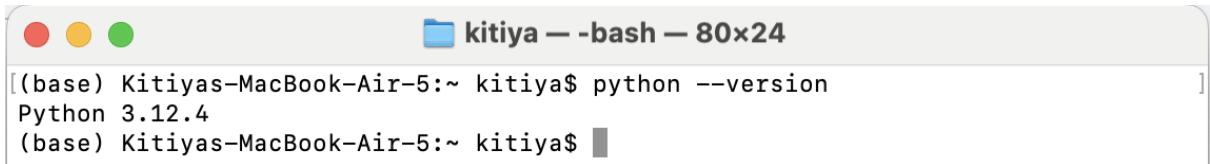


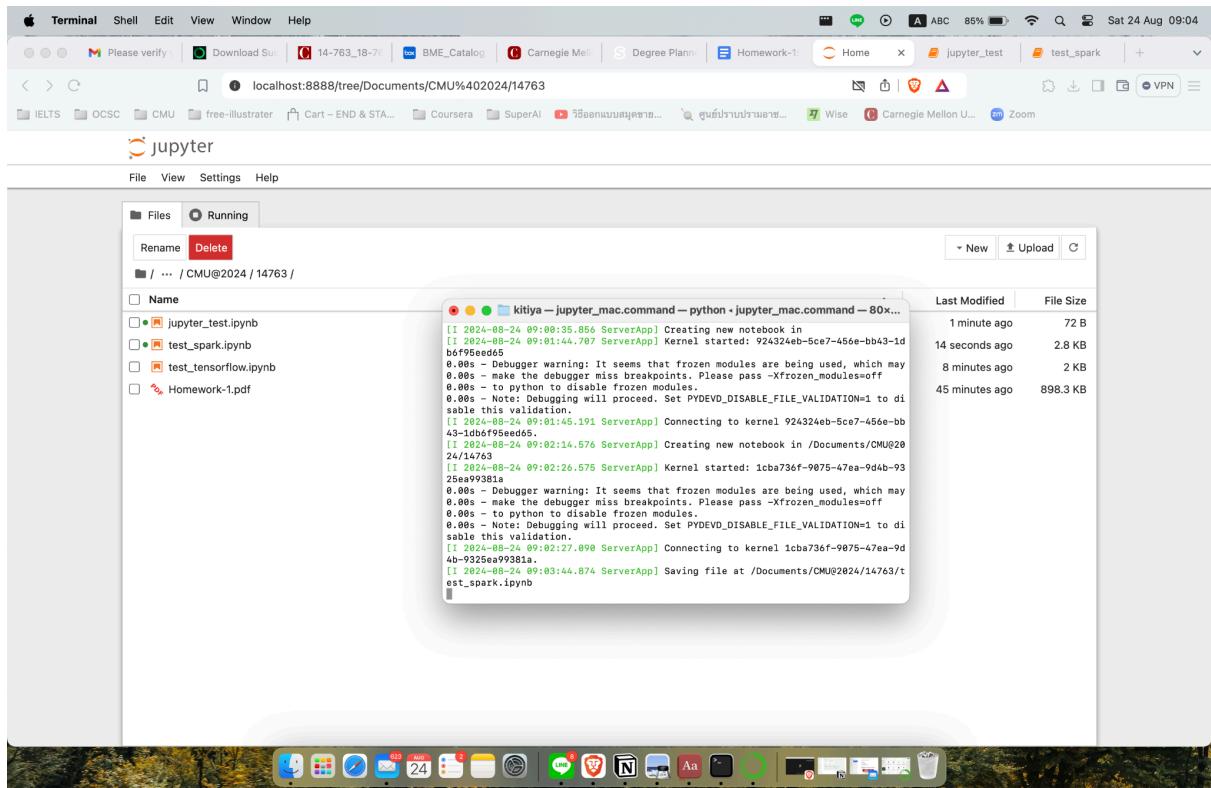
Part-I

1. Python 3.x

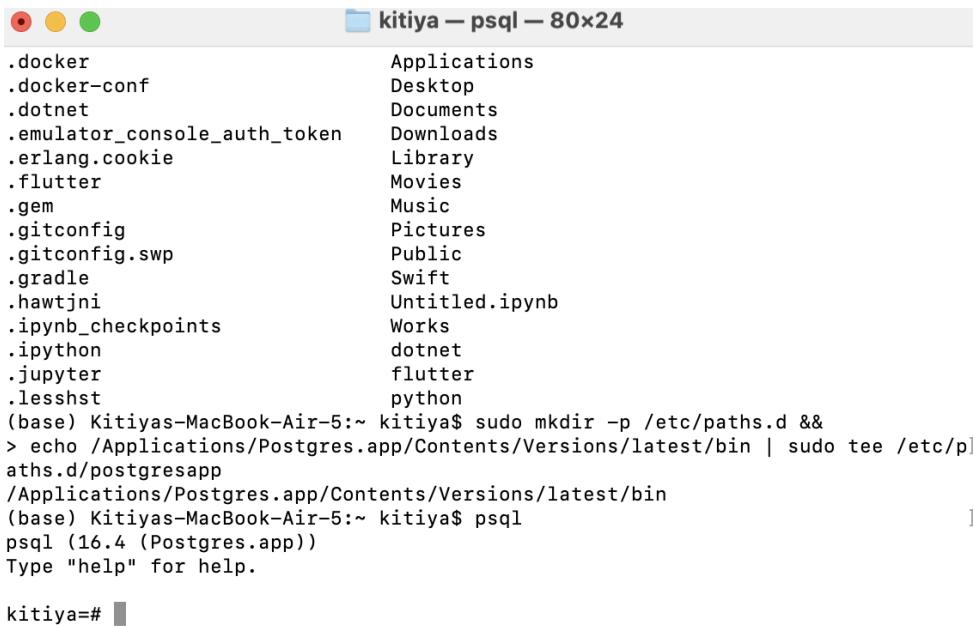


```
(base) Kitiyas-MacBook-Air-5:~ kitiya$ python --version
Python 3.12.4
(base) Kitiyas-MacBook-Air-5:~ kitiya$
```

2. Jupyter. Make sure you are able to open and run 'jupyter notebooks'.



3. PostgreSQL



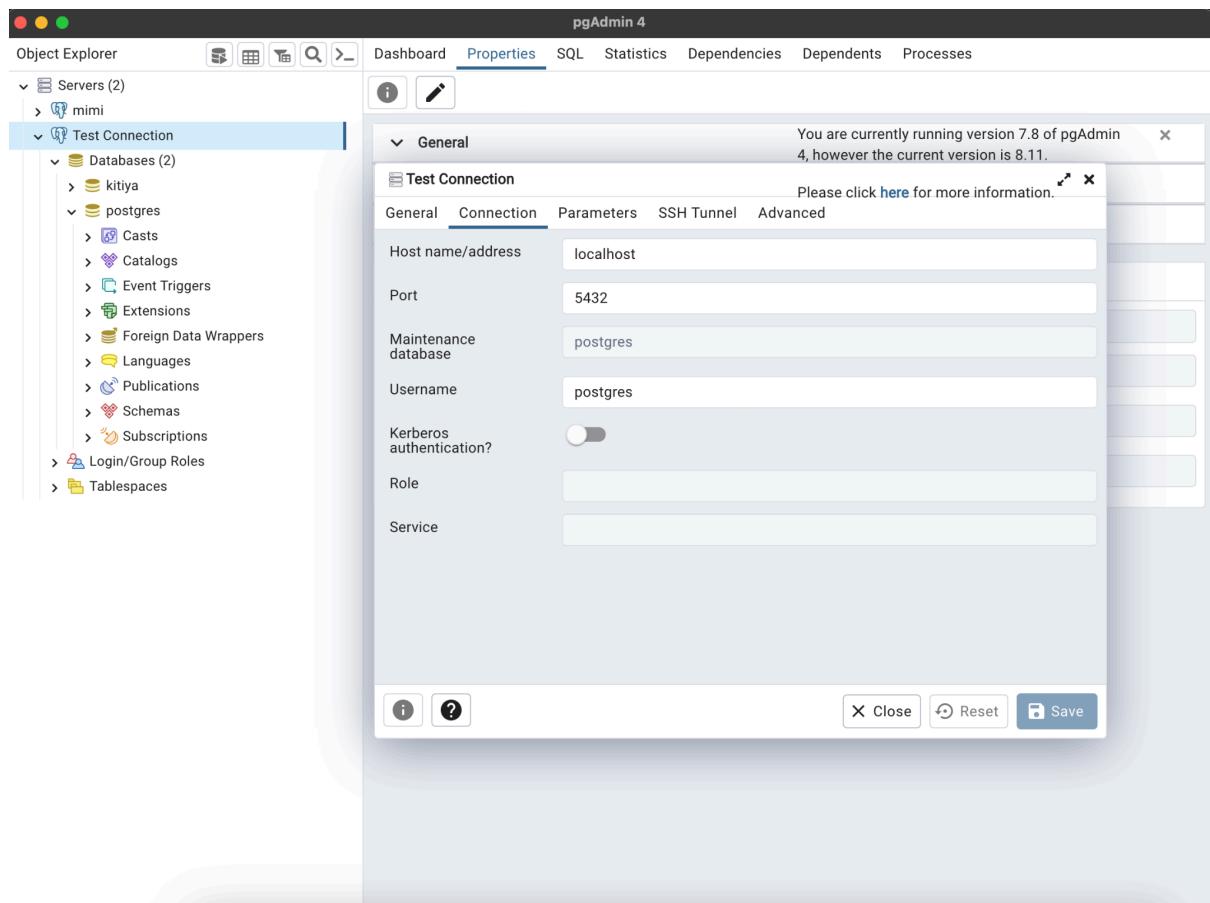
```

.kitiya          Applications
.docker          Desktop
.docker-conf    Documents
.dotnet          Downloads
.emulator_console_auth_token Library
.erlang.cookie   Movies
.flutter         Music
.gem             Pictures
.gitconfig       Public
.gitconfig.swp  Swift
.gradle         Untitled.ipynb
.hawtjni        Works
.ipynb_checkpoints dotnet
.ipython         flutter
.jupyter        python
.lessht          python
(base) Kitiyas-MacBook-Air-5:~ kitiya$ sudo mkdir -p /etc(paths.d &&
> echo /Applications/Postgres.app/Contents/Versions/latest/bin | sudo tee /etc/p
aths.d/postgresapp
/Applications/Postgres.app/Contents/Versions/latest/bin
(base) Kitiyas-MacBook-Air-5:~ kitiya$ psql
psql (16.4 (Postgres.app))
Type "help" for help.

kitiya=#

```

4. PgAdmin4



The screenshot shows the pgAdmin 4 application window. The left sidebar is the Object Explorer, displaying two servers: 'mimi' and 'kitiya'. Under 'kitiya', there are two databases: 'postgres' and 'kitiya'. The 'postgres' database has several objects listed under it. The main pane is titled 'Properties' and shows the 'Test Connection' properties for the 'mimi' server. The 'General' tab is selected, showing fields for Host name/address (localhost), Port (5432), Maintenance database (postgres), Username (postgres), and Kerberos authentication? (disabled). Other tabs include Connection, Parameters, SSH Tunnel, and Advanced. At the bottom are buttons for Close, Reset, and Save.

5. Apache Spark

The screenshot shows a Jupyter Notebook interface with the following details:

- Title:** test_spark
- Last Checkpoint:** 3 days ago
- File Menu:** File, Edit, View, Run, Kernel, Settings, Help
- Toolbar:** File, Edit, View, Run, Kernel, Settings, Help, Code, Trusted, JupyterLab, Python 3 (ipykernel)
- Code Cells:**
 - [3]:

```
# Uncomment the following lines if you are using Windows
#import findspark
#findspark.init()
#findspark.find()

import pyspark
```
 - [4]:

```
from pyspark.sql import SparkSession

spark = SparkSession.builder.appName('abc').getOrCreate()
```
 - [5]:

```
Setting default log level to "WARN".
To adjust logging level use sc.setLogLevel(newLevel). For SparkR, use setLogLevel.
24/08/27 18:25:42 WARN NativeCodeLoader: Unable to load native-hadoop lib
e

print(spark)
```
 - [6]:

```
<pyspark.sql.session.SparkSession object at 0x123dda3d0>
```
 - [6]:

```
spark
```
 - [6]:

```
SparkSession - in-memory
```
 - [6]:

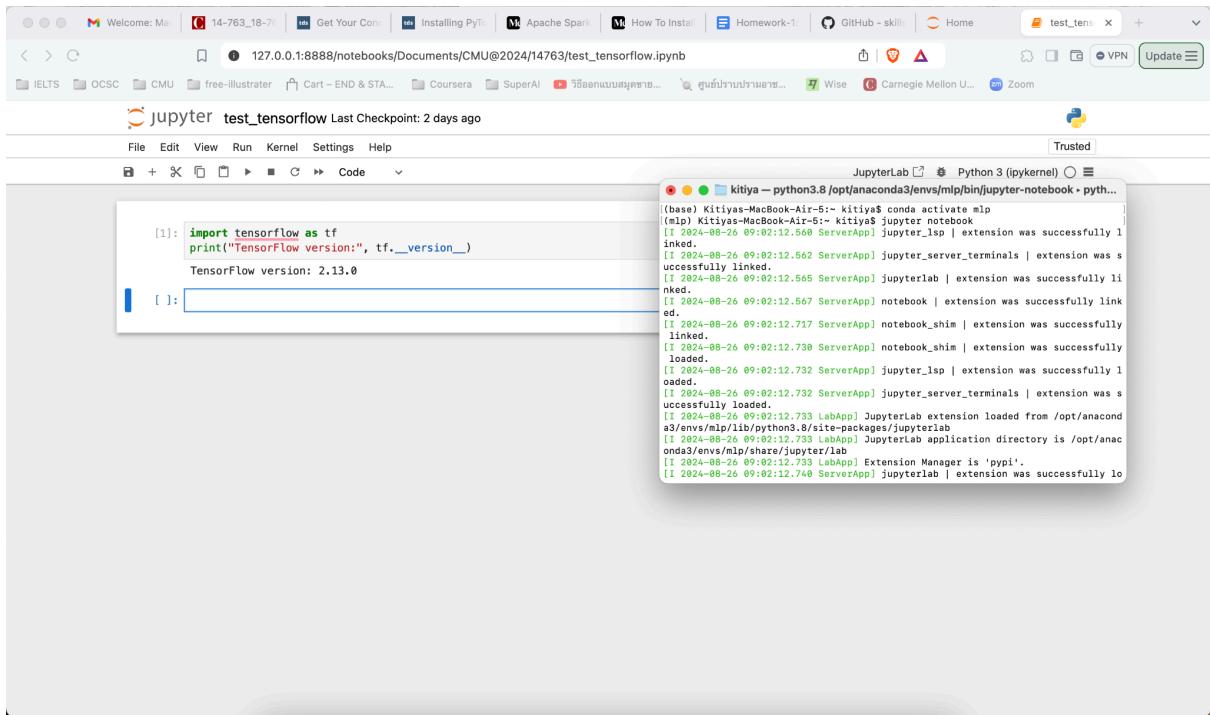
```
SparkContext
```
 - [6]:

```
Spark UI
```
- Version Information:**

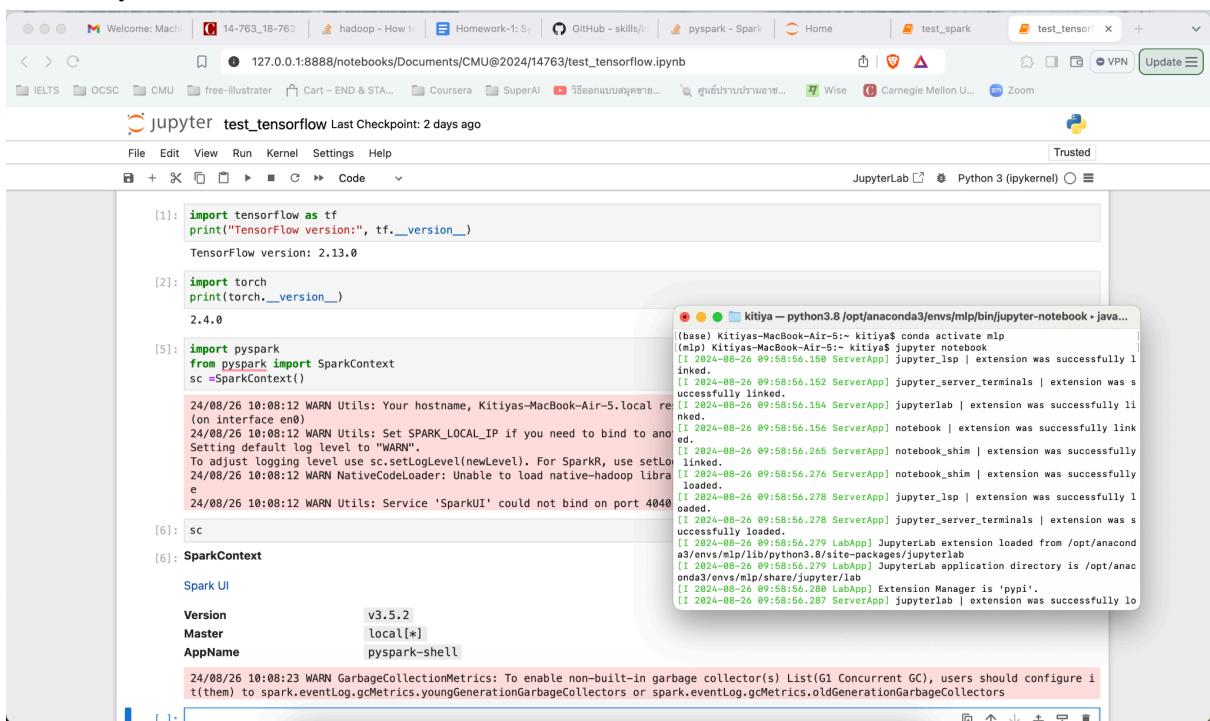
Version	v3.5.2
Master	local[*]
AppName	abc
- Terminal Output:**

```
● ● ● kitiya — python3.8 /opt/anaconda3/envs/mlp/bin/jupyter-notebook --java...
(help) Kitiyas-air-5i: kitiyas$ jupyter notebook
[I 2024-08-27 18:24:44.881 ServerApp] jupyter_lsp | extension was successfully l
inked.
[I 2024-08-27 18:24:44.885 ServerApp] jupyter_server_terminals | extension was s
uccessfully linked.
[I 2024-08-27 18:24:44.885 ServerApp] jupyterlab | extension was successfully li
nkied.
[I 2024-08-27 18:24:44.887 ServerApp] notebook | extension was successfully link
ed.
[I 2024-08-27 18:24:44.961 ServerApp] notebook_shim | extension was successfully
linked.
[I 2024-08-27 18:24:44.975 ServerApp] notebook_shim | extension was successfully
loaded.
[I 2024-08-27 18:24:44.976 ServerApp] jupyter_lsp | extension was successfully l
oaded.
[I 2024-08-27 18:24:44.977 ServerApp] jupyter_server_terminals | extension was s
uccessfully loaded.
[I 2024-08-27 18:24:44.978 LabApp] JupyterLab extension loaded from /opt/anacond
a/envs/mlp/lib/python3.8/site-packages/jupyterlab
[I 2024-08-27 18:24:44.978 LabApp] JupyterLab application directory is /opt/ana
conda3/envs/mlp/share/jupyter/lab
[I 2024-08-27 18:24:44.978 LabApp] Extension Manager is 'pypi'.
[I 2024-08-27 18:24:44.985 ServerApp] jupyterlab | extension was successfully lo
aded.
```

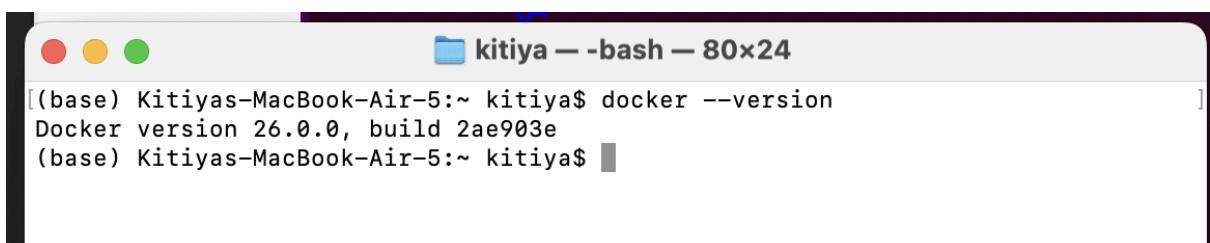
6. Tensorflow



7. Pytorch



8. Docker



Part-II

1. Introduction to GitHub

The screenshot shows a GitHub repository page for 'Kitiyaparnnn/skills-introduction-to-github'. The page title is 'Introduction to GitHub'. It features a section titled 'Finish' with the message 'Congratulations, you've completed this course and joined the world of developers!'. Below this, a list of accomplishments includes learning about GitHub, repositories, branches, commits, and pull requests. To the right of the text is an illustration of two GitHub octocat avatars on laptops. The page also includes sections for 'What's next?' and 'Contributors' (listing 'github-actions[bot]' and 'Kitiyaparnnn'). The top of the browser window shows a menu bar with Brave, File, Edit, View, History, Bookmarks, Profiles, Tab, Window, Help, and a tab bar with various links like Gmail, Dashboard, and the current GitHub page.

2. Communicate using markdown

The screenshot shows a GitHub repository page for 'Kitiyaparnnn/skills-communicate-using-markdown'. The page title is 'Communicate using Markdown'. It features a section titled 'Finish' with the message 'Congratulations friend, you've completed this course!'. Below this, a list of accomplishments includes learning about Markdown, headings, images, code examples, and task lists. To the right of the text is an illustration of a GitHub octocat character with colorful confetti. The page also includes sections for 'What's next?' and 'Contributors' (listing 'github-actions[bot]' and 'Kitiyaparnnn'). The top of the browser window shows a menu bar with Brave, File, Edit, View, History, Bookmarks, Profiles, Tab, Window, Help, and a tab bar with various links like Gmail, Dashboard, and the current GitHub page.

3. Test Toolchains

A) A screenshot of your GitHub repository history

Commits

		All users	All time
-o-	Commits on Aug 27, 2024		
	Second PDF Kitiyaparnnn committed 1 minute ago	(Verified) 036994e	...
	Deleted First PDF Kitiyaparnnn committed 2 minutes ago	(Verified) 42b8560	...
	First PDF Kitiyaparnnn committed 8 minutes ago	(Verified) 425fe6f	...
-o-	Commits on Aug 26, 2024		
	Initial commit Kitiyaparnnn committed 10 hours ago	(Verified) d6e59fa	...

B) A screenshot of the current view of your repository

Pin	Unwatch
	1
main	1 Branch 0 Tags
Go to file	Add file
Code	
Kitiyaparnnn Second PDF	036994e · 9 minutes ago 4 Commits
Homework-1.pdf	Second PDF 9 minutes ago
README.md	Initial commit 10 hours ago

C) <https://github.com/Kitiyaparnnn/Test-Toolchains>