# Assignment 8

Name: sai sahithi katuri

1. I used both 1:1 and M:1
2. Sequence\_length = 1,3

Number of predictors=1

Number of sequences=25,23

1. I have fixed sequence length
2. I have padded data by sorting the data
3. Sorted the data ascending.
4. Batch size = 1
5. Stateful
6. Didn’t perform subsequences
7. Didn’t perform realtime rolling forecast
8. One directional

Model: "sequential\_11"

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Layer (type) Output Shape Param #

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lstm\_11 (LSTM) (None, 32) 4352

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

dense\_11 (Dense) (None, 26) 858

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Total params: 5,210

Trainable params: 5,210

Non-trainable params: 0

Type 2

Model: "sequential\_17"

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Layer (type) Output Shape Param #

=================================================================

lstm\_17 (LSTM) (None, 32) 4608

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dense\_17 (Dense) (None, 26) 858

=================================================================

Total params: 5,466

Trainable params: 5,466

1. 88%,82%

A -> B

B -> C

C -> D

D -> E

E -> F

F -> G

G -> H

H -> I

I -> J

J -> K

K -> L

L -> M

M -> N

N -> O

O -> P

P -> Q

Q -> R

R -> S

S -> T

T -> U

U -> V

V -> W

W -> X

X -> Y

Y -> Z

[[0], [1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11], [12], [13], [14], [15], [16], [17], [18], [19], [20], [21], [22], [23], [24]]

[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25]

Type 2

ABC -> D

BCD -> E

CDE -> F

DEF -> G

EFG -> H

FGH -> I

GHI -> J

HIJ -> K

IJK -> L

JKL -> M

KLM -> N

LMN -> O

MNO -> P

NOP -> Q

OPQ -> R

PQR -> S

QRS -> T

RST -> U

STU -> V

TUV -> W

UVW -> X

VWX -> Y

WXY -> Z

[[0, 1, 2], [1, 2, 3], [2, 3, 4], [3, 4, 5], [4, 5, 6], [5, 6, 7], [6, 7, 8], [7, 8, 9], [8, 9, 10], [9, 10, 11], [10, 11, 12], [11, 12, 13], [12, 13, 14], [13, 14, 15], [14, 15, 16], [15, 16, 17], [16, 17, 18], [17, 18, 19], [18, 19, 20], [19, 20, 21], [20, 21, 22], [21, 22, 23], [22, 23, 24]]

[3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25]

1. 10mins
2. CPU