

## Training Model for CA\_1...

Epoch 1/100

50/50 [=====] - 5s 104ms/step - loss: 0.7632 - val\_loss: 0.7219

Epoch 2/100

50/50 [=====] - 5s 93ms/step - loss: 0.7146 - val\_loss: 0.7151

Epoch 3/100

50/50 [=====] - 5s 93ms/step - loss: 0.6992 - val\_loss: 0.7152

Epoch 4/100

50/50 [=====] - 5s 95ms/step - loss: 0.6966 - val\_loss: 0.7144

Epoch 5/100

50/50 [=====] - 5s 97ms/step - loss: 0.6947 - val\_loss: 0.7130

Epoch 6/100

50/50 [=====] - 5s 96ms/step - loss: 0.6923 - val\_loss: 0.7101

Epoch 7/100

50/50 [=====] - 5s 92ms/step - loss: 0.6903 - val\_loss: 0.7055

Epoch 8/100

50/50 [=====] - 5s 92ms/step - loss: 0.6864 - val\_loss: 0.7028

Epoch 9/100

50/50 [=====] - 5s 93ms/step - loss: 0.6807 - val\_loss: 0.6896

Epoch 10/100

50/50 [=====] - 5s 93ms/step - loss: 0.6638 - val\_loss: 0.6632

Epoch 11/100

50/50 [=====] - 5s 96ms/step - loss: 0.6988 - val\_loss: 0.6592

Epoch 12/100

50/50 [=====] - 5s 94ms/step - loss: 0.6004 - val\_loss: 0.5077

Epoch 13/100

50/50 [=====] - 5s 94ms/step - loss: 0.4506 - val\_loss: 0.3959

Epoch 14/100

50/50 [=====] - 5s 93ms/step - loss: 0.4231 - val\_loss: 0.4257

Epoch 15/100

50/50 [=====] - 5s 93ms/step - loss: 0.3935 - val\_loss: 0.4028

Epoch 16/100

50/50 [=====] - 5s 94ms/step - loss: 0.3879 - val\_loss: 0.3823

Epoch 17/100

50/50 [=====] - 5s 94ms/step - loss: 0.3864 - val\_loss: 0.3698

Epoch 18/100

50/50 [=====] - 5s 94ms/step - loss: 0.3683 - val\_loss: 0.3738

Epoch 19/100

50/50 [=====] - 5s 95ms/step - loss: 0.3654 - val\_loss: 0.3632

Epoch 20/100

50/50 [=====] - 5s 95ms/step - loss: 0.3890 - val\_loss: 0.3604

Epoch 21/100

50/50 [=====] - 5s 94ms/step - loss: 0.3415 - val\_loss: 0.3511

Epoch 22/100

50/50 [=====] - 5s 93ms/step - loss: 0.5147 - val\_loss: 0.4963

Epoch 23/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3843 - val\_loss: 0.3585  
Epoch 24/100  
50/50 [=====] - 5s 93ms/step - loss: 0.3383 - val\_loss: 0.3409  
Epoch 25/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3266 - val\_loss: 0.3421  
Epoch 26/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3190 - val\_loss: 0.3443  
Epoch 27/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3286 - val\_loss: 0.3487  
Epoch 28/100  
50/50 [=====] - 5s 93ms/step - loss: 0.3122 - val\_loss: 0.3423  
Epoch 29/100  
50/50 [=====] - 5s 92ms/step - loss: 0.3062 - val\_loss: 0.3393  
Epoch 30/100  
50/50 [=====] - 5s 93ms/step - loss: 0.5420 - val\_loss: 0.6865  
Epoch 31/100  
50/50 [=====] - 5s 95ms/step - loss: 0.6297 - val\_loss: 0.6222  
Epoch 32/100  
50/50 [=====] - 5s 96ms/step - loss: 0.5357 - val\_loss: 0.5007  
Epoch 33/100  
50/50 [=====] - 5s 92ms/step - loss: 0.4091 - val\_loss: 0.4165  
Epoch 34/100  
50/50 [=====] - 5s 93ms/step - loss: 0.3545 - val\_loss: 0.3949  
Epoch 35/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3319 - val\_loss: 0.3809  
Epoch 36/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3160 - val\_loss: 0.3685  
Epoch 37/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3094 - val\_loss: 0.3692  
Epoch 38/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3016 - val\_loss: 0.3537  
Epoch 39/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2976 - val\_loss: 0.3519  
Epoch 40/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2948 - val\_loss: 0.3536  
Epoch 41/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2915 - val\_loss: 0.3487  
Epoch 42/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2878 - val\_loss: 0.3389  
Epoch 43/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2866 - val\_loss: 0.3403  
Epoch 44/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2843 - val\_loss: 0.3357  
Epoch 45/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2822 - val\_loss: 0.3272  
Epoch 46/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2804 - val\_loss: 0.3436

Epoch 47/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2787 - val\_loss: 0.3351  
Epoch 48/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2782 - val\_loss: 0.3328  
Epoch 49/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2752 - val\_loss: 0.3273  
Epoch 50/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3040 - val\_loss: 0.3311  
Epoch 51/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2752 - val\_loss: 0.3252  
Epoch 52/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2734 - val\_loss: 0.3184  
Epoch 53/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2717 - val\_loss: 0.3175  
Epoch 54/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2701 - val\_loss: 0.3239  
Epoch 55/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2685 - val\_loss: 0.3185  
Epoch 56/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2690 - val\_loss: 0.3235  
Epoch 57/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2659 - val\_loss: 0.3124  
Epoch 58/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2665 - val\_loss: 0.3023  
Epoch 59/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2658 - val\_loss: 0.3018  
Epoch 60/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2654 - val\_loss: 0.3141  
Epoch 61/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3581 - val\_loss: 0.3317  
Epoch 62/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2799 - val\_loss: 0.3112  
Epoch 63/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2672 - val\_loss: 0.3097  
Epoch 64/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2627 - val\_loss: 0.3072  
Epoch 65/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2623 - val\_loss: 0.3126  
Epoch 66/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2611 - val\_loss: 0.3062  
Epoch 67/100  
50/50 [=====] - 5s 92ms/step - loss: 0.2587 - val\_loss: 0.3147  
Epoch 68/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2580 - val\_loss: 0.3124  
Epoch 69/100  
50/50 [=====] - 7s 136ms/step - loss: 0.2575 - val\_loss: 0.3140  
Epoch 70/100  
50/50 [=====] - 5s 107ms/step - loss: 0.2577 - val\_loss: 0.3103

Epoch 71/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2555 - val\_loss: 0.3180  
Epoch 72/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2741 - val\_loss: 0.3297  
Epoch 73/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2632 - val\_loss: 0.3219  
Epoch 74/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2547 - val\_loss: 0.3191  
Epoch 75/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2521 - val\_loss: 0.3101  
Epoch 76/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2514 - val\_loss: 0.3148  
Epoch 77/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2514 - val\_loss: 0.3131  
Epoch 78/100  
50/50 [=====] - 5s 92ms/step - loss: 0.2503 - val\_loss: 0.3067  
Epoch 79/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2504 - val\_loss: 0.3152  
Epoch 80/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2485 - val\_loss: 0.3118  
Epoch 81/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2493 - val\_loss: 0.3082  
Epoch 82/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2479 - val\_loss: 0.3114  
Epoch 83/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2631 - val\_loss: 0.3167  
Epoch 84/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2464 - val\_loss: 0.3231  
Epoch 85/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2449 - val\_loss: 0.3117  
Epoch 86/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2463 - val\_loss: 0.3234  
Epoch 87/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2439 - val\_loss: 0.3153  
Epoch 88/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2440 - val\_loss: 0.3158  
Epoch 89/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3244 - val\_loss: 0.3272  
Epoch 90/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2515 - val\_loss: 0.3209  
Epoch 91/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2442 - val\_loss: 0.3116  
Epoch 92/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2427 - val\_loss: 0.3168  
Epoch 93/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2416 - val\_loss: 0.3228  
Epoch 94/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2412 - val\_loss: 0.3182

Epoch 95/100

50/50 [=====] - 5s 95ms/step - loss: 0.2412 - val\_loss: 0.3252

Epoch 96/100

50/50 [=====] - 5s 94ms/step - loss: 0.2400 - val\_loss: 0.3240

Epoch 97/100

50/50 [=====] - 5s 93ms/step - loss: 0.2401 - val\_loss: 0.3195

Epoch 98/100

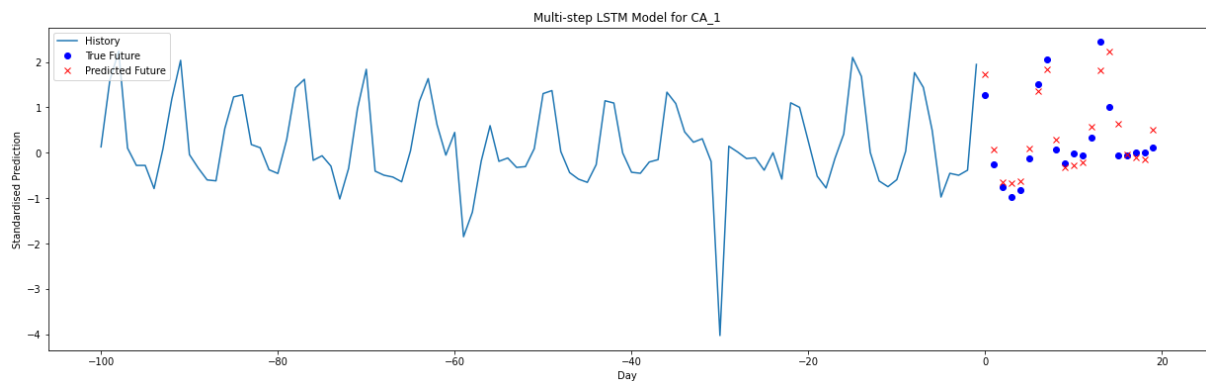
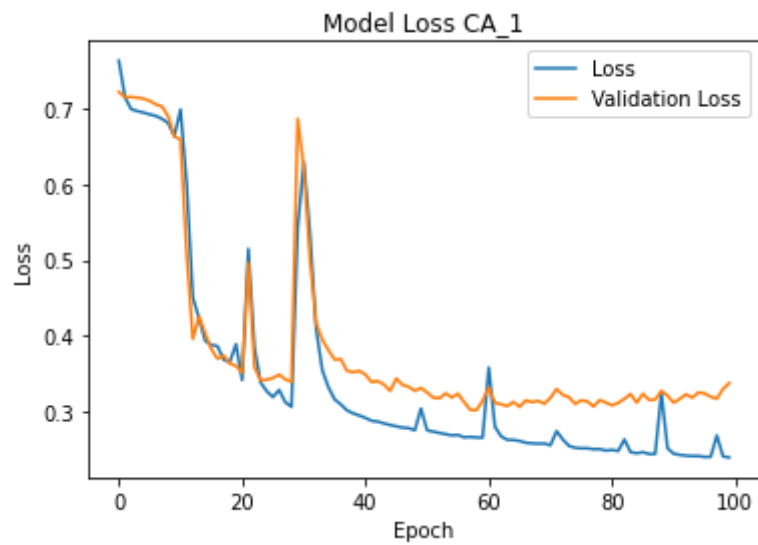
50/50 [=====] - 5s 95ms/step - loss: 0.2683 - val\_loss: 0.3169

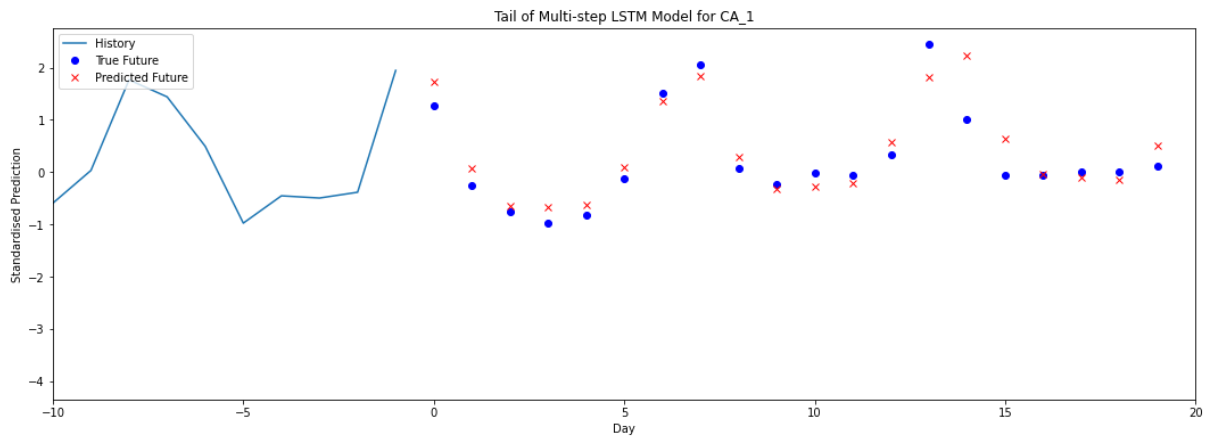
Epoch 99/100

50/50 [=====] - 5s 93ms/step - loss: 0.2408 - val\_loss: 0.3297

Epoch 100/100

50/50 [=====] - 5s 94ms/step - loss: 0.2393 - val\_loss: 0.3375





CA\_1 - True Future: [5247. 3741. 3246. 3031. 3173. 3871. 5498. 6032. 4075. 3765. 3983. 3928. 4327. 6412. 4986. 3933. 3936. 3995. 4007. 4111.]

CA\_1 - Model Prediction: [5699.5176 4064.3418 3345.882 3339.5657 3372.0383 4079.6763 5339.324

5806.9146 4277.369 3681.5134 3716.0981 3783.6516 4556.2505 5785.5645 6206.67 4623.5835 3947.8713 3894.1155 3849.2595 4492.1016]

CA\_1 - Model Percentage Error: [ 8.62431062 8.64319158 3.07708195 10.18032576 6.2728752 5.39075871

2.88606368 3.7315227 4.96611388 2.21743884 6.70102575 3.67485715 5.29813932 9.76973716 24.48194789 17.55869555 0.30160919 2.52526962 3.93662287 9.27028856]%

CA\_1 - Model Mean Percentage Error: 6.975393798726643%

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Training Model for CA\_2...

Epoch 1/100

50/50 [=====] - 5s 104ms/step - loss: 0.7616 - val\_loss: 1.5081

Epoch 2/100

50/50 [=====] - 5s 94ms/step - loss: 0.6946 - val\_loss: 1.1165

Epoch 3/100

50/50 [=====] - 5s 95ms/step - loss: 0.6739 - val\_loss: 1.1038

Epoch 4/100

50/50 [=====] - 5s 94ms/step - loss: 0.6693 - val\_loss: 1.1117

Epoch 5/100

50/50 [=====] - 5s 96ms/step - loss: 0.6568 - val\_loss: 1.1178

Epoch 6/100

50/50 [=====] - 5s 95ms/step - loss: 0.6173 - val\_loss: 1.0847

Epoch 7/100

50/50 [=====] - 5s 95ms/step - loss: 0.5018 - val\_loss: 0.9363

Epoch 8/100

50/50 [=====] - 5s 95ms/step - loss: 0.4073 - val\_loss: 0.7907

Epoch 9/100

50/50 [=====] - 5s 95ms/step - loss: 0.3825 - val\_loss: 0.7481

Epoch 10/100

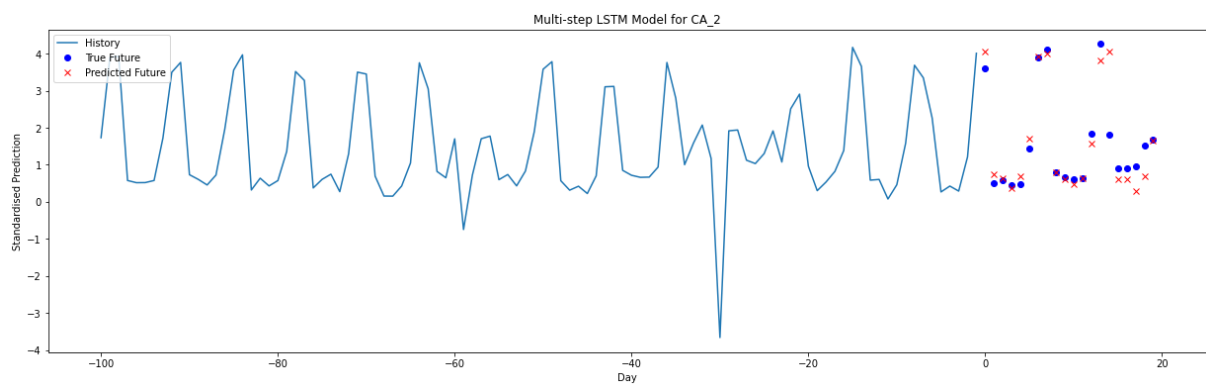
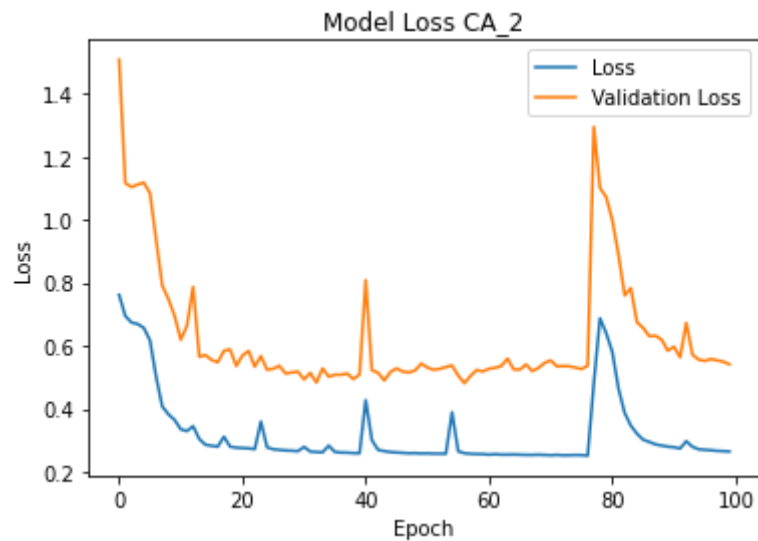
50/50 [=====] - 5s 96ms/step - loss: 0.3647 - val\_loss: 0.6945  
Epoch 11/100  
50/50 [=====] - 5s 96ms/step - loss: 0.3350 - val\_loss: 0.6193  
Epoch 12/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3293 - val\_loss: 0.6634  
Epoch 13/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3449 - val\_loss: 0.7866  
Epoch 14/100  
50/50 [=====] - 5s 96ms/step - loss: 0.3044 - val\_loss: 0.5653  
Epoch 15/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2860 - val\_loss: 0.5707  
Epoch 16/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2826 - val\_loss: 0.5551  
Epoch 17/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2799 - val\_loss: 0.5477  
Epoch 18/100  
50/50 [=====] - 5s 96ms/step - loss: 0.3115 - val\_loss: 0.5837  
Epoch 19/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2799 - val\_loss: 0.5886  
Epoch 20/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2767 - val\_loss: 0.5360  
Epoch 21/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2755 - val\_loss: 0.5690  
Epoch 22/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2745 - val\_loss: 0.5835  
Epoch 23/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2719 - val\_loss: 0.5338  
Epoch 24/100  
50/50 [=====] - 5s 96ms/step - loss: 0.3595 - val\_loss: 0.5674  
Epoch 25/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2776 - val\_loss: 0.5239  
Epoch 26/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2718 - val\_loss: 0.5273  
Epoch 27/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2696 - val\_loss: 0.5364  
Epoch 28/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2680 - val\_loss: 0.5120  
Epoch 29/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2671 - val\_loss: 0.5156  
Epoch 30/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2656 - val\_loss: 0.5180  
Epoch 31/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2792 - val\_loss: 0.4929  
Epoch 32/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2644 - val\_loss: 0.5139  
Epoch 33/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2630 - val\_loss: 0.4834  
Epoch 34/100

50/50 [=====] - 5s 94ms/step - loss: 0.2619 - val\_loss: 0.5280  
Epoch 35/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2830 - val\_loss: 0.5018  
Epoch 36/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2631 - val\_loss: 0.5080  
Epoch 37/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2613 - val\_loss: 0.5079  
Epoch 38/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2608 - val\_loss: 0.5118  
Epoch 39/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2593 - val\_loss: 0.4939  
Epoch 40/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2590 - val\_loss: 0.5091  
Epoch 41/100  
50/50 [=====] - 5s 94ms/step - loss: 0.4275 - val\_loss: 0.8086  
Epoch 42/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3007 - val\_loss: 0.5224  
Epoch 43/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2697 - val\_loss: 0.5146  
Epoch 44/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2658 - val\_loss: 0.4900  
Epoch 45/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2627 - val\_loss: 0.5167  
Epoch 46/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2615 - val\_loss: 0.5284  
Epoch 47/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2601 - val\_loss: 0.5180  
Epoch 48/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2589 - val\_loss: 0.5156  
Epoch 49/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2593 - val\_loss: 0.5217  
Epoch 50/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2582 - val\_loss: 0.5434  
Epoch 51/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2587 - val\_loss: 0.5311  
Epoch 52/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2577 - val\_loss: 0.5239  
Epoch 53/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2577 - val\_loss: 0.5268  
Epoch 54/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2575 - val\_loss: 0.5326  
Epoch 55/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3889 - val\_loss: 0.5375  
Epoch 56/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2652 - val\_loss: 0.5057  
Epoch 57/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2591 - val\_loss: 0.4812  
Epoch 58/100



50/50 [=====] - 5s 94ms/step - loss: 0.2572 - val\_loss: 0.5046  
Epoch 59/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2565 - val\_loss: 0.5230  
Epoch 60/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2562 - val\_loss: 0.5185  
Epoch 61/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2546 - val\_loss: 0.5274  
Epoch 62/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2560 - val\_loss: 0.5301  
Epoch 63/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2547 - val\_loss: 0.5360  
Epoch 64/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2546 - val\_loss: 0.5592  
Epoch 65/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2550 - val\_loss: 0.5249  
Epoch 66/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2544 - val\_loss: 0.5247  
Epoch 67/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2538 - val\_loss: 0.5405  
Epoch 68/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2536 - val\_loss: 0.5199  
Epoch 69/100  
50/50 [=====] - 5s 92ms/step - loss: 0.2543 - val\_loss: 0.5295  
Epoch 70/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2536 - val\_loss: 0.5453  
Epoch 71/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2526 - val\_loss: 0.5535  
Epoch 72/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2537 - val\_loss: 0.5349  
Epoch 73/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2525 - val\_loss: 0.5356  
Epoch 74/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2526 - val\_loss: 0.5350  
Epoch 75/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2533 - val\_loss: 0.5309  
Epoch 76/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2529 - val\_loss: 0.5262  
Epoch 77/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2513 - val\_loss: 0.5366  
Epoch 78/100  
50/50 [=====] - 5s 94ms/step - loss: 0.4813 - val\_loss: 1.2947  
Epoch 79/100  
50/50 [=====] - 5s 95ms/step - loss: 0.6873 - val\_loss: 1.1003  
Epoch 80/100  
50/50 [=====] - 5s 94ms/step - loss: 0.6404 - val\_loss: 1.0722  
Epoch 81/100  
50/50 [=====] - 5s 95ms/step - loss: 0.5807 - val\_loss: 0.9988  
Epoch 82/100

50/50 [=====] - 5s 94ms/step - loss: 0.4646 - val\_loss: 0.8888  
Epoch 83/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3871 - val\_loss: 0.7604  
Epoch 84/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3467 - val\_loss: 0.7829  
Epoch 85/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3212 - val\_loss: 0.6746  
Epoch 86/100  
50/50 [=====] - 5s 109ms/step - loss: 0.3023 - val\_loss: 0.6567  
Epoch 87/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2949 - val\_loss: 0.6304  
Epoch 88/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2872 - val\_loss: 0.6319  
Epoch 89/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2834 - val\_loss: 0.6195  
Epoch 90/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2800 - val\_loss: 0.5845  
Epoch 91/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2781 - val\_loss: 0.5969  
Epoch 92/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2740 - val\_loss: 0.5635  
Epoch 93/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2971 - val\_loss: 0.6726  
Epoch 94/100  
50/50 [=====] - 7s 145ms/step - loss: 0.2796 - val\_loss: 0.5718  
Epoch 95/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2715 - val\_loss: 0.5561  
Epoch 96/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2699 - val\_loss: 0.5521  
Epoch 97/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2685 - val\_loss: 0.5578  
Epoch 98/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2666 - val\_loss: 0.5539  
Epoch 99/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2657 - val\_loss: 0.5496  
Epoch 100/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2646 - val\_loss: 0.5413



CA\_2 - True Future: [5647. 3240. 3294. 3189. 3211. 3964. 5873. 6037. 3454. 3360. 3314. 3333. 4276. 6150. 4251. 3537. 3549. 3586. 4026. 4140.]

CA\_2 - Model Prediction: [5992.8516 3418.6646 3335.609 3131.3555 3386.1772 4176.088 5885.3076

5946.1475 3466.2974 3324.378 3224.6582 3347.9077 4064.378 5802.17

5984.2705 3323.2917 3324.8752 3066.3315 3378.0376 4129.38 ]

CA\_2 - Model Percentage Error: [ 6.12451855 5.51433799 1.26317203 1.80760524 5.45553554 5.35035042

0.2095627 1.50492859 0.35603252 1.06018066 2.69589007 0.44727617

4.94906619 5.65577363 40.77324177 6.04207667 6.31515232 14.49159111

16.09444616 0.25652457]%

CA\_2 - Model Mean Percentage Error: 6.3183631452505455%

=====  
=====

Training Model for CA\_3...

Epoch 1/100

50/50 [=====] - 5s 104ms/step - loss: 0.7092 - val\_loss: 0.6392

Epoch 2/100

50/50 [=====] - 5s 97ms/step - loss: 0.6430 - val\_loss: 0.6351

Epoch 3/100

50/50 [=====] - 5s 97ms/step - loss: 0.6225 - val\_loss: 0.6345

Epoch 4/100

50/50 [=====] - 5s 96ms/step - loss: 0.6191 - val\_loss: 0.6374

Epoch 5/100

50/50 [=====] - 5s 97ms/step - loss: 0.6178 - val\_loss: 0.6372

Epoch 6/100

50/50 [=====] - 5s 94ms/step - loss: 0.6149 - val\_loss: 0.6391

Epoch 7/100

50/50 [=====] - 5s 95ms/step - loss: 0.6115 - val\_loss: 0.6350

Epoch 8/100

50/50 [=====] - 5s 96ms/step - loss: 0.6075 - val\_loss: 0.6290

Epoch 9/100

50/50 [=====] - 5s 96ms/step - loss: 0.5969 - val\_loss: 0.6173

Epoch 10/100

50/50 [=====] - 5s 97ms/step - loss: 0.5833 - val\_loss: 0.5741

Epoch 11/100

50/50 [=====] - 5s 96ms/step - loss: 0.5089 - val\_loss: 0.3975

Epoch 12/100

50/50 [=====] - 5s 97ms/step - loss: 0.4212 - val\_loss: 0.3591

Epoch 13/100

50/50 [=====] - 5s 96ms/step - loss: 0.4029 - val\_loss: 0.4136

Epoch 14/100

50/50 [=====] - 5s 96ms/step - loss: 0.3894 - val\_loss: 0.3458

Epoch 15/100

50/50 [=====] - 5s 96ms/step - loss: 0.3869 - val\_loss: 0.3459

Epoch 16/100

50/50 [=====] - 5s 97ms/step - loss: 0.4474 - val\_loss: 0.4625

Epoch 17/100

50/50 [=====] - 5s 97ms/step - loss: 0.3816 - val\_loss: 0.3271

Epoch 18/100

50/50 [=====] - 5s 97ms/step - loss: 0.3744 - val\_loss: 0.3264

Epoch 19/100

50/50 [=====] - 5s 98ms/step - loss: 0.3574 - val\_loss: 0.3224

Epoch 20/100

50/50 [=====] - 5s 98ms/step - loss: 0.3679 - val\_loss: 0.3119

Epoch 21/100

50/50 [=====] - 5s 98ms/step - loss: 0.3401 - val\_loss: 0.3021

Epoch 22/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3414 - val\_loss: 0.3060  
Epoch 23/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3523 - val\_loss: 0.3048  
Epoch 24/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3290 - val\_loss: 0.5883  
Epoch 25/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3372 - val\_loss: 0.3031  
Epoch 26/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3263 - val\_loss: 0.5676  
Epoch 27/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3490 - val\_loss: 0.3280  
Epoch 28/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3179 - val\_loss: 0.3032  
Epoch 29/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3149 - val\_loss: 0.3185  
Epoch 30/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3298 - val\_loss: 0.6731  
Epoch 31/100  
50/50 [=====] - 5s 100ms/step - loss: 0.5374 - val\_loss: 0.5289  
Epoch 32/100  
50/50 [=====] - 5s 98ms/step - loss: 0.4091 - val\_loss: 0.3486  
Epoch 33/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3398 - val\_loss: 0.3371  
Epoch 34/100  
50/50 [=====] - 5s 100ms/step - loss: 0.3210 - val\_loss: 0.3182  
Epoch 35/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3158 - val\_loss: 0.3460  
Epoch 36/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3138 - val\_loss: 0.3231  
Epoch 37/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3084 - val\_loss: 0.3544  
Epoch 38/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3134 - val\_loss: 0.3500  
Epoch 39/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3043 - val\_loss: 0.3543  
Epoch 40/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3052 - val\_loss: 0.3592  
Epoch 41/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3078 - val\_loss: 0.3882  
Epoch 42/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2995 - val\_loss: 0.3987  
Epoch 43/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2983 - val\_loss: 0.3758  
Epoch 44/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2981 - val\_loss: 0.3763  
Epoch 45/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2949 - val\_loss: 0.3772

Epoch 46/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2996 - val\_loss: 0.3798  
Epoch 47/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2900 - val\_loss: 0.3740  
Epoch 48/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2893 - val\_loss: 0.3951  
Epoch 49/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2863 - val\_loss: 0.4021  
Epoch 50/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2821 - val\_loss: 0.4211  
Epoch 51/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2826 - val\_loss: 0.4635  
Epoch 52/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3211 - val\_loss: 0.6523  
Epoch 53/100  
50/50 [=====] - 5s 98ms/step - loss: 0.4426 - val\_loss: 0.4010  
Epoch 54/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2960 - val\_loss: 0.4506  
Epoch 55/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2779 - val\_loss: 0.4099  
Epoch 56/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2745 - val\_loss: 0.4228  
Epoch 57/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2732 - val\_loss: 0.4004  
Epoch 58/100  
50/50 [=====] - 5s 100ms/step - loss: 0.2709 - val\_loss: 0.4049  
Epoch 59/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2692 - val\_loss: 0.4142  
Epoch 60/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2680 - val\_loss: 0.3999  
Epoch 61/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2667 - val\_loss: 0.4054  
Epoch 62/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2635 - val\_loss: 0.4341  
Epoch 63/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2636 - val\_loss: 0.4272  
Epoch 64/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3550 - val\_loss: 0.6527  
Epoch 65/100  
50/50 [=====] - 5s 98ms/step - loss: 0.5001 - val\_loss: 0.5874  
Epoch 66/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3441 - val\_loss: 0.4150  
Epoch 67/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2820 - val\_loss: 0.4310  
Epoch 68/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2707 - val\_loss: 0.4358  
Epoch 69/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2645 - val\_loss: 0.4207

Epoch 70/100  
50/50 [=====] - 5s 100ms/step - loss: 0.2620 - val\_loss: 0.4222  
Epoch 71/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2605 - val\_loss: 0.4314  
Epoch 72/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2588 - val\_loss: 0.4204  
Epoch 73/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2581 - val\_loss: 0.4271  
Epoch 74/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2547 - val\_loss: 0.4256  
Epoch 75/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2551 - val\_loss: 0.4321  
Epoch 76/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2548 - val\_loss: 0.4186  
Epoch 77/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2532 - val\_loss: 0.4250  
Epoch 78/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2519 - val\_loss: 0.4523  
Epoch 79/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2517 - val\_loss: 0.4317  
Epoch 80/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2499 - val\_loss: 0.4363  
Epoch 81/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2505 - val\_loss: 0.4444  
Epoch 82/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3088 - val\_loss: 0.5691  
Epoch 83/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3150 - val\_loss: 0.4330  
Epoch 84/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2550 - val\_loss: 0.4427  
Epoch 85/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2490 - val\_loss: 0.4533  
Epoch 86/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2474 - val\_loss: 0.4655  
Epoch 87/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2465 - val\_loss: 0.4608  
Epoch 88/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2461 - val\_loss: 0.4786  
Epoch 89/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2447 - val\_loss: 0.4769  
Epoch 90/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2735 - val\_loss: 0.4698  
Epoch 91/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2446 - val\_loss: 0.4753  
Epoch 92/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2438 - val\_loss: 0.4965  
Epoch 93/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2421 - val\_loss: 0.4973

Epoch 94/100

50/50 [=====] - 5s 97ms/step - loss: 0.2430 - val\_loss: 0.4733

Epoch 95/100

50/50 [=====] - 5s 97ms/step - loss: 0.2417 - val\_loss: 0.4925

Epoch 96/100

50/50 [=====] - 5s 96ms/step - loss: 0.2408 - val\_loss: 0.4848

Epoch 97/100

50/50 [=====] - 5s 97ms/step - loss: 0.2405 - val\_loss: 0.4938

Epoch 98/100

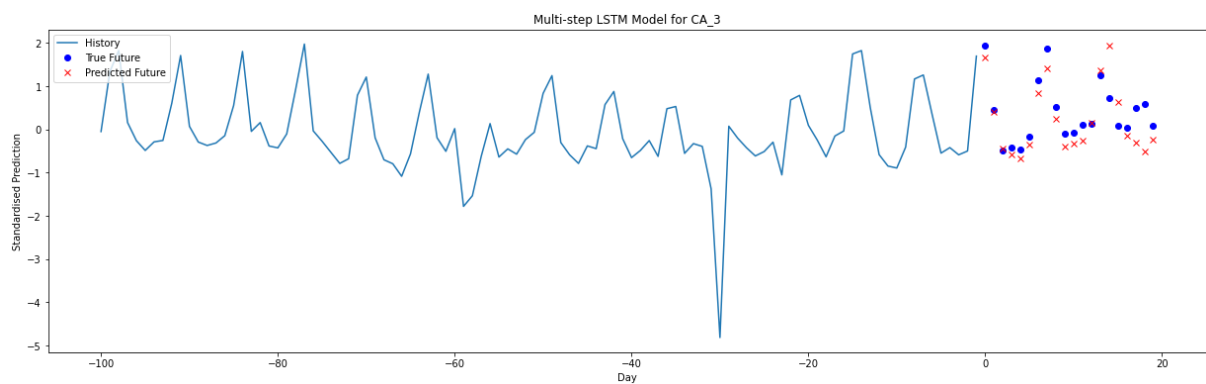
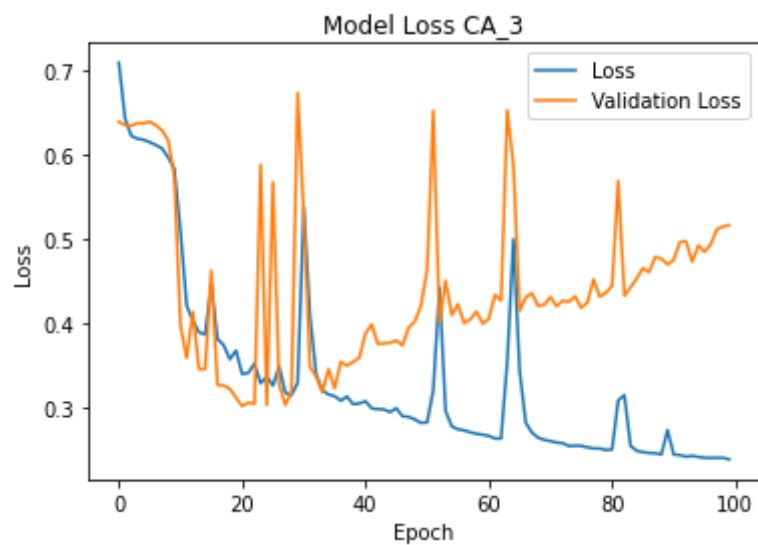
50/50 [=====] - 5s 96ms/step - loss: 0.2407 - val\_loss: 0.5117

Epoch 99/100

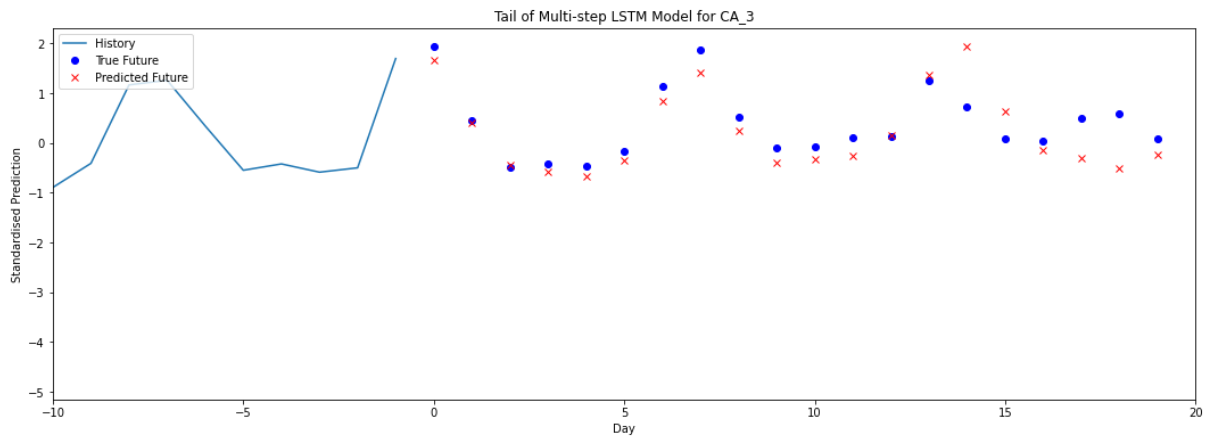
50/50 [=====] - 5s 97ms/step - loss: 0.2406 - val\_loss: 0.5149

Epoch 100/100

50/50 [=====] - 5s 96ms/step - loss: 0.2387 - val\_loss: 0.5164







CA\_3 - True Future: [8164. 6371. 5244. 5309. 5261. 5637. 7217. 8094. 6446. 5722. 5740. 5951. 5986. 7347. 6696. 5930. 5882. 6421. 6547. 5928.]

CA\_3 - Model Prediction: [7853.8027 6306.5635 5306.9316 5140.9653 5019.504 5411.023 6854.255

7549.7153 6123.649 5358.4546 5421.0474 5507.949 6019.2734 7495.6665

8168.037 6595.4756 5666.9937 5471.718 5203.0938 5530.549 ]

CA\_3 - Model Percentage Error: [ 3.79957454 1.0114036 1.20006942 3.16509075 4.59030781 4.00881765

5.02625907 6.72454495 5.00079234 6.3534675 5.55666614 7.44498036

0.55585428 2.02349944 21.9838278 11.22218526 3.65532723 14.78402471

20.52705438 6.7046419 ]%

CA\_3 - Model Mean Percentage Error: 6.766919456666393%

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Training Model for CA\_4...

Epoch 1/100

50/50 [=====] - 5s 103ms/step - loss: 0.6947 - val\_loss: 0.8419

Epoch 2/100

50/50 [=====] - 5s 96ms/step - loss: 0.5453 - val\_loss: 0.6117

Epoch 3/100

50/50 [=====] - 5s 96ms/step - loss: 0.5176 - val\_loss: 0.6012

Epoch 4/100

50/50 [=====] - 5s 96ms/step - loss: 0.5160 - val\_loss: 0.5928

Epoch 5/100

50/50 [=====] - 5s 97ms/step - loss: 0.5165 - val\_loss: 0.5995

Epoch 6/100

50/50 [=====] - 5s 96ms/step - loss: 0.5140 - val\_loss: 0.5926

Epoch 7/100

50/50 [=====] - 5s 97ms/step - loss: 0.5125 - val\_loss: 0.5915

Epoch 8/100

50/50 [=====] - 5s 96ms/step - loss: 0.5116 - val\_loss: 0.5823

Epoch 9/100

50/50 [=====] - 5s 97ms/step - loss: 0.5101 - val\_loss: 0.5725

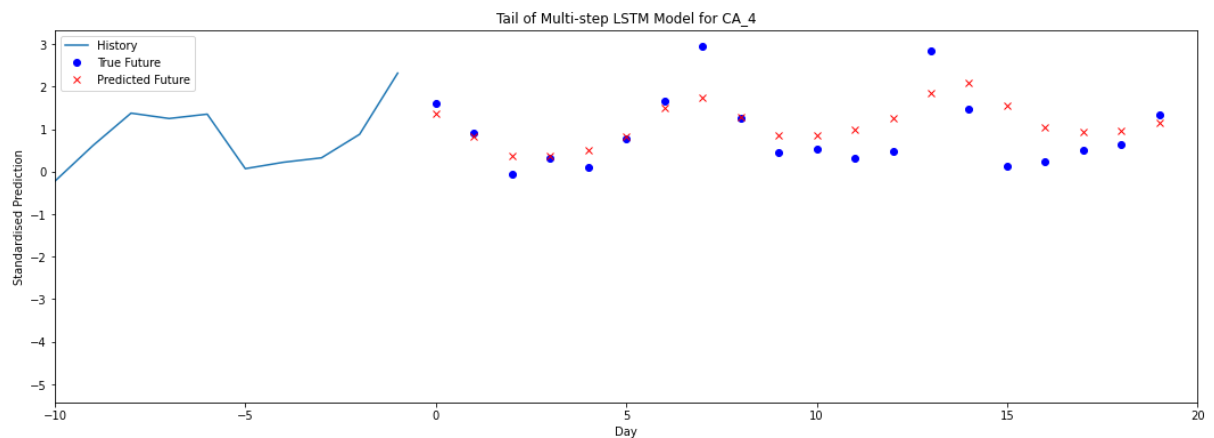
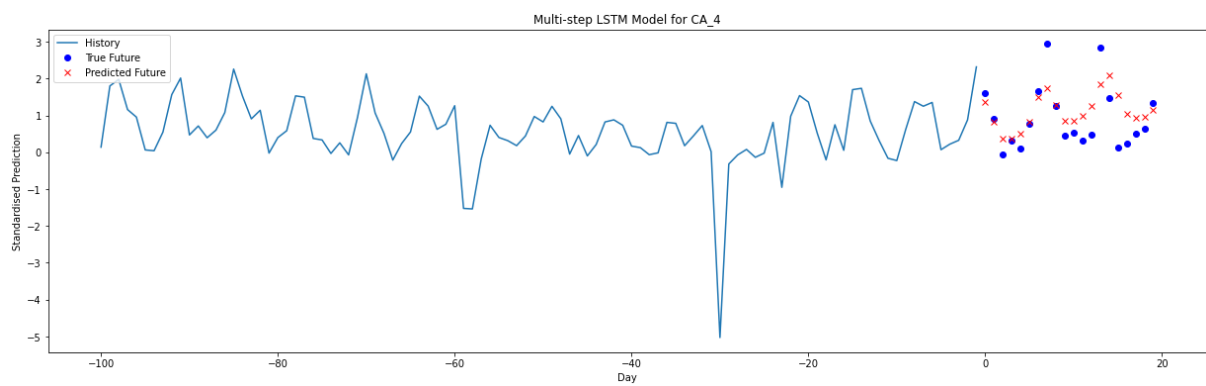
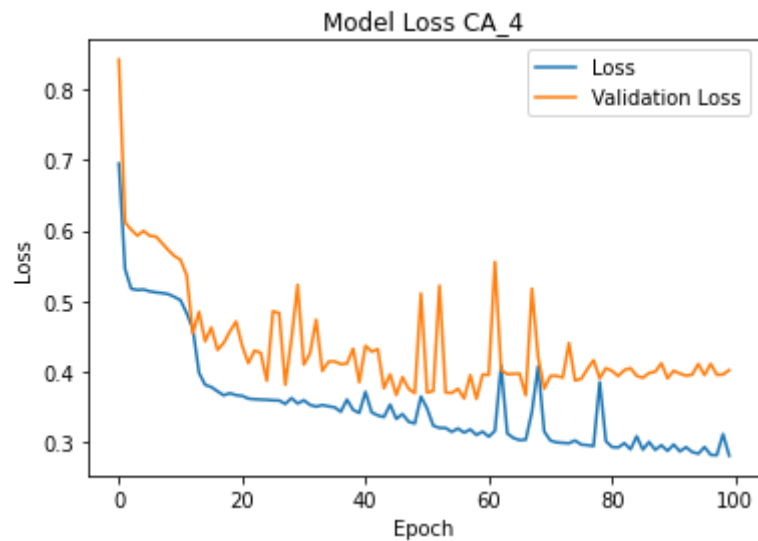
Epoch 10/100

50/50 [=====] - 5s 97ms/step - loss: 0.5062 - val\_loss: 0.5641  
Epoch 11/100  
50/50 [=====] - 5s 97ms/step - loss: 0.5014 - val\_loss: 0.5585  
Epoch 12/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4831 - val\_loss: 0.5367  
Epoch 13/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4609 - val\_loss: 0.4548  
Epoch 14/100  
50/50 [=====] - 6s 129ms/step - loss: 0.3987 - val\_loss: 0.4850  
Epoch 15/100  
50/50 [=====] - 6s 115ms/step - loss: 0.3816 - val\_loss: 0.4432  
Epoch 16/100  
50/50 [=====] - 5s 96ms/step - loss: 0.3785 - val\_loss: 0.4628  
Epoch 17/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3725 - val\_loss: 0.4311  
Epoch 18/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3668 - val\_loss: 0.4408  
Epoch 19/100  
50/50 [=====] - 5s 100ms/step - loss: 0.3698 - val\_loss: 0.4571  
Epoch 20/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3670 - val\_loss: 0.4713  
Epoch 21/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3660 - val\_loss: 0.4370  
Epoch 22/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3622 - val\_loss: 0.4123  
Epoch 23/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3613 - val\_loss: 0.4301  
Epoch 24/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3608 - val\_loss: 0.4271  
Epoch 25/100  
50/50 [=====] - 5s 100ms/step - loss: 0.3605 - val\_loss: 0.3874  
Epoch 26/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3598 - val\_loss: 0.4859  
Epoch 27/100  
50/50 [=====] - 5s 100ms/step - loss: 0.3595 - val\_loss: 0.4831  
Epoch 28/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3547 - val\_loss: 0.3818  
Epoch 29/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3629 - val\_loss: 0.4469  
Epoch 30/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3552 - val\_loss: 0.5231  
Epoch 31/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3598 - val\_loss: 0.4102  
Epoch 32/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3533 - val\_loss: 0.4261  
Epoch 33/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3509 - val\_loss: 0.4738  
Epoch 34/100

50/50 [=====] - 5s 99ms/step - loss: 0.3530 - val\_loss: 0.4013  
Epoch 35/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3513 - val\_loss: 0.4145  
Epoch 36/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3499 - val\_loss: 0.4148  
Epoch 37/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3436 - val\_loss: 0.4109  
Epoch 38/100  
50/50 [=====] - 5s 96ms/step - loss: 0.3609 - val\_loss: 0.4118  
Epoch 39/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3462 - val\_loss: 0.4328  
Epoch 40/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3420 - val\_loss: 0.3853  
Epoch 41/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3719 - val\_loss: 0.4370  
Epoch 42/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3427 - val\_loss: 0.4287  
Epoch 43/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3384 - val\_loss: 0.4322  
Epoch 44/100  
50/50 [=====] - 5s 100ms/step - loss: 0.3361 - val\_loss: 0.3768  
Epoch 45/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3538 - val\_loss: 0.3964  
Epoch 46/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3335 - val\_loss: 0.3672  
Epoch 47/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3403 - val\_loss: 0.3925  
Epoch 48/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3295 - val\_loss: 0.3761  
Epoch 49/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3270 - val\_loss: 0.3698  
Epoch 50/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3652 - val\_loss: 0.5110  
Epoch 51/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3481 - val\_loss: 0.3708  
Epoch 52/100  
50/50 [=====] - 5s 100ms/step - loss: 0.3238 - val\_loss: 0.3730  
Epoch 53/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3207 - val\_loss: 0.5221  
Epoch 54/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3206 - val\_loss: 0.3708  
Epoch 55/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3151 - val\_loss: 0.3702  
Epoch 56/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3199 - val\_loss: 0.3761  
Epoch 57/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3140 - val\_loss: 0.3624  
Epoch 58/100

50/50 [=====] - 5s 99ms/step - loss: 0.3186 - val\_loss: 0.3954  
Epoch 59/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3108 - val\_loss: 0.3619  
Epoch 60/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3155 - val\_loss: 0.3963  
Epoch 61/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3083 - val\_loss: 0.3956  
Epoch 62/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3166 - val\_loss: 0.5557  
Epoch 63/100  
50/50 [=====] - 5s 98ms/step - loss: 0.4090 - val\_loss: 0.4027  
Epoch 64/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3128 - val\_loss: 0.3968  
Epoch 65/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3065 - val\_loss: 0.3972  
Epoch 66/100  
50/50 [=====] - 5s 102ms/step - loss: 0.3034 - val\_loss: 0.3975  
Epoch 67/100  
50/50 [=====] - 5s 101ms/step - loss: 0.3041 - val\_loss: 0.3668  
Epoch 68/100  
50/50 [=====] - 5s 105ms/step - loss: 0.3434 - val\_loss: 0.5178  
Epoch 69/100  
50/50 [=====] - 5s 102ms/step - loss: 0.4080 - val\_loss: 0.4210  
Epoch 70/100  
50/50 [=====] - 5s 101ms/step - loss: 0.3155 - val\_loss: 0.3763  
Epoch 71/100  
50/50 [=====] - 5s 100ms/step - loss: 0.3028 - val\_loss: 0.3942  
Epoch 72/100  
50/50 [=====] - 5s 101ms/step - loss: 0.3003 - val\_loss: 0.3945  
Epoch 73/100  
50/50 [=====] - 5s 101ms/step - loss: 0.2996 - val\_loss: 0.3918  
Epoch 74/100  
50/50 [=====] - 5s 100ms/step - loss: 0.2990 - val\_loss: 0.4408  
Epoch 75/100  
50/50 [=====] - 5s 100ms/step - loss: 0.3029 - val\_loss: 0.3877  
Epoch 76/100  
50/50 [=====] - 5s 102ms/step - loss: 0.2972 - val\_loss: 0.3901  
Epoch 77/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2963 - val\_loss: 0.4041  
Epoch 78/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2951 - val\_loss: 0.4165  
Epoch 79/100  
50/50 [=====] - 5s 99ms/step - loss: 0.3856 - val\_loss: 0.3910  
Epoch 80/100  
50/50 [=====] - 5s 102ms/step - loss: 0.3019 - val\_loss: 0.4052  
Epoch 81/100  
50/50 [=====] - 5s 101ms/step - loss: 0.2937 - val\_loss: 0.4014  
Epoch 82/100

50/50 [=====] - 5s 99ms/step - loss: 0.2931 - val\_loss: 0.3941  
Epoch 83/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2991 - val\_loss: 0.4026  
Epoch 84/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2904 - val\_loss: 0.4052  
Epoch 85/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3089 - val\_loss: 0.3944  
Epoch 86/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2899 - val\_loss: 0.3916  
Epoch 87/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3009 - val\_loss: 0.3984  
Epoch 88/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2897 - val\_loss: 0.4002  
Epoch 89/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2962 - val\_loss: 0.4121  
Epoch 90/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2882 - val\_loss: 0.3909  
Epoch 91/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2973 - val\_loss: 0.4016  
Epoch 92/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2875 - val\_loss: 0.3976  
Epoch 93/100  
50/50 [=====] - 5s 101ms/step - loss: 0.2935 - val\_loss: 0.3946  
Epoch 94/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2866 - val\_loss: 0.3961  
Epoch 95/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2843 - val\_loss: 0.4112  
Epoch 96/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2937 - val\_loss: 0.3954  
Epoch 97/100  
50/50 [=====] - 5s 98ms/step - loss: 0.2826 - val\_loss: 0.4115  
Epoch 98/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2822 - val\_loss: 0.3959  
Epoch 99/100  
50/50 [=====] - 5s 98ms/step - loss: 0.3120 - val\_loss: 0.3963  
Epoch 100/100  
50/50 [=====] - 5s 99ms/step - loss: 0.2815 - val\_loss: 0.4024



CA\_4 - True Future: [2787. 2487. 2088. 2239. 2153. 2432. 2806. 3343. 2643. 2299. 2335. 2244. 2316. 3301. 2727. 2166. 2207. 2323. 2383. 2677.]

CA\_4 - Model Prediction: [2688.0579 2460.1252 2262.0046 2270.9294 2317.2388 2455.3242 2733.914

2844.927 2647.1624 2467.4333 2471.3064 2519.5925 2636.6614 2890.3691 2983.0352 2759.4346 2544.41 2507.0576 2516.9668 2598.2856]

CA\_4 - Model Percentage Error: [ 3.55013056 1.0806094 8.33355549 1.42605821 7.6283683 0.95905505

2.56899278 14.89898289 0.15748594 7.32637449 5.83753304 12.28130701

13.8454826 12.4395898 9.38889462 27.39771793 15.28817001 7.92327237

5.62177075 2.9403943 ]%

CA\_4 - Model Mean Percentage Error: 8.044687277576006%

=====  
=====

Training Model for TX\_1...

Epoch 1/100

50/50 [=====] - 5s 107ms/step - loss: 0.7362 - val\_loss: 0.7575

Epoch 2/100

50/50 [=====] - 5s 98ms/step - loss: 0.7091 - val\_loss: 0.7325

Epoch 3/100

50/50 [=====] - 5s 96ms/step - loss: 0.7040 - val\_loss: 0.7217

Epoch 4/100

50/50 [=====] - 5s 98ms/step - loss: 0.7027 - val\_loss: 0.7151

Epoch 5/100

50/50 [=====] - 5s 96ms/step - loss: 0.7016 - val\_loss: 0.7170

Epoch 6/100

50/50 [=====] - 5s 94ms/step - loss: 0.6992 - val\_loss: 0.7088

Epoch 7/100

50/50 [=====] - 5s 95ms/step - loss: 0.6981 - val\_loss: 0.7055

Epoch 8/100

50/50 [=====] - 5s 96ms/step - loss: 0.6957 - val\_loss: 0.6967

Epoch 9/100

50/50 [=====] - 5s 96ms/step - loss: 0.6922 - val\_loss: 0.6911

Epoch 10/100

50/50 [=====] - 5s 95ms/step - loss: 0.6881 - val\_loss: 0.6893

Epoch 11/100

50/50 [=====] - 5s 97ms/step - loss: 2.6875 - val\_loss: nan

Epoch 12/100

50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan

Epoch 13/100

50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan

Epoch 14/100

50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan

Epoch 15/100

50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan

Epoch 16/100

50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan

Epoch 17/100

50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan

Epoch 18/100

50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan

Epoch 19/100

50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan

Epoch 20/100

50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan

Epoch 21/100

50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan

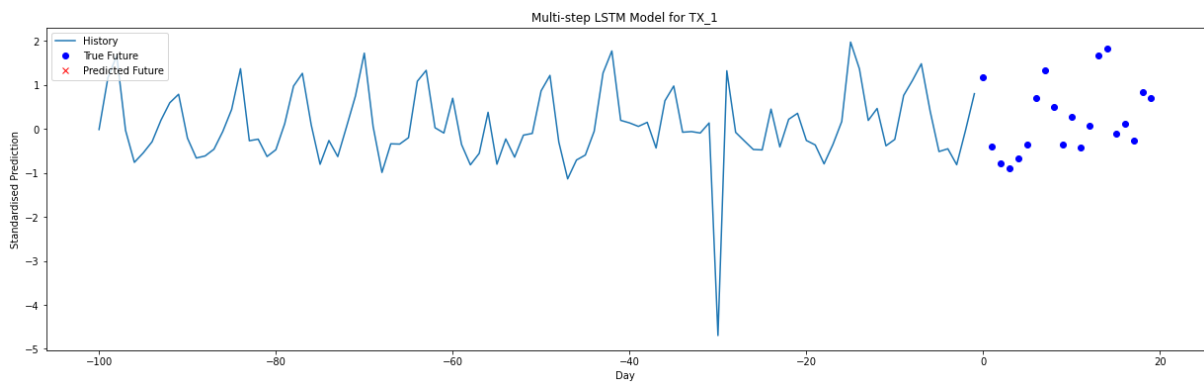
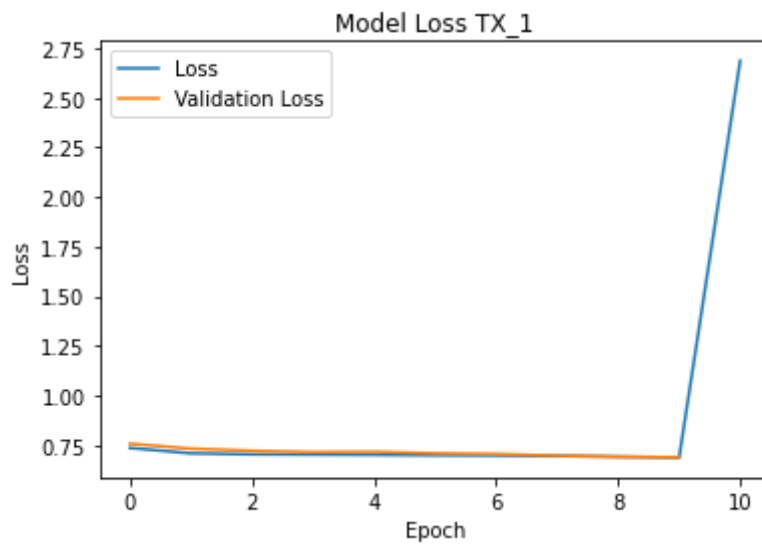
Epoch 22/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 23/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 24/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 25/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 26/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 27/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 28/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 29/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 30/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 31/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 32/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 33/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 34/100  
50/50 [=====] - 5s 104ms/step - loss: nan - val\_loss: nan  
Epoch 35/100  
50/50 [=====] - 8s 156ms/step - loss: nan - val\_loss: nan  
Epoch 36/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 37/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 38/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 39/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 40/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 41/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 42/100  
50/50 [=====] - 5s 101ms/step - loss: nan - val\_loss: nan  
Epoch 43/100  
50/50 [=====] - 5s 101ms/step - loss: nan - val\_loss: nan  
Epoch 44/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 45/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan

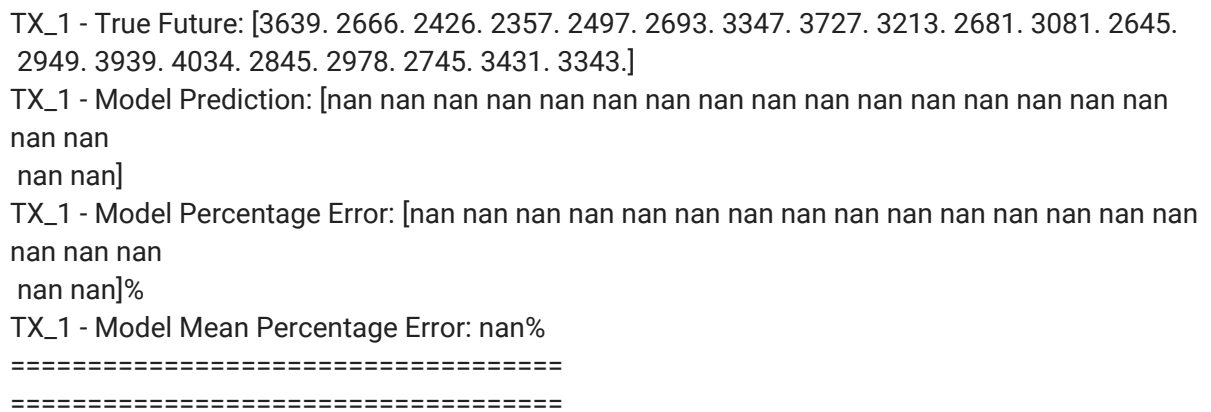


Epoch 46/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 47/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 48/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 49/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 50/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 51/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 52/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 53/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 54/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 55/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 56/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 57/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 58/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 59/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 60/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 61/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 62/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 63/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 64/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 65/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 66/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 67/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 68/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 69/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan

Epoch 70/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 71/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 72/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 73/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 74/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 75/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 76/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 77/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 78/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 79/100  
50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan  
Epoch 80/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 81/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 82/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 83/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 84/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 85/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 86/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 87/100  
50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan  
Epoch 88/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 89/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 90/100  
50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan  
Epoch 91/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 92/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 93/100  
50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan

Epoch 94/100  
 50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
 Epoch 95/100  
 50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan  
 Epoch 96/100  
 50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan  
 Epoch 97/100  
 50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
 Epoch 98/100  
 50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
 Epoch 99/100  
 50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
 Epoch 100/100  
 50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan





```
Epoch 1/100
50/50 [=====] - 5s 107ms/step - loss: 0.7592 - val_loss: 0.6991
Epoch 2/100
50/50 [=====] - 5s 98ms/step - loss: 0.7302 - val_loss: 0.6946
Epoch 3/100
50/50 [=====] - 5s 101ms/step - loss: 0.7213 - val_loss: 0.7075
Epoch 4/100
50/50 [=====] - 5s 102ms/step - loss: 0.7077 - val_loss: 0.6861
Epoch 5/100
50/50 [=====] - 5s 99ms/step - loss: 0.7000 - val_loss: 0.6822
Epoch 6/100
50/50 [=====] - 5s 98ms/step - loss: 0.6969 - val_loss: 0.6821
Epoch 7/100
50/50 [=====] - 5s 99ms/step - loss: 0.6961 - val_loss: 0.6779
Epoch 8/100
50/50 [=====] - 5s 98ms/step - loss: 0.6938 - val_loss: 0.6750
Epoch 9/100
50/50 [=====] - 5s 98ms/step - loss: 0.6894 - val_loss: 0.6814
Epoch 10/100
50/50 [=====] - 5s 99ms/step - loss: 0.7182 - val_loss: 0.6873
Epoch 11/100
50/50 [=====] - 5s 100ms/step - loss: 0.7220 - val_loss: 0.6753
```

Epoch 12/100  
50/50 [=====] - 5s 99ms/step - loss: 0.7018 - val\_loss: 0.6731  
Epoch 13/100  
50/50 [=====] - 5s 99ms/step - loss: 0.6928 - val\_loss: 0.6662  
Epoch 14/100  
50/50 [=====] - 5s 98ms/step - loss: 0.6839 - val\_loss: 0.6521  
Epoch 15/100  
50/50 [=====] - 5s 97ms/step - loss: 0.6673 - val\_loss: 0.6481  
Epoch 16/100  
50/50 [=====] - 5s 98ms/step - loss: 0.6033 - val\_loss: 0.4864  
Epoch 17/100  
50/50 [=====] - 5s 99ms/step - loss: 0.4965 - val\_loss: 0.4435  
Epoch 18/100  
50/50 [=====] - 5s 99ms/step - loss: 0.4724 - val\_loss: 0.4464  
Epoch 19/100  
50/50 [=====] - 5s 99ms/step - loss: 0.4810 - val\_loss: 0.4371  
Epoch 20/100  
50/50 [=====] - 5s 99ms/step - loss: 0.4614 - val\_loss: 0.4362  
Epoch 21/100  
50/50 [=====] - 5s 101ms/step - loss: 0.4602 - val\_loss: 0.4317  
Epoch 22/100  
50/50 [=====] - 5s 99ms/step - loss: 0.4599 - val\_loss: 0.4282  
Epoch 23/100  
50/50 [=====] - 5s 100ms/step - loss: 0.4588 - val\_loss: 0.4274  
Epoch 24/100  
50/50 [=====] - 5s 100ms/step - loss: 0.4397 - val\_loss: 0.4217  
Epoch 25/100  
50/50 [=====] - 5s 99ms/step - loss: 0.4516 - val\_loss: 0.4537  
Epoch 26/100  
50/50 [=====] - 5s 99ms/step - loss: 0.4376 - val\_loss: 0.3986  
Epoch 27/100  
50/50 [=====] - 5s 101ms/step - loss: 0.4381 - val\_loss: 0.4118  
Epoch 28/100  
50/50 [=====] - 5s 100ms/step - loss: 0.4499 - val\_loss: 0.4297  
Epoch 29/100  
50/50 [=====] - 5s 100ms/step - loss: 0.4143 - val\_loss: 0.4212  
Epoch 30/100  
50/50 [=====] - 5s 99ms/step - loss: 0.4041 - val\_loss: 0.3933  
Epoch 31/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 32/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 33/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 34/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 35/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan

Epoch 36/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 37/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 38/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 39/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 40/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 41/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 42/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 43/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 44/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 45/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 46/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 47/100  
50/50 [=====] - 5s 101ms/step - loss: nan - val\_loss: nan  
Epoch 48/100  
50/50 [=====] - 5s 103ms/step - loss: nan - val\_loss: nan  
Epoch 49/100  
50/50 [=====] - 5s 106ms/step - loss: nan - val\_loss: nan  
Epoch 50/100  
50/50 [=====] - 5s 106ms/step - loss: nan - val\_loss: nan  
Epoch 51/100  
50/50 [=====] - 5s 107ms/step - loss: nan - val\_loss: nan  
Epoch 52/100  
50/50 [=====] - 5s 101ms/step - loss: nan - val\_loss: nan  
Epoch 53/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 54/100  
50/50 [=====] - 7s 142ms/step - loss: nan - val\_loss: nan  
Epoch 55/100  
50/50 [=====] - 5s 107ms/step - loss: nan - val\_loss: nan  
Epoch 56/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 57/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 58/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 59/100  
50/50 [=====] - 5s 101ms/step - loss: nan - val\_loss: nan

Epoch 60/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 61/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 62/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 63/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 64/100  
50/50 [=====] - 5s 104ms/step - loss: nan - val\_loss: nan  
Epoch 65/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 66/100  
50/50 [=====] - 5s 103ms/step - loss: nan - val\_loss: nan  
Epoch 67/100  
50/50 [=====] - 5s 103ms/step - loss: nan - val\_loss: nan  
Epoch 68/100  
50/50 [=====] - 5s 103ms/step - loss: nan - val\_loss: nan  
Epoch 69/100  
50/50 [=====] - 5s 103ms/step - loss: nan - val\_loss: nan  
Epoch 70/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 71/100  
50/50 [=====] - 5s 101ms/step - loss: nan - val\_loss: nan  
Epoch 72/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 73/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 74/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 75/100  
50/50 [=====] - 5s 101ms/step - loss: nan - val\_loss: nan  
Epoch 76/100  
50/50 [=====] - 5s 103ms/step - loss: nan - val\_loss: nan  
Epoch 77/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 78/100  
50/50 [=====] - 5s 103ms/step - loss: nan - val\_loss: nan  
Epoch 79/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 80/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 81/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 82/100  
50/50 [=====] - 5s 103ms/step - loss: nan - val\_loss: nan  
Epoch 83/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan

Epoch 84/100  
50/50 [=====] - 5s 102ms/step - loss: nan - val\_loss: nan  
Epoch 85/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 86/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 87/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 88/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 89/100  
50/50 [=====] - 5s 101ms/step - loss: nan - val\_loss: nan  
Epoch 90/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 91/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 92/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 93/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 94/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 95/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 96/100  
50/50 [=====] - 5s 100ms/step - loss: nan - val\_loss: nan  
Epoch 97/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 98/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 99/100  
50/50 [=====] - 5s 97ms/step - loss: nan - val\_loss: nan  
Epoch 100/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan





## Training Model for TX\_3...

Epoch 1/100

50/50 [=====] - 5s 106ms/step - loss: 0.7531 - val\_loss: 1.0434

Epoch 2/100

50/50 [=====] - 5s 96ms/step - loss: 0.7279 - val\_loss: 0.7317

Epoch 3/100

50/50 [=====] - 5s 97ms/step - loss: 0.6948 - val\_loss: 0.6708

Epoch 4/100

50/50 [=====] - 5s 97ms/step - loss: 0.6543 - val\_loss: 0.6573

Epoch 5/100

50/50 [=====] - 5s 96ms/step - loss: 0.6426 - val\_loss: 0.6306

Epoch 6/100

50/50 [=====] - 5s 96ms/step - loss: 0.6366 - val\_loss: 0.6370

Epoch 7/100

50/50 [=====] - 5s 96ms/step - loss: 0.6331 - val\_loss: 0.6364

Epoch 8/100

50/50 [=====] - 5s 96ms/step - loss: 0.6300 - val\_loss: 0.6432

Epoch 9/100

50/50 [=====] - 5s 97ms/step - loss: 0.6271 - val\_loss: 0.6287

Epoch 10/100

50/50 [=====] - 5s 98ms/step - loss: 0.6185 - val\_loss: 0.6166

Epoch 11/100

50/50 [=====] - 5s 97ms/step - loss: 0.5967 - val\_loss: 0.6114

Epoch 12/100

50/50 [=====] - 5s 96ms/step - loss: 0.5516 - val\_loss: 0.5724

Epoch 13/100

50/50 [=====] - 5s 95ms/step - loss: 0.5262 - val\_loss: 0.5761

Epoch 14/100

50/50 [=====] - 5s 97ms/step - loss: 0.5022 - val\_loss: 0.5711

Epoch 15/100

50/50 [=====] - 5s 98ms/step - loss: 0.4747 - val\_loss: 0.5488

Epoch 16/100

50/50 [=====] - 5s 95ms/step - loss: 0.4581 - val\_loss: 0.4818

Epoch 17/100

50/50 [=====] - 5s 95ms/step - loss: 0.4496 - val\_loss: 0.5116

Epoch 18/100

50/50 [=====] - 5s 97ms/step - loss: 0.4429 - val\_loss: 0.5179

Epoch 19/100

50/50 [=====] - 5s 97ms/step - loss: 0.4388 - val\_loss: 0.4559

Epoch 20/100

50/50 [=====] - 5s 98ms/step - loss: 0.4425 - val\_loss: 0.5310

Epoch 21/100

50/50 [=====] - 5s 97ms/step - loss: 0.4370 - val\_loss: 0.4519

Epoch 22/100

50/50 [=====] - 5s 97ms/step - loss: 0.4466 - val\_loss: 0.4929

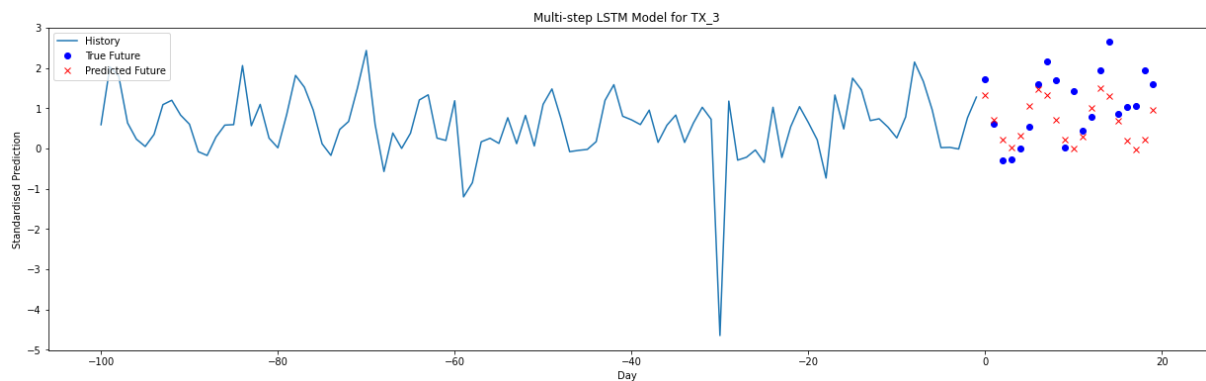
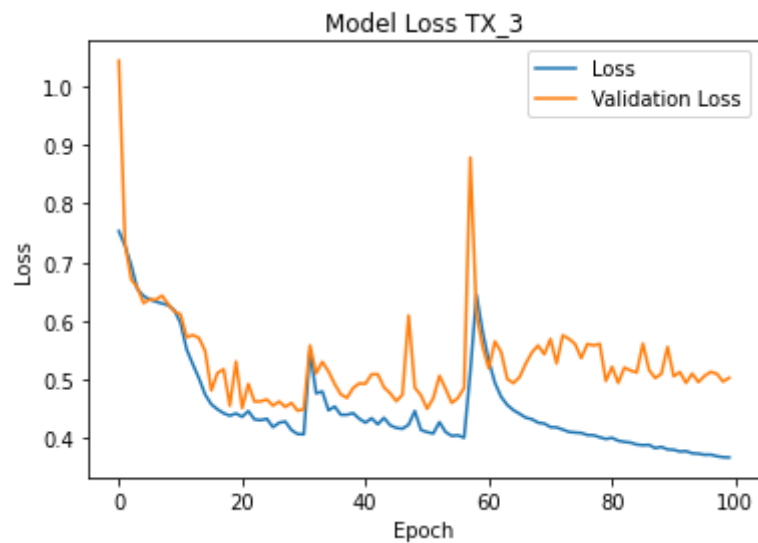
Epoch 23/100

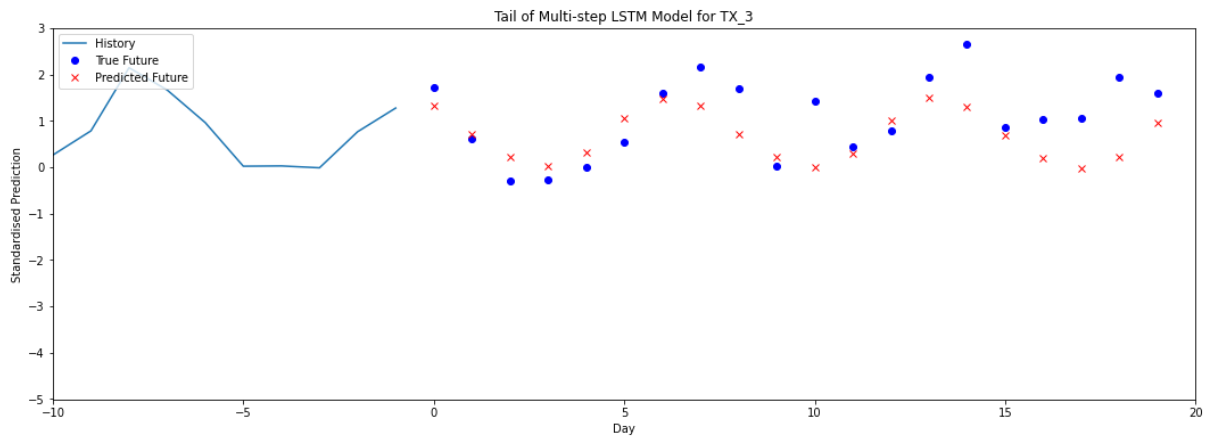
50/50 [=====] - 5s 98ms/step - loss: 0.4324 - val\_loss: 0.4628  
Epoch 24/100  
50/50 [=====] - 5s 99ms/step - loss: 0.4312 - val\_loss: 0.4633  
Epoch 25/100  
50/50 [=====] - 5s 99ms/step - loss: 0.4335 - val\_loss: 0.4664  
Epoch 26/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4193 - val\_loss: 0.4560  
Epoch 27/100  
50/50 [=====] - 5s 97ms/step - loss: 0.4268 - val\_loss: 0.4629  
Epoch 28/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4288 - val\_loss: 0.4538  
Epoch 29/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4143 - val\_loss: 0.4605  
Epoch 30/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4075 - val\_loss: 0.4473  
Epoch 31/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4072 - val\_loss: 0.4498  
Epoch 32/100  
50/50 [=====] - 5s 96ms/step - loss: 0.5496 - val\_loss: 0.5585  
Epoch 33/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4769 - val\_loss: 0.5109  
Epoch 34/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4800 - val\_loss: 0.5306  
Epoch 35/100  
50/50 [=====] - 5s 94ms/step - loss: 0.4479 - val\_loss: 0.5142  
Epoch 36/100  
50/50 [=====] - 5s 94ms/step - loss: 0.4544 - val\_loss: 0.4929  
Epoch 37/100  
50/50 [=====] - 5s 94ms/step - loss: 0.4404 - val\_loss: 0.4752  
Epoch 38/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4404 - val\_loss: 0.4692  
Epoch 39/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4431 - val\_loss: 0.4859  
Epoch 40/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4336 - val\_loss: 0.4939  
Epoch 41/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4270 - val\_loss: 0.4932  
Epoch 42/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4345 - val\_loss: 0.5095  
Epoch 43/100  
50/50 [=====] - 5s 97ms/step - loss: 0.4241 - val\_loss: 0.5094  
Epoch 44/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4351 - val\_loss: 0.4873  
Epoch 45/100  
50/50 [=====] - 5s 98ms/step - loss: 0.4226 - val\_loss: 0.4771  
Epoch 46/100  
50/50 [=====] - 5s 98ms/step - loss: 0.4180 - val\_loss: 0.4636  
Epoch 47/100

50/50 [=====] - 5s 96ms/step - loss: 0.4166 - val\_loss: 0.4745  
Epoch 48/100  
50/50 [=====] - 5s 97ms/step - loss: 0.4234 - val\_loss: 0.6095  
Epoch 49/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4467 - val\_loss: 0.4868  
Epoch 50/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4145 - val\_loss: 0.4734  
Epoch 51/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4108 - val\_loss: 0.4505  
Epoch 52/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4085 - val\_loss: 0.4686  
Epoch 53/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4278 - val\_loss: 0.5067  
Epoch 54/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4109 - val\_loss: 0.4846  
Epoch 55/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4044 - val\_loss: 0.4606  
Epoch 56/100  
50/50 [=====] - 5s 97ms/step - loss: 0.4054 - val\_loss: 0.4690  
Epoch 57/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4013 - val\_loss: 0.4862  
Epoch 58/100  
50/50 [=====] - 5s 95ms/step - loss: 0.5131 - val\_loss: 0.8785  
Epoch 59/100  
50/50 [=====] - 5s 96ms/step - loss: 0.6449 - val\_loss: 0.6120  
Epoch 60/100  
50/50 [=====] - 5s 96ms/step - loss: 0.5818 - val\_loss: 0.5562  
Epoch 61/100  
50/50 [=====] - 5s 95ms/step - loss: 0.5323 - val\_loss: 0.5195  
Epoch 62/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4947 - val\_loss: 0.5653  
Epoch 63/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4711 - val\_loss: 0.5473  
Epoch 64/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4571 - val\_loss: 0.5013  
Epoch 65/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4483 - val\_loss: 0.4943  
Epoch 66/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4420 - val\_loss: 0.5046  
Epoch 67/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4355 - val\_loss: 0.5276  
Epoch 68/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4328 - val\_loss: 0.5467  
Epoch 69/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4270 - val\_loss: 0.5585  
Epoch 70/100  
50/50 [=====] - 5s 95ms/step - loss: 0.4255 - val\_loss: 0.5432  
Epoch 71/100

50/50 [=====] - 5s 96ms/step - loss: 0.4194 - val\_loss: 0.5694  
Epoch 72/100  
50/50 [=====] - 5s 97ms/step - loss: 0.4189 - val\_loss: 0.5279  
Epoch 73/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4152 - val\_loss: 0.5757  
Epoch 74/100  
50/50 [=====] - 5s 108ms/step - loss: 0.4112 - val\_loss: 0.5697  
Epoch 75/100  
50/50 [=====] - 7s 136ms/step - loss: 0.4102 - val\_loss: 0.5608  
Epoch 76/100  
50/50 [=====] - 5s 97ms/step - loss: 0.4094 - val\_loss: 0.5369  
Epoch 77/100  
50/50 [=====] - 5s 98ms/step - loss: 0.4058 - val\_loss: 0.5610  
Epoch 78/100  
50/50 [=====] - 5s 94ms/step - loss: 0.4055 - val\_loss: 0.5585  
Epoch 79/100  
50/50 [=====] - 5s 94ms/step - loss: 0.4021 - val\_loss: 0.5611  
Epoch 80/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3991 - val\_loss: 0.4979  
Epoch 81/100  
50/50 [=====] - 5s 96ms/step - loss: 0.4010 - val\_loss: 0.5219  
Epoch 82/100  
50/50 [=====] - 5s 93ms/step - loss: 0.3961 - val\_loss: 0.4947  
Epoch 83/100  
50/50 [=====] - 5s 93ms/step - loss: 0.3943 - val\_loss: 0.5208  
Epoch 84/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3930 - val\_loss: 0.5157  
Epoch 85/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3897 - val\_loss: 0.5123  
Epoch 86/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3885 - val\_loss: 0.5616  
Epoch 87/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3890 - val\_loss: 0.5166  
Epoch 88/100  
50/50 [=====] - 5s 97ms/step - loss: 0.3836 - val\_loss: 0.5030  
Epoch 89/100  
50/50 [=====] - 5s 96ms/step - loss: 0.3856 - val\_loss: 0.5100  
Epoch 90/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3813 - val\_loss: 0.5559  
Epoch 91/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3806 - val\_loss: 0.5059  
Epoch 92/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3778 - val\_loss: 0.5131  
Epoch 93/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3783 - val\_loss: 0.4946  
Epoch 94/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3748 - val\_loss: 0.5105  
Epoch 95/100

50/50 [=====] - 5s 93ms/step - loss: 0.3741 - val\_loss: 0.4961  
Epoch 96/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3722 - val\_loss: 0.5065  
Epoch 97/100  
50/50 [=====] - 5s 93ms/step - loss: 0.3725 - val\_loss: 0.5134  
Epoch 98/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3698 - val\_loss: 0.5101  
Epoch 99/100  
50/50 [=====] - 5s 93ms/step - loss: 0.3681 - val\_loss: 0.4969  
Epoch 100/100  
50/50 [=====] - 5s 93ms/step - loss: 0.3676 - val\_loss: 0.5032





TX\_3 - True Future: [4286. 3538. 2934. 2939. 3135. 3486. 4202. 4575. 4262. 3141. 4091. 3421. 3664. 4432. 4905. 3707. 3825. 3831. 4438. 4198.]

TX\_3 - Model Prediction: [4016.0508 3601.0454 3279.6726 3140.099 3339.0825 3834.55 4116.798

4013.2026 3598.39 3276.4204 3126.8174 3324.9316 3808.5193 4136.322

4005.9685 3591.585 3262.4236 3102.949 3278.462 3773.984]

TX\_3 - Model Percentage Error: [ 6.29839521 1.78195054 11.78161579 6.84243352 6.50980924 9.99856709

2.02765703 12.27972379 15.57039201 4.31137887 23.56838468 2.80819525

3.94430369 6.67144004 18.32887858 3.1134351 14.70788016 19.00420322

26.1274918 10.10043147]%

TX\_3 - Model Mean Percentage Error: 10.288828353077088%

=====  
=====

Training Model for WL\_1...

Epoch 1/100

50/50 [=====] - 5s 104ms/step - loss: 0.7097 - val\_loss: 0.8998

Epoch 2/100

50/50 [=====] - 5s 93ms/step - loss: 0.5038 - val\_loss: 0.8196

Epoch 3/100

50/50 [=====] - 5s 92ms/step - loss: 0.4990 - val\_loss: 0.8195

Epoch 4/100

50/50 [=====] - 5s 92ms/step - loss: 0.4982 - val\_loss: 0.8150

Epoch 5/100

50/50 [=====] - 5s 93ms/step - loss: 0.4971 - val\_loss: 0.8174

Epoch 6/100

50/50 [=====] - 5s 93ms/step - loss: 0.4962 - val\_loss: 0.8146

Epoch 7/100

50/50 [=====] - 5s 94ms/step - loss: 0.4955 - val\_loss: 0.8108

Epoch 8/100

50/50 [=====] - 5s 94ms/step - loss: 0.4921 - val\_loss: 0.8046

Epoch 9/100

50/50 [=====] - 5s 93ms/step - loss: 0.4901 - val\_loss: 0.7781

Epoch 10/100

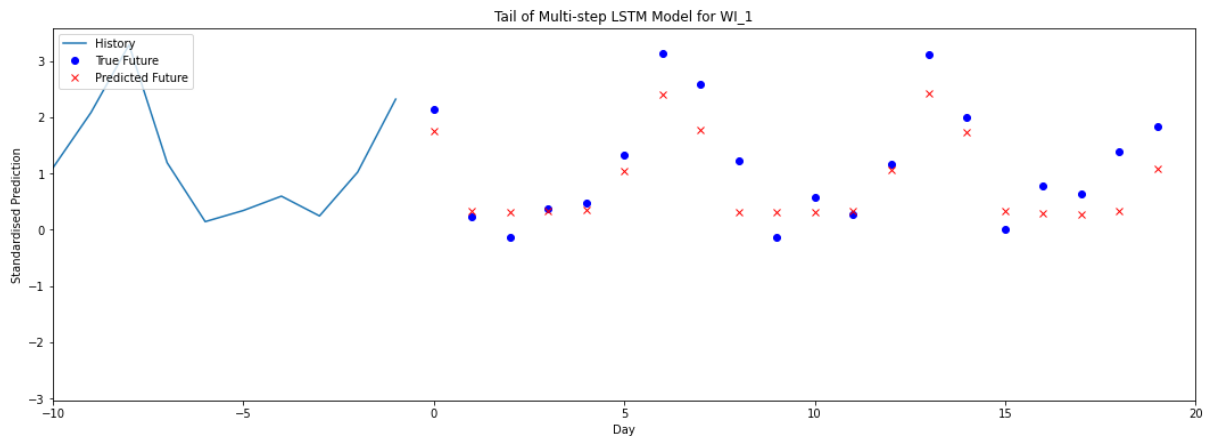
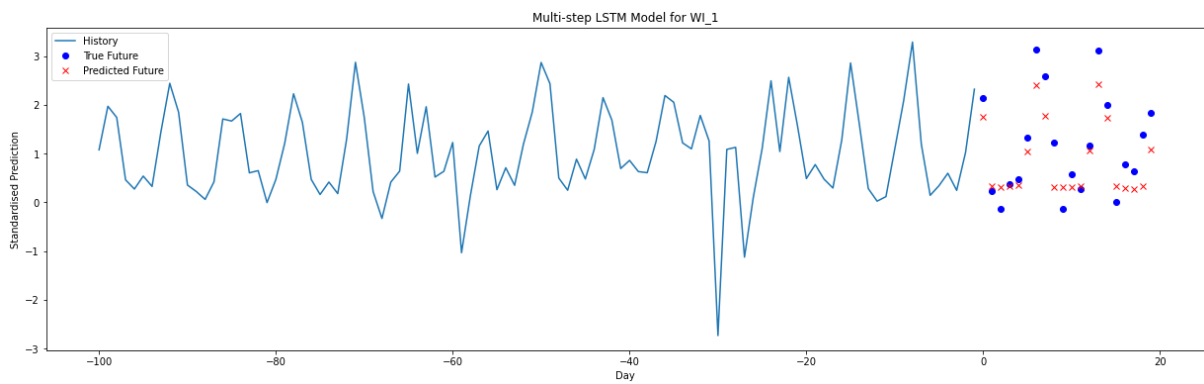
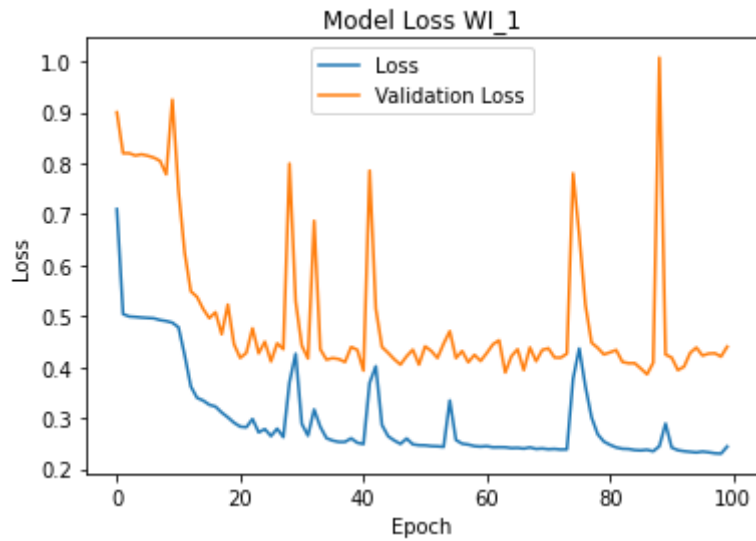
50/50 [=====] - 5s 94ms/step - loss: 0.4870 - val\_loss: 0.9248  
Epoch 11/100  
50/50 [=====] - 5s 94ms/step - loss: 0.4779 - val\_loss: 0.7466  
Epoch 12/100  
50/50 [=====] - 5s 94ms/step - loss: 0.4231 - val\_loss: 0.6242  
Epoch 13/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3616 - val\_loss: 0.5484  
Epoch 14/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3395 - val\_loss: 0.5375  
Epoch 15/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3341 - val\_loss: 0.5137  
Epoch 16/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3259 - val\_loss: 0.4958  
Epoch 17/100  
50/50 [=====] - 5s 93ms/step - loss: 0.3222 - val\_loss: 0.5074  
Epoch 18/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3106 - val\_loss: 0.4643  
Epoch 19/100  
50/50 [=====] - 5s 95ms/step - loss: 0.3012 - val\_loss: 0.5224  
Epoch 20/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2906 - val\_loss: 0.4448  
Epoch 21/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2830 - val\_loss: 0.4178  
Epoch 22/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2817 - val\_loss: 0.4277  
Epoch 23/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2979 - val\_loss: 0.4758  
Epoch 24/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2717 - val\_loss: 0.4268  
Epoch 25/100  
50/50 [=====] - 5s 97ms/step - loss: 0.2780 - val\_loss: 0.4495  
Epoch 26/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2644 - val\_loss: 0.4109  
Epoch 27/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2789 - val\_loss: 0.4464  
Epoch 28/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2624 - val\_loss: 0.4351  
Epoch 29/100  
50/50 [=====] - 5s 93ms/step - loss: 0.3700 - val\_loss: 0.7994  
Epoch 30/100  
50/50 [=====] - 5s 94ms/step - loss: 0.4259 - val\_loss: 0.5288  
Epoch 31/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2883 - val\_loss: 0.4419  
Epoch 32/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2652 - val\_loss: 0.4167  
Epoch 33/100  
50/50 [=====] - 5s 96ms/step - loss: 0.3165 - val\_loss: 0.6869  
Epoch 34/100



50/50 [=====] - 5s 106ms/step - loss: 0.2825 - val\_loss: 0.4348  
Epoch 35/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2603 - val\_loss: 0.4143  
Epoch 36/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2555 - val\_loss: 0.4174  
Epoch 37/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2529 - val\_loss: 0.4155  
Epoch 38/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2530 - val\_loss: 0.4097  
Epoch 39/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2599 - val\_loss: 0.4392  
Epoch 40/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2513 - val\_loss: 0.4337  
Epoch 41/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2487 - val\_loss: 0.3928  
Epoch 42/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3688 - val\_loss: 0.7854  
Epoch 43/100  
50/50 [=====] - 5s 92ms/step - loss: 0.4013 - val\_loss: 0.5145  
Epoch 44/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2862 - val\_loss: 0.4394  
Epoch 45/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2640 - val\_loss: 0.4277  
Epoch 46/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2557 - val\_loss: 0.4151  
Epoch 47/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2490 - val\_loss: 0.4047  
Epoch 48/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2596 - val\_loss: 0.4210  
Epoch 49/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2482 - val\_loss: 0.4340  
Epoch 50/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2464 - val\_loss: 0.4046  
Epoch 51/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2462 - val\_loss: 0.4405  
Epoch 52/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2448 - val\_loss: 0.4314  
Epoch 53/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2443 - val\_loss: 0.4175  
Epoch 54/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2432 - val\_loss: 0.4458  
Epoch 55/100  
50/50 [=====] - 5s 93ms/step - loss: 0.3342 - val\_loss: 0.4702  
Epoch 56/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2566 - val\_loss: 0.4175  
Epoch 57/100  
50/50 [=====] - 5s 92ms/step - loss: 0.2495 - val\_loss: 0.4313  
Epoch 58/100

50/50 [=====] - 5s 92ms/step - loss: 0.2477 - val\_loss: 0.4092  
Epoch 59/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2447 - val\_loss: 0.4238  
Epoch 60/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2437 - val\_loss: 0.4118  
Epoch 61/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2446 - val\_loss: 0.4273  
Epoch 62/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2424 - val\_loss: 0.4444  
Epoch 63/100  
50/50 [=====] - 5s 96ms/step - loss: 0.2426 - val\_loss: 0.4523  
Epoch 64/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2424 - val\_loss: 0.3892  
Epoch 65/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2408 - val\_loss: 0.4212  
Epoch 66/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2412 - val\_loss: 0.4349  
Epoch 67/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2399 - val\_loss: 0.3938  
Epoch 68/100  
50/50 [=====] - 5s 91ms/step - loss: 0.2421 - val\_loss: 0.4383  
Epoch 69/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2392 - val\_loss: 0.4113  
Epoch 70/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2401 - val\_loss: 0.4334  
Epoch 71/100  
50/50 [=====] - 5s 91ms/step - loss: 0.2386 - val\_loss: 0.4366  
Epoch 72/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2392 - val\_loss: 0.4185  
Epoch 73/100  
50/50 [=====] - 5s 92ms/step - loss: 0.2380 - val\_loss: 0.4182  
Epoch 74/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2383 - val\_loss: 0.4261  
Epoch 75/100  
50/50 [=====] - 5s 94ms/step - loss: 0.3768 - val\_loss: 0.7802  
Epoch 76/100  
50/50 [=====] - 5s 94ms/step - loss: 0.4363 - val\_loss: 0.6589  
Epoch 77/100  
50/50 [=====] - 5s 93ms/step - loss: 0.3621 - val\_loss: 0.5220  
Epoch 78/100  
50/50 [=====] - 5s 92ms/step - loss: 0.3011 - val\_loss: 0.4477  
Epoch 79/100  
50/50 [=====] - 5s 92ms/step - loss: 0.2678 - val\_loss: 0.4375  
Epoch 80/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2536 - val\_loss: 0.4246  
Epoch 81/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2472 - val\_loss: 0.4287  
Epoch 82/100

50/50 [=====] - 5s 95ms/step - loss: 0.2421 - val\_loss: 0.4332  
Epoch 83/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2395 - val\_loss: 0.4100  
Epoch 84/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2390 - val\_loss: 0.4073  
Epoch 85/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2369 - val\_loss: 0.4074  
Epoch 86/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2363 - val\_loss: 0.3969  
Epoch 87/100  
50/50 [=====] - 5s 91ms/step - loss: 0.2375 - val\_loss: 0.3857  
Epoch 88/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2346 - val\_loss: 0.4084  
Epoch 89/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2444 - val\_loss: 1.0073  
Epoch 90/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2888 - val\_loss: 0.4244  
Epoch 91/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2418 - val\_loss: 0.4184  
Epoch 92/100  
50/50 [=====] - 5s 93ms/step - loss: 0.2366 - val\_loss: 0.3938  
Epoch 93/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2347 - val\_loss: 0.4006  
Epoch 94/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2334 - val\_loss: 0.4277  
Epoch 95/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2322 - val\_loss: 0.4381  
Epoch 96/100  
50/50 [=====] - 5s 95ms/step - loss: 0.2340 - val\_loss: 0.4224  
Epoch 97/100  
50/50 [=====] - 5s 92ms/step - loss: 0.2325 - val\_loss: 0.4262  
Epoch 98/100  
50/50 [=====] - 5s 92ms/step - loss: 0.2306 - val\_loss: 0.4269  
Epoch 99/100  
50/50 [=====] - 5s 94ms/step - loss: 0.2299 - val\_loss: 0.4204  
Epoch 100/100  
50/50 [=====] - 6s 126ms/step - loss: 0.2439 - val\_loss: 0.4399



WI\_1 - True Future: [4600. 2798. 2466. 2937. 3036. 3845. 5538. 5034. 3740. 2460. 3135. 2831. 3676. 5516. 4461. 2597. 3313. 3180. 3899. 4308.]

WI\_1 - Model Prediction: [4249.057 2891.8298 2877.2915 2897.5615 2922.996 3572.1926 4851.3643

4252.881 2887.6323 2878.1687 2872.815 2900.984 3586.6326 4872.1875

4214.7617 2900.995 2861.6042 2834.629 2891.5679 3605.5398]

WI\_1 - Model Percentage Error: [ 7.62919285 3.35346083 16.67848759 1.342815 3.7221313 7.09512024

12.39862301 15.51686811 22.79057957 16.99872769 8.36315976 2.47205534

2.43110532 11.6717277 5.51980007 11.70562638 13.62498497 10.86072622

25.83821823 16.30594719]%

WI\_1 - Model Mean Percentage Error: 10.815967868579207%

=====  
=====

Training Model for WI\_2...

Epoch 1/100

50/50 [=====] - 5s 102ms/step - loss: 0.7641 - val\_loss: 1.4973

Epoch 2/100

50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan

Epoch 3/100

50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan

Epoch 4/100

50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan

Epoch 5/100

50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan

Epoch 6/100

50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan

Epoch 7/100

50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan

Epoch 8/100

50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan

Epoch 9/100

50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan

Epoch 10/100

50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan

Epoch 11/100

50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan

Epoch 12/100

50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan

Epoch 13/100

50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan

Epoch 14/100

50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan

Epoch 15/100

50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan

Epoch 16/100

50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan

Epoch 17/100

50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan

Epoch 18/100

50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan

Epoch 19/100

50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan

Epoch 20/100

50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan

Epoch 21/100

50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan

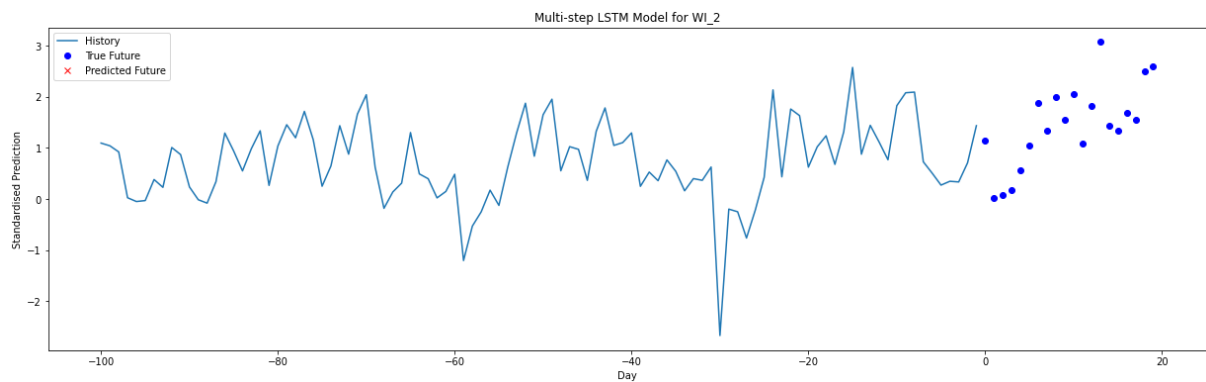
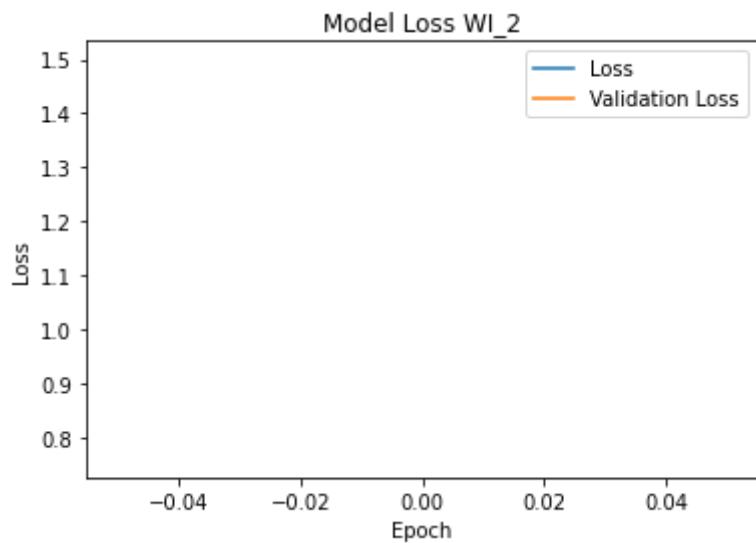
Epoch 22/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 23/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 24/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 25/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 26/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 27/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 28/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 29/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 30/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 31/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 32/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 33/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 34/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 35/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 36/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 37/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 38/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 39/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 40/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 41/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 42/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 43/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 44/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 45/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan

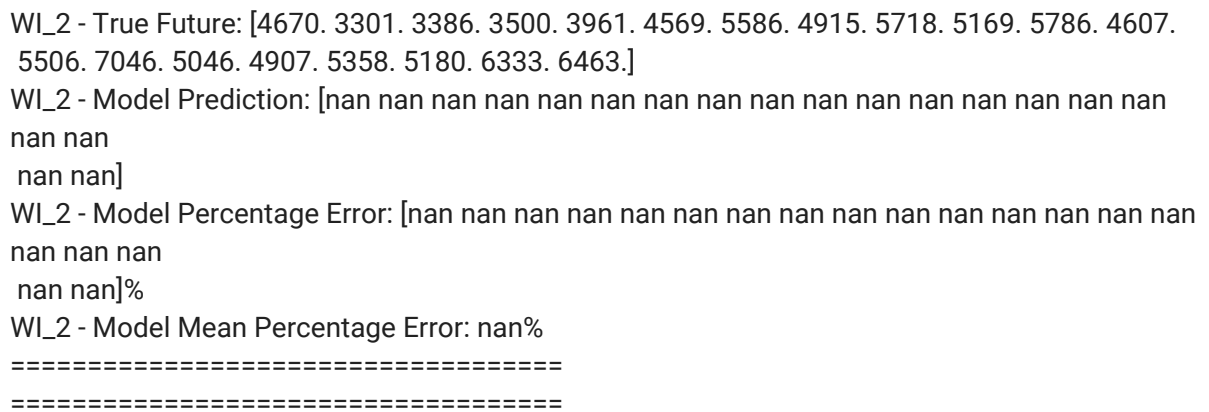
Epoch 46/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 47/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 48/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 49/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 50/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 51/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 52/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 53/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 54/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 55/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 56/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 57/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 58/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 59/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 60/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 61/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 62/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 63/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 64/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 65/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 66/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 67/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 68/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 69/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan

Epoch 70/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 71/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 72/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 73/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 74/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 75/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 76/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 77/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 78/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 79/100  
50/50 [=====] - 4s 89ms/step - loss: nan - val\_loss: nan  
Epoch 80/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 81/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 82/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 83/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 84/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 85/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 86/100  
50/50 [=====] - 4s 90ms/step - loss: nan - val\_loss: nan  
Epoch 87/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 88/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 89/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 90/100  
50/50 [=====] - 5s 90ms/step - loss: nan - val\_loss: nan  
Epoch 91/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 92/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 93/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan



Epoch 94/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 95/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 96/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 97/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 98/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 99/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 100/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan





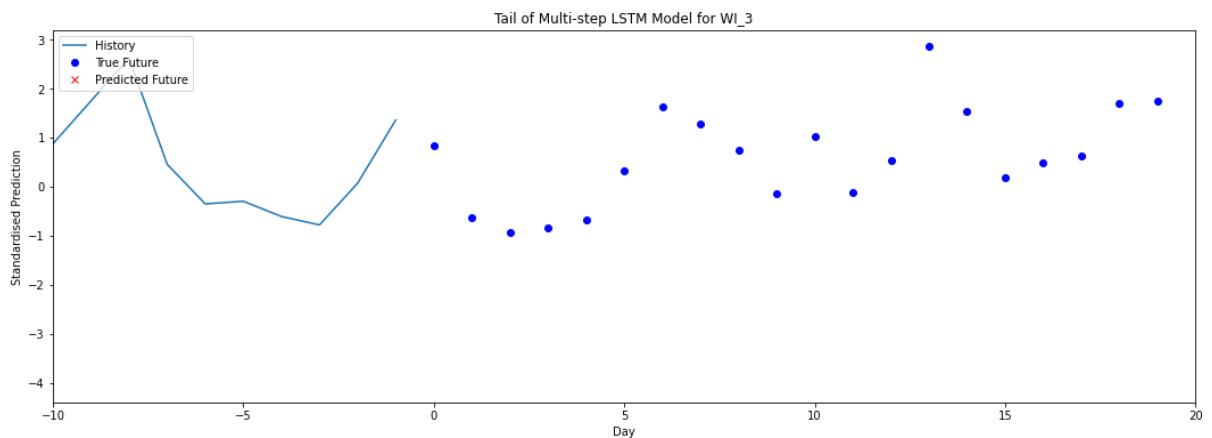
```
Epoch 1/100
50/50 [=====] - 5s 101ms/step - loss: 0.7786 - val_loss: 0.9883
Epoch 2/100
50/50 [=====] - 5s 91ms/step - loss: 0.7421 - val_loss: 0.9716
Epoch 3/100
50/50 [=====] - 5s 92ms/step - loss: 0.7185 - val_loss: 0.8735
Epoch 4/100
50/50 [=====] - 5s 91ms/step - loss: 0.6859 - val_loss: 0.8330
Epoch 5/100
50/50 [=====] - 5s 91ms/step - loss: 0.6416 - val_loss: 0.7936
Epoch 6/100
50/50 [=====] - 5s 91ms/step - loss: nan - val_loss: nan
Epoch 7/100
50/50 [=====] - 5s 91ms/step - loss: nan - val_loss: nan
Epoch 8/100
50/50 [=====] - 5s 90ms/step - loss: nan - val_loss: nan
Epoch 9/100
50/50 [=====] - 5s 91ms/step - loss: nan - val_loss: nan
Epoch 10/100
50/50 [=====] - 5s 92ms/step - loss: nan - val_loss: nan
Epoch 11/100
50/50 [=====] - 5s 92ms/step - loss: nan - val_loss: nan
```

Epoch 12/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 13/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 14/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 15/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 16/100  
50/50 [=====] - 5s 91ms/step - loss: nan - val\_loss: nan  
Epoch 17/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 18/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 19/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 20/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 21/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 22/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 23/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 24/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 25/100  
50/50 [=====] - 5s 110ms/step - loss: nan - val\_loss: nan  
Epoch 26/100  
50/50 [=====] - 5s 101ms/step - loss: nan - val\_loss: nan  
Epoch 27/100  
50/50 [=====] - 6s 123ms/step - loss: nan - val\_loss: nan  
Epoch 28/100  
50/50 [=====] - 6s 111ms/step - loss: nan - val\_loss: nan  
Epoch 29/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 30/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 31/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 32/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 33/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 34/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 35/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan

Epoch 36/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 37/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 38/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 39/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 40/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 41/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 42/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 43/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 44/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 45/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 46/100  
50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan  
Epoch 47/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 48/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 49/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 50/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 51/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 52/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 53/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 54/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 55/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 56/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 57/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 58/100  
50/50 [=====] - 5s 92ms/step - loss: nan - val\_loss: nan  
Epoch 59/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan

Epoch 60/100  
50/50 [=====] - 5s 93ms/step - loss: nan - val\_loss: nan  
Epoch 61/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 62/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 63/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 64/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 65/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 66/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 67/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 68/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 69/100  
50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan  
Epoch 70/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 71/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 72/100  
50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan  
Epoch 73/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 74/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 75/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 76/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 77/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 78/100  
50/50 [=====] - 5s 94ms/step - loss: nan - val\_loss: nan  
Epoch 79/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 80/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 81/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 82/100  
50/50 [=====] - 5s 95ms/step - loss: nan - val\_loss: nan  
Epoch 83/100  
50/50 [=====] - 5s 96ms/step - loss: nan - val\_loss: nan

Epoch 84/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 85/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 86/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 87/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 88/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 89/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 90/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 91/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 92/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 93/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 94/100  
50/50 [=====] - 5s 101ms/step - loss: nan - val\_loss: nan  
Epoch 95/100  
50/50 [=====] - 5s 101ms/step - loss: nan - val\_loss: nan  
Epoch 96/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 97/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 98/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan  
Epoch 99/100  
50/50 [=====] - 5s 98ms/step - loss: nan - val\_loss: nan  
Epoch 100/100  
50/50 [=====] - 5s 99ms/step - loss: nan - val\_loss: nan



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