

Exp No: 1

INSTALLATION AND CONFIGURATION OF TENSORFLOW

Aim:

To install and configure TensorFlow in anaconda environment in Windows 10.

Procedure:

1. Download Anaconda Navigator and install.

2. Open Anaconda prompt

3. Create a new environment dlc with python 3.7 using the following command:

```
conda create -n dlc python=3.7
```

4. Activate newly created environment dlc using the following command:

```
conda activate dlc
```

5. In dlc prompt, install tensorflow using the following command:

```
pip install tensorflow
```

6. Next install Tensorflow-datasets using the following command:

```
pip install tensorflow-datasets
```

7. Install scikit-learn package using the following command:

```
pip install scikit-learn
```

8. Install pandas package using the following command:

```
pip install pandas
```

9. Lastly, install jupyter notebook

```
pip install jupyter notebook
```

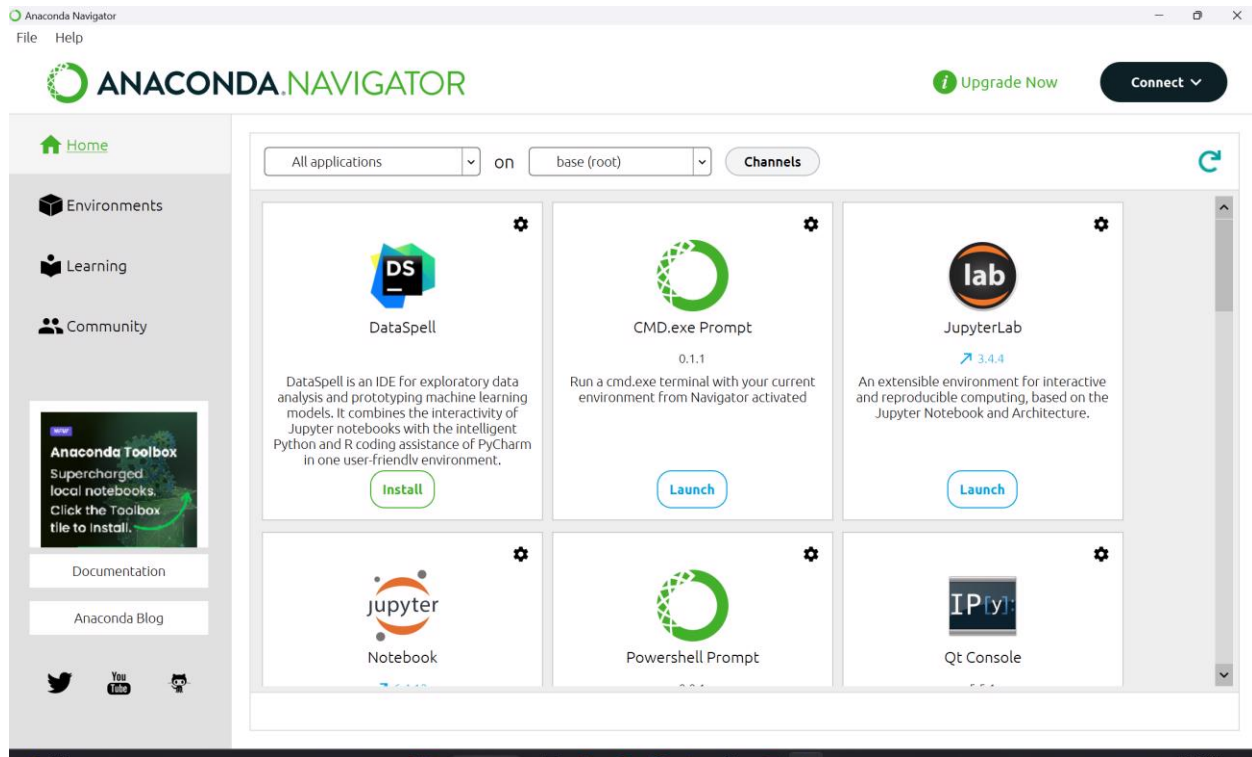
10. Open jupyter notebook by typing the following in dlc prompt:

```
jupyter notebook
```

11. Click create new and then choose python 3 (ipykernel)

12. Give the name to the file

13. Type the code and click Run button to execute (eg. Type `import tensorflow` and then run)

Output:

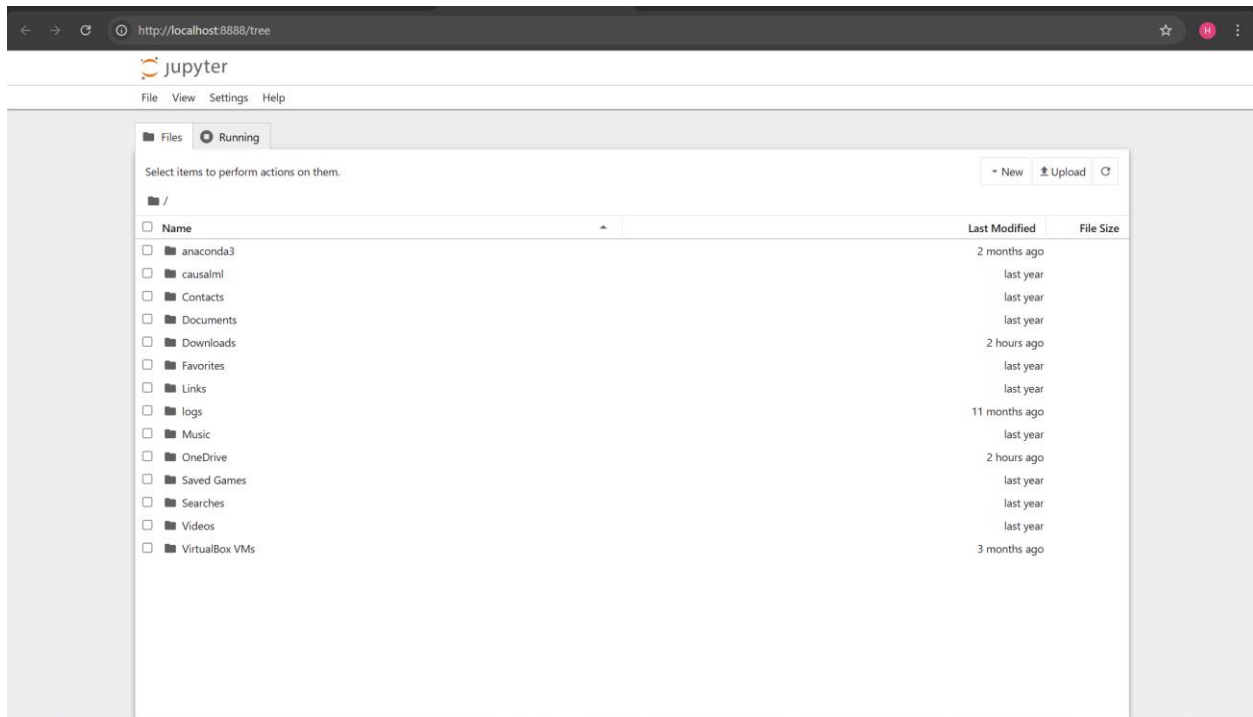
```

Anaconda Prompt (anaconda) x + v

(base) C:\Users\hares>conda activate ML

(ML) C:\Users\hares>pip install tensorflow
Requirement already satisfied: tensorflow in c:\users\hares\anaconda3\envs\ml\lib\site-packages (2.18.0)
Requirement already satisfied: tensorflow-intel==2.18.0 in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow) (2.18.0)
Requirement already satisfied: absl-py>=1.0.0 in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow-intel==2.18.0->tensorflow) (2.1.0)
Requirement already satisfied: astunparse>=1.6.0 in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow-intel==2.18.0->tensorflow) (1.6.3)
Requirement already satisfied: flatbuffers>=24.3.25 in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow-intel==2.18.0->tensorflow) (24.3.25)
Requirement already satisfied: gast!=0.5.0,!0.5.1,!0.5.2,>=0.2.1 in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow-intel==2.18.0->tensorflow) (0.6.0)
Requirement already satisfied: google-pasta>=0.1.1 in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow-intel==2.18.0->tensorflow) (0.2.0)
Requirement already satisfied: libclang>=13.0.0 in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow-intel==2.18.0->tensorflow) (18.1.1)
Requirement already satisfied: opt-einsum>=2.3.2 in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow-intel==2.18.0->tensorflow) (3.3.0)
Requirement already satisfied: packaging in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow-intel==2.18.0->tensorflow) (24.1)
Requirement already satisfied: protobuf!=4.21.0,!4.21.1,!4.21.2,!4.21.3,!4.21.4,!4.21.5,<6.0.0dev,>=3.20.3 in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow-intel==2.18.0->tensorflow) (4.25.4)
Requirement already satisfied: requests<3,>=2.21.0 in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow-intel==2.18.0->tensorflow) (2.32.3)
Requirement already satisfied: setuptools in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow-intel==2.18.0->tensorflow) (72.1.0)
Requirement already satisfied: six>=1.12.0 in c:\users\hares\anaconda3\envs\ml\lib\site-packages (from tensorflow-intel==2.18.0->tensorflow) (1.16.0)

```

**Result:**

Tensorflow has been successfully installed in anaconda environment and jupyter notebook created successfully.