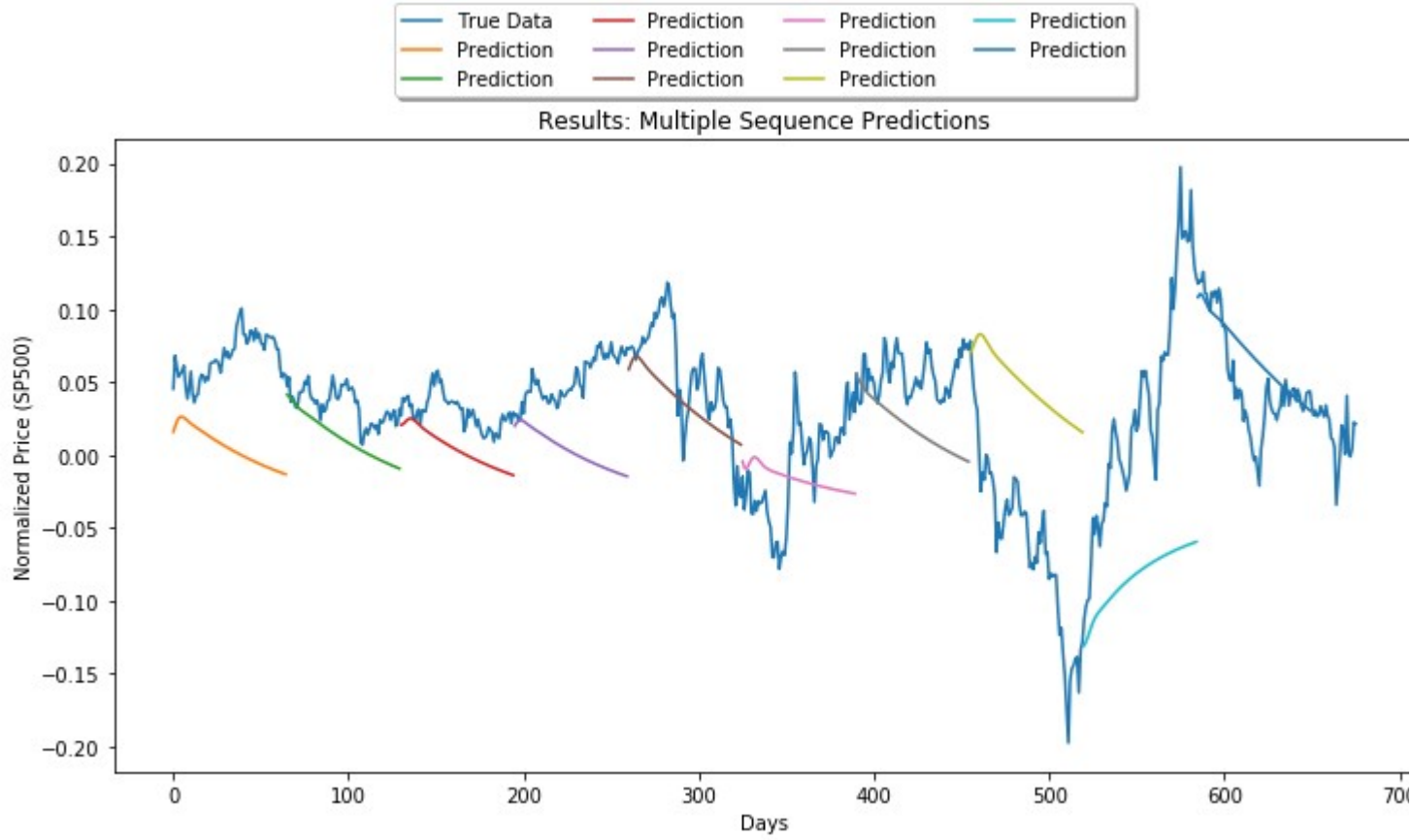
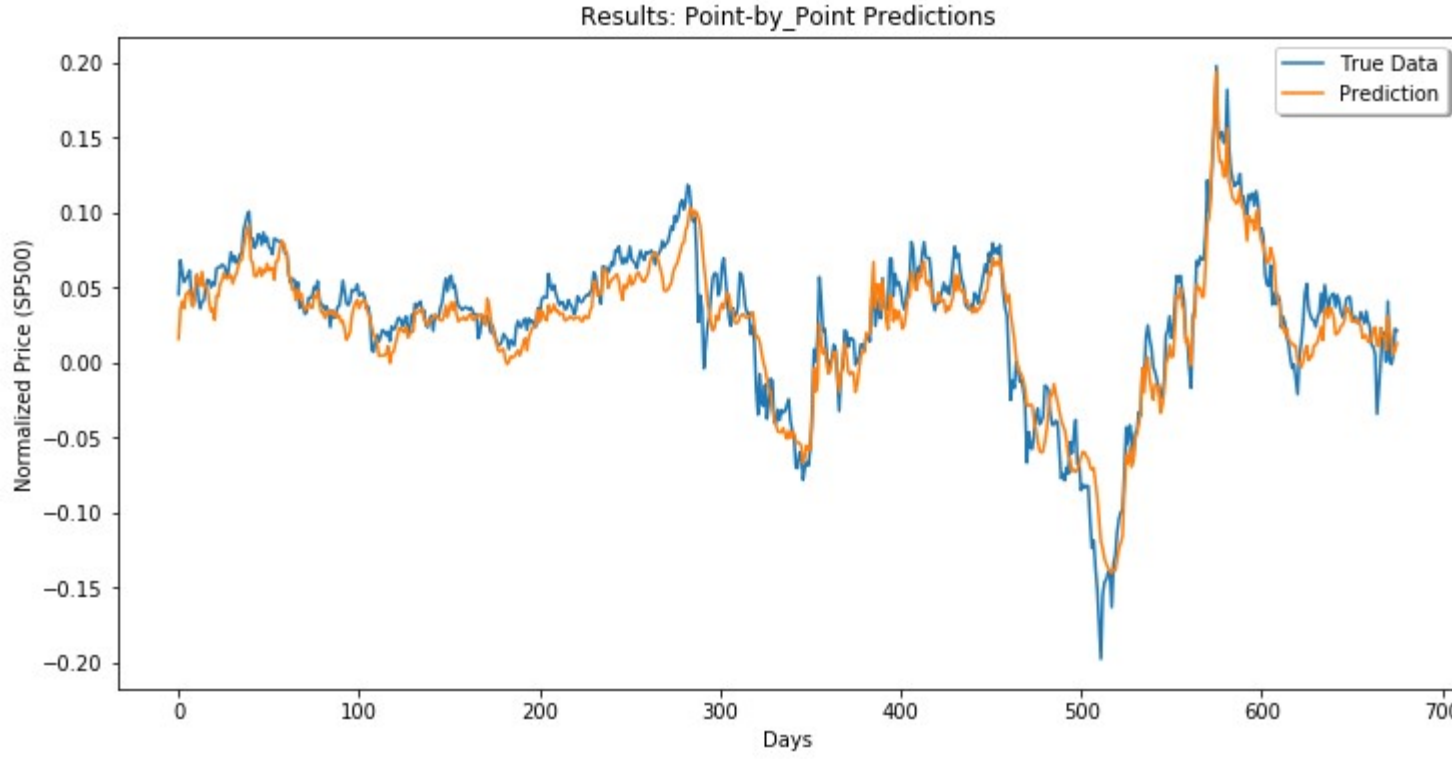
```
Python 3.7.3 (default, Mar 27 2019, 17:13:21) [MSC v.1915 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 7.4.0 -- An enhanced Interactive Python.

In [1]: runfile('C:/Users/Yesser/Desktop/data_collection/lstm_new_example/LSTM-Neural-
Network-for-Time-Series-Prediction-master/data/LSTM_Multi_Seq_prediction/
sequential_data_lstm.py', wdir='C:/Users/Yesser/Desktop/data_collection/lstm_new_example/
LSTM-Neural-Network-for-Time-Series-Prediction-master/data/LSTM_Multi_Seq_prediction')
Using TensorFlow backend.
WARNING: Logging before flag parsing goes to stderr.
W0821 17:12:17.470623 11004 deprecation_wrapper.py:119] From C:\Users\Yesser\Anaconda3\lib
\site-packages\keras\backend\tensorflow_backend.py:74: The name tf.get_default_graph is
deprecated. Please use tf.compat.v1.get_default_graph instead.

W0821 17:12:17.480903 11004 deprecation_wrapper.py:119] From C:\Users\Yesser\Anaconda3\lib
\site-packages\keras\backend\tensorflow_backend.py:517: The name tf.placeholder is
deprecated. Please use tf.compat.v1.placeholder instead.

W0821 17:12:17.486520 11004 deprecation_wrapper.py:119] From C:\Users\Yesser\Anaconda3\lib
\site-packages\keras\backend\tensorflow_backend.py:4138: The name tf.random_uniform is
deprecated. Please use tf.random.uniform instead.

W0821 17:12:17.640805 11004 deprecation_wrapper.py:119] From C:\Users\Yesser\Anaconda3\lib
\site-packages\keras\backend\tensorflow_backend.py:133: The name tf.placeholder_with_default
is deprecated. Please use tf.compat.v1.placeholder_with_default instead.

W0821 17:12:17.647353 11004 deprecation.py:506] From C:\Users\Yesser\Anaconda3\lib\site-
packages\keras\backend\tensorflow_backend.py:3445: calling dropout (from
tensorflow.python.ops.nn_ops) with keep_prob is deprecated and will be removed in a future
version.
Instructions for updating:
Please use `rate` instead of `keep_prob`. Rate should be set to `rate = 1 - keep_prob`.
W0821 17:12:18.193699 11004 deprecation_wrapper.py:119] From C:\Users\Yesser\Anaconda3\lib
\site-packages\keras\optimizers.py:790: The name tf.train.Optimizer is deprecated. Please
use tf.compat.v1.train.Optimizer instead.


_________________________________________________________________
Layer (type)                 Output Shape              Param #
=================================================================
lstm_1 (LSTM)                (None, 64, 100)           41200
_________________________________________________________________
dropout_1 (Dropout)          (None, 64, 100)           0
_________________________________________________________________
lstm_2 (LSTM)                (None, 64, 100)           80400
_________________________________________________________________
lstm_3 (LSTM)                (None, 64, 64)            42240
_________________________________________________________________
lstm_4 (LSTM)                (None, 100)               66000
_________________________________________________________________
dropout_2 (Dropout)          (None, 100)               0
_________________________________________________________________
dense_1 (Dense)              (None, 1)                 101
=================================================================
Total params: 229,941
Trainable params: 229,941
Non-trainable params: 0
_________________________________________________________________
[Model] training started
```

```
[Model] 5 epochs, 32 batch_size 130 steps_per_epoch
W0821 17:12:18.430742 11004 deprecation.py:323] From C:\Users\Yesser\Anaconda3\lib\site-
packages\tensorflow\python\ops\math_grad.py:1250: add_dispatch_support.<locals>.wrapper
(from tensorflow.python.ops.array_ops) is deprecated and will be removed in a future
version.
Instructions for updating:
Use tf.where in 2.0, which has the same broadcast rule as np.where
W0821 17:12:20.312466 11004 deprecation_wrapper.py:119] From C:\Users\Yesser\Anaconda3\lib
\site-packages\keras\backend\tensorflow_backend.py:986: The name tf.assign_add is
deprecated. Please use tf.compat.v1.assign_add instead.

Epoch 1/5
130/130 [==============================] - 16s 122ms/step - loss: 0.0034
Epoch 2/5
  1/130 [..............................] - ETA: 14s - loss: 8.9450e-04C:\Users\Yesser
\Anaconda3\lib\site-packages\keras\callbacks.py:569: RuntimeWarning: Early stopping
conditioned on metric `val_loss` which is not available. Available metrics are: loss
  (self.monitor, ','.join(list(logs.keys()))), RuntimeWarning
C:\Users\Yesser\Anaconda3\lib\site-packages\keras\callbacks.py:434: RuntimeWarning: Can save
best model only with val_loss available, skipping.
  'skipping.' % (self.monitor), RuntimeWarning)
130/130 [==============================] - 15s 116ms/step - loss: 0.0013
Epoch 3/5
130/130 [==============================] - 15s 116ms/step - loss: 9.5635e-04
Epoch 4/5
130/130 [==============================] - 14s 107ms/step - loss: 6.8830e-04
Epoch 5/5
130/130 [==============================] - 13s 102ms/step - loss: 6.3279e-04
[Model] Training completed. Model saved as saved_models\21082019-171218-e5.h5
Time taken: 0:01:16.032289
[Model] predicting sequences multiple
[Model] Predicting Point-by-Point
<Figure size 432x288 with 0 Axes>
<Figure size 432x288 with 0 Axes>
```




```
<Figure size 432x288 with 0 Axes>
<Figure size 432x288 with 0 Axes>
```



In [2]: