# June, SAC, LSTM-Basic:

# 3365.0527538185884

# 2709.5685428139836

# 2682.176218725889

# LSTM-1 is BAD:

# model.add(LSTM(64,input\_shape=(X\_train.shape[1],X\_train.shape[2]))) # input layer; 31 data inputs, 1 step (1 hr)

# model.add(Dense(32, 'relu')) #hidden layer 1

# model.add(Dense(1, 'linear')) #output layer

# 3047.106441143009

# 3279.308643887853

# 2931.9482840644505

#LSTM-2:

# model.add(LSTM(128,input\_shape=(X\_train.shape[1],X\_train.shape[2]))) # input layer; 31 data inputs, 1 step (1 hr)

# model.add(Dense(32, 'relu')) #hidden layer 1

# model.add(Dense(32, 'relu')) #hidden layer 1

# model.add(Dense(1, 'linear')) #output layer

# 2614.353682862183

# 3275.0059424474907

# 2728.6914050742903

#LSTM-3:

# model.add(LSTM(128,input\_shape=(X\_train.shape[1],X\_train.shape[2]))) # input layer; 31 data inputs, 1 step (1 hr)

# model.add(Dense(64, 'relu')) #hidden layer 1

# model.add(Dense(32, 'relu')) #hidden layer 1

# model.add(Dense(1, 'linear')) #output layer

# 2855.5003686848095

# 2966.7474960557192

# 3425.6539014270707

#LSTM-4:

# model.add(LSTM(128,input\_shape=(X\_train.shape[1],X\_train.shape[2]))) # input layer; 31 data inputs, 1 step (1 hr)

# model.add(Dense(64, 'relu')) #hidden layer 1

# model.add(Dense(1, 'linear')) #output layer

# 2613.3168277215836

# 2734.576641118105

# 3143.187063066916

#LSTM-5:

# model.add(LSTM(128, input\_shape=(X\_train.shape[1],X\_train.shape[2]))) #100 steps, 1 feature

# model.add(Dense(1, 'linear')) #output layer

# 3259.147332496291

# 3078.1125806134805

# 3877.9240904623875

from statistics import mean

avg1 = mean([3365.0527538185884, 2709.5685428139836 , 2682.176218725889])

avg2 = mean([3047.106441143009, 3279.308643887853, 2931.9482840644505])

avg3 = mean([2614.353682862183, 3275.0059424474907, 2728.6914050742903])

avg4 = mean([2855.5003686848095, 2966.7474960557192, 3425.6539014270707])

avg5 = mean([2613.3168277215836, 2734.576641118105, 3143.187063066916])

avg6 = mean([3259.147332496291, 3078.1125806134805, 3877.9240904623875])

print('lstm-basic: ', str(avg1))

print('lstm-1: ', str(avg2))

print('lstm-2: ', str(avg3))

print('lstm-3: ', str(avg4))

print('lstm-4: ', str(avg5))

print('lstm-5: ', str(avg6))

lstm-basic: 2918.932505119487

lstm-1: 3086.121123031771

lstm-2: 2872.6836767946547

lstm-3: 3082.6339220558666

lstm-4: 2830.3601773022015

lstm-5: 3405.061334524053