Deep Learning

Application 3

**TensorFlow application which creates two nodes which are constant and perform multiplication operation and run it with the session.
We use TensorBoard to display the Neural Network.**

```python
import tensorflow as tf

#Build computational graph
node1 = tf.constant(3.0, tf.float32)
node2 = tf.constant(4.0, tf.float32)

output = node1 * node2

# Run computational graph
sobj = tf.compat.v1.Session()

File_Writer = tf.compat.v1.summary.FileWriter("Demo",sobj.graph)

print(sobj.run(output))

sobj.close()
```

Output of above application

```
led to use: AVX2 FMA
12.0
(base) MacBook-Pro-de-MARVELLOUS:TensorApplications
 marvellous$ python3 Tensor3.py
2019-06-08 22:01:50.562537: I tensorflow/core/platf
orm/cpu_feature_guard.cc:142] Your CPU supports ins
tructions that this TensorFlow binary was not compi
led to use: AVX2 FMA
12.0
(base) MacBook-Pro-de-MARVELLOUS:TensorApplications
 marvellous$ tensorboard --logdir="Demo"
W0608 22:02:00.375401 123145428885504 plugin_event_
accumulator.py:294] Found more than one graph event
 per run, or there was a metagraph containing a gra
ph_def, as well as one or more graph events.  Overw
riting the graph with the newest event.
W0608 22:02:00.375644 123145428885504 plugin_event_
accumulator.py:302] Found more than one metagraph e
vent per run. Overwriting the metagraph with the ne
west event.
TensorBoard 1.14.0a20190606 at http://MacBook-Pro-d
e-MARVELLOUS.local:6006/ (Press CTRL+C to quit)
```

For graphical view we use TensorBoard

Run below command as

tensorboard —logdir="Demo"

Open url to display
#http://localhost:6006

Output by using TensorBoard