

## Training Model for CA\_1...

Epoch 1/100

50/50 [=====] - 2s 42ms/step - loss: 0.7534 - val\_loss: 0.7566

Epoch 2/100

50/50 [=====] - 2s 37ms/step - loss: 0.7092 - val\_loss: 0.7319

Epoch 3/100

50/50 [=====] - 2s 35ms/step - loss: 0.6896 - val\_loss: 0.7101

Epoch 4/100

50/50 [=====] - 2s 37ms/step - loss: 0.6745 - val\_loss: 0.6758

Epoch 5/100

50/50 [=====] - 2s 37ms/step - loss: 0.6401 - val\_loss: 0.6346

Epoch 6/100

50/50 [=====] - 2s 37ms/step - loss: 0.5971 - val\_loss: 0.5792

Epoch 7/100

50/50 [=====] - 2s 37ms/step - loss: 0.5469 - val\_loss: 0.5189

Epoch 8/100

50/50 [=====] - 2s 36ms/step - loss: 0.4990 - val\_loss: 0.4611

Epoch 9/100

50/50 [=====] - 2s 40ms/step - loss: 0.4617 - val\_loss: 0.4296

Epoch 10/100

50/50 [=====] - 2s 36ms/step - loss: 0.4318 - val\_loss: 0.4116

Epoch 11/100

50/50 [=====] - 2s 36ms/step - loss: 0.4169 - val\_loss: 0.3959

Epoch 12/100

50/50 [=====] - 2s 39ms/step - loss: 0.4094 - val\_loss: 0.3871

Epoch 13/100

50/50 [=====] - 2s 38ms/step - loss: 0.4023 - val\_loss: 0.3791

Epoch 14/100

50/50 [=====] - 2s 39ms/step - loss: 0.3965 - val\_loss: 0.3728

Epoch 15/100

50/50 [=====] - 2s 39ms/step - loss: 0.3921 - val\_loss: 0.3667

Epoch 16/100

50/50 [=====] - 2s 40ms/step - loss: 0.3890 - val\_loss: 0.3611

Epoch 17/100

50/50 [=====] - 2s 39ms/step - loss: 0.3849 - val\_loss: 0.3577

Epoch 18/100

50/50 [=====] - 2s 36ms/step - loss: 0.3819 - val\_loss: 0.3521

Epoch 19/100

50/50 [=====] - 2s 38ms/step - loss: 0.3767 - val\_loss: 0.3497

Epoch 20/100

50/50 [=====] - 2s 38ms/step - loss: 0.3759 - val\_loss: 0.3461

Epoch 21/100

50/50 [=====] - 2s 38ms/step - loss: 0.3696 - val\_loss: 0.3438

Epoch 22/100

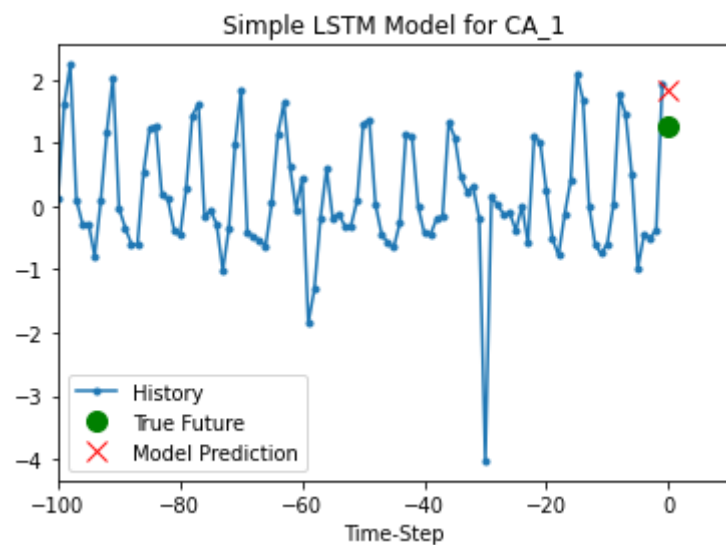
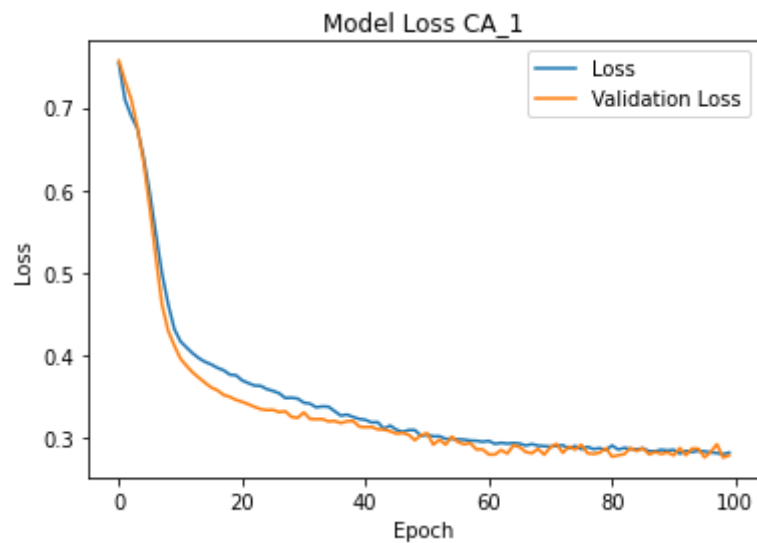
50/50 [=====] - 2s 38ms/step - loss: 0.3665 - val\_loss: 0.3408

Epoch 23/100  
50/50 [=====] - 2s 40ms/step - loss: 0.3634 - val\_loss: 0.3377  
Epoch 24/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3631 - val\_loss: 0.3349  
Epoch 25/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3592 - val\_loss: 0.3337  
Epoch 26/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3569 - val\_loss: 0.3340  
Epoch 27/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3541 - val\_loss: 0.3313  
Epoch 28/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3483 - val\_loss: 0.3323  
Epoch 29/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3487 - val\_loss: 0.3255  
Epoch 30/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3478 - val\_loss: 0.3243  
Epoch 31/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3427 - val\_loss: 0.3309  
Epoch 32/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3416 - val\_loss: 0.3230  
Epoch 33/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3371 - val\_loss: 0.3227  
Epoch 34/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3382 - val\_loss: 0.3229  
Epoch 35/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3378 - val\_loss: 0.3200  
Epoch 36/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3324 - val\_loss: 0.3206  
Epoch 37/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3270 - val\_loss: 0.3180  
Epoch 38/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3283 - val\_loss: 0.3202  
Epoch 39/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3254 - val\_loss: 0.3206  
Epoch 40/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3230 - val\_loss: 0.3137  
Epoch 41/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3219 - val\_loss: 0.3131  
Epoch 42/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3187 - val\_loss: 0.3133  
Epoch 43/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3191 - val\_loss: 0.3104  
Epoch 44/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3111 - val\_loss: 0.3102  
Epoch 45/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3150 - val\_loss: 0.3081  
Epoch 46/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3100 - val\_loss: 0.3052

Epoch 47/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3074 - val\_loss: 0.3061  
Epoch 48/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3095 - val\_loss: 0.3039  
Epoch 49/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3096 - val\_loss: 0.2974  
Epoch 50/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3028 - val\_loss: 0.3032  
Epoch 51/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3036 - val\_loss: 0.3058  
Epoch 52/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3020 - val\_loss: 0.2920  
Epoch 53/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3021 - val\_loss: 0.2979  
Epoch 54/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2989 - val\_loss: 0.2919  
Epoch 55/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2989 - val\_loss: 0.3015  
Epoch 56/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2983 - val\_loss: 0.2951  
Epoch 57/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2980 - val\_loss: 0.2924  
Epoch 58/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2968 - val\_loss: 0.2939  
Epoch 59/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2966 - val\_loss: 0.2861  
Epoch 60/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2954 - val\_loss: 0.2862  
Epoch 61/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2964 - val\_loss: 0.2800  
Epoch 62/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2929 - val\_loss: 0.2799  
Epoch 63/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2941 - val\_loss: 0.2854  
Epoch 64/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2932 - val\_loss: 0.2811  
Epoch 65/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2938 - val\_loss: 0.2912  
Epoch 66/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2932 - val\_loss: 0.2890  
Epoch 67/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2908 - val\_loss: 0.2830  
Epoch 68/100  
50/50 [=====] - 2s 39ms/step - loss: 0.2926 - val\_loss: 0.2816  
Epoch 69/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2907 - val\_loss: 0.2868  
Epoch 70/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2901 - val\_loss: 0.2798

Epoch 71/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2896 - val\_loss: 0.2889  
Epoch 72/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2903 - val\_loss: 0.2928  
Epoch 73/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2912 - val\_loss: 0.2821  
Epoch 74/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2873 - val\_loss: 0.2896  
Epoch 75/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2903 - val\_loss: 0.2859  
Epoch 76/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2864 - val\_loss: 0.2917  
Epoch 77/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2893 - val\_loss: 0.2816  
Epoch 78/100  
50/50 [=====] - 2s 39ms/step - loss: 0.2866 - val\_loss: 0.2808  
Epoch 79/100  
50/50 [=====] - 2s 39ms/step - loss: 0.2877 - val\_loss: 0.2822  
Epoch 80/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2854 - val\_loss: 0.2876  
Epoch 81/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2909 - val\_loss: 0.2774  
Epoch 82/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2860 - val\_loss: 0.2791  
Epoch 83/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2880 - val\_loss: 0.2805  
Epoch 84/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2867 - val\_loss: 0.2879  
Epoch 85/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2863 - val\_loss: 0.2842  
Epoch 86/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2873 - val\_loss: 0.2877  
Epoch 87/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2840 - val\_loss: 0.2802  
Epoch 88/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2840 - val\_loss: 0.2830  
Epoch 89/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2857 - val\_loss: 0.2807  
Epoch 90/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2849 - val\_loss: 0.2825  
Epoch 91/100  
50/50 [=====] - 2s 39ms/step - loss: 0.2857 - val\_loss: 0.2790  
Epoch 92/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2810 - val\_loss: 0.2878  
Epoch 93/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2843 - val\_loss: 0.2792  
Epoch 94/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2830 - val\_loss: 0.2873

Epoch 95/100  
 50/50 [=====] - 2s 37ms/step - loss: 0.2844 - val\_loss: 0.2870  
 Epoch 96/100  
 50/50 [=====] - 2s 40ms/step - loss: 0.2837 - val\_loss: 0.2766  
 Epoch 97/100  
 50/50 [=====] - 2s 36ms/step - loss: 0.2825 - val\_loss: 0.2829  
 Epoch 98/100  
 50/50 [=====] - 2s 37ms/step - loss: 0.2818 - val\_loss: 0.2925  
 Epoch 99/100  
 50/50 [=====] - 2s 37ms/step - loss: 0.2804 - val\_loss: 0.2764  
 Epoch 100/100  
 50/50 [=====] - 2s 36ms/step - loss: 0.2822 - val\_loss: 0.2790



CA\_1 - True Future: 5247  
 CA\_1 - Model Prediction: 5811  
 CA\_1 - Model Percentage Error: 10.75%

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## Training Model for CA\_2...

Epoch 1/100

50/50 [=====] - 2s 44ms/step - loss: 0.7327 - val\_loss: 1.4356

Epoch 2/100

50/50 [=====] - 2s 38ms/step - loss: 0.6805 - val\_loss: 1.2908

Epoch 3/100

50/50 [=====] - 2s 38ms/step - loss: 0.6614 - val\_loss: 1.2272

Epoch 4/100

50/50 [=====] - 2s 36ms/step - loss: 0.6449 - val\_loss: 1.1974

Epoch 5/100

50/50 [=====] - 2s 37ms/step - loss: 0.6107 - val\_loss: 1.1583

Epoch 6/100

50/50 [=====] - 2s 37ms/step - loss: 0.5831 - val\_loss: 1.1165

Epoch 7/100

50/50 [=====] - 2s 37ms/step - loss: 0.5436 - val\_loss: 1.0989

Epoch 8/100

50/50 [=====] - 2s 38ms/step - loss: 0.5165 - val\_loss: 1.1176

Epoch 9/100

50/50 [=====] - 2s 36ms/step - loss: 0.4877 - val\_loss: 1.0892

Epoch 10/100

50/50 [=====] - 2s 36ms/step - loss: 0.4728 - val\_loss: 1.0909

Epoch 11/100

50/50 [=====] - 2s 37ms/step - loss: 0.4613 - val\_loss: 1.1080

Epoch 12/100

50/50 [=====] - 2s 36ms/step - loss: 0.4458 - val\_loss: 1.1106

Epoch 13/100

50/50 [=====] - 2s 37ms/step - loss: 0.4285 - val\_loss: 1.0910

Epoch 14/100

50/50 [=====] - 2s 37ms/step - loss: 0.4135 - val\_loss: 1.0643

Epoch 15/100

50/50 [=====] - 2s 37ms/step - loss: 0.3975 - val\_loss: 1.0332

Epoch 16/100

50/50 [=====] - 2s 37ms/step - loss: 0.3833 - val\_loss: 0.9938

Epoch 17/100

50/50 [=====] - 2s 39ms/step - loss: 0.3767 - val\_loss: 0.9643

Epoch 18/100

50/50 [=====] - 2s 36ms/step - loss: 0.3708 - val\_loss: 0.9844

Epoch 19/100

50/50 [=====] - 2s 38ms/step - loss: 0.3579 - val\_loss: 0.9187

Epoch 20/100

50/50 [=====] - 2s 36ms/step - loss: 0.3476 - val\_loss: 0.8858

Epoch 21/100

50/50 [=====] - 2s 37ms/step - loss: 0.3412 - val\_loss: 0.8639

Epoch 22/100

50/50 [=====] - 2s 37ms/step - loss: 0.3312 - val\_loss: 0.8154

Epoch 23/100

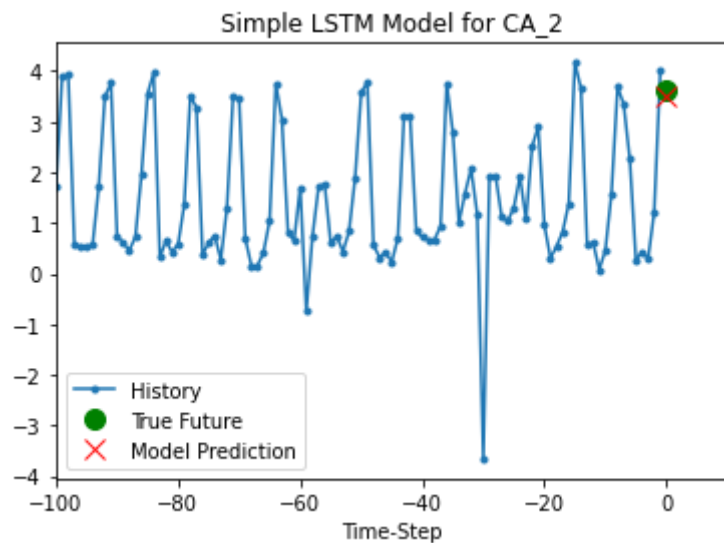
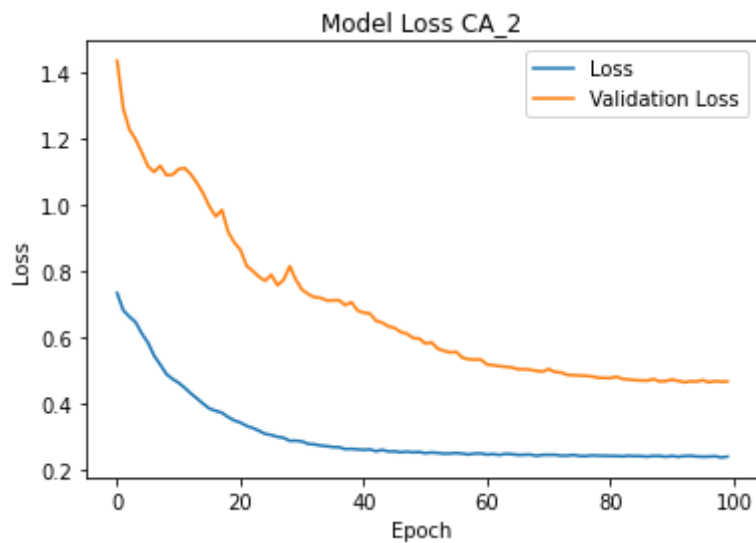
50/50 [=====] - 2s 39ms/step - loss: 0.3246 - val\_loss: 0.7996  
Epoch 24/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3164 - val\_loss: 0.7822  
Epoch 25/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3070 - val\_loss: 0.7701  
Epoch 26/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3037 - val\_loss: 0.7881  
Epoch 27/100  
50/50 [=====] - 2s 45ms/step - loss: 0.2979 - val\_loss: 0.7566  
Epoch 28/100  
50/50 [=====] - 3s 52ms/step - loss: 0.2951 - val\_loss: 0.7725  
Epoch 29/100  
50/50 [=====] - 3s 53ms/step - loss: 0.2858 - val\_loss: 0.8137  
Epoch 30/100  
50/50 [=====] - 2s 43ms/step - loss: 0.2864 - val\_loss: 0.7734  
Epoch 31/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2839 - val\_loss: 0.7430  
Epoch 32/100  
50/50 [=====] - 2s 40ms/step - loss: 0.2768 - val\_loss: 0.7298  
Epoch 33/100  
50/50 [=====] - 2s 40ms/step - loss: 0.2752 - val\_loss: 0.7204  
Epoch 34/100  
50/50 [=====] - 2s 39ms/step - loss: 0.2717 - val\_loss: 0.7184  
Epoch 35/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2697 - val\_loss: 0.7106  
Epoch 36/100  
50/50 [=====] - 2s 39ms/step - loss: 0.2670 - val\_loss: 0.7108  
Epoch 37/100  
50/50 [=====] - 2s 39ms/step - loss: 0.2667 - val\_loss: 0.7114  
Epoch 38/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2607 - val\_loss: 0.6965  
Epoch 39/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2617 - val\_loss: 0.7051  
Epoch 40/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2601 - val\_loss: 0.6803  
Epoch 41/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2586 - val\_loss: 0.6732  
Epoch 42/100  
50/50 [=====] - 2s 39ms/step - loss: 0.2600 - val\_loss: 0.6708  
Epoch 43/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2545 - val\_loss: 0.6489  
Epoch 44/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2585 - val\_loss: 0.6435  
Epoch 45/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2537 - val\_loss: 0.6321  
Epoch 46/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2542 - val\_loss: 0.6274  
Epoch 47/100

50/50 [=====] - 2s 37ms/step - loss: 0.2515 - val\_loss: 0.6152  
Epoch 48/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2530 - val\_loss: 0.6100  
Epoch 49/100  
50/50 [=====] - 2s 41ms/step - loss: 0.2513 - val\_loss: 0.5970  
Epoch 50/100  
50/50 [=====] - 2s 40ms/step - loss: 0.2523 - val\_loss: 0.5953  
Epoch 51/100  
50/50 [=====] - 2s 41ms/step - loss: 0.2486 - val\_loss: 0.5802  
Epoch 52/100  
50/50 [=====] - 2s 39ms/step - loss: 0.2506 - val\_loss: 0.5839  
Epoch 53/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2494 - val\_loss: 0.5648  
Epoch 54/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2472 - val\_loss: 0.5584  
Epoch 55/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2476 - val\_loss: 0.5533  
Epoch 56/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2490 - val\_loss: 0.5550  
Epoch 57/100  
50/50 [=====] - 2s 39ms/step - loss: 0.2473 - val\_loss: 0.5375  
Epoch 58/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2447 - val\_loss: 0.5328  
Epoch 59/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2473 - val\_loss: 0.5318  
Epoch 60/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2479 - val\_loss: 0.5318  
Epoch 61/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2444 - val\_loss: 0.5168  
Epoch 62/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2460 - val\_loss: 0.5148  
Epoch 63/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2430 - val\_loss: 0.5119  
Epoch 64/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2466 - val\_loss: 0.5099  
Epoch 65/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2455 - val\_loss: 0.5081  
Epoch 66/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2433 - val\_loss: 0.5026  
Epoch 67/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2437 - val\_loss: 0.5026  
Epoch 68/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2445 - val\_loss: 0.5009  
Epoch 69/100  
50/50 [=====] - 2s 39ms/step - loss: 0.2405 - val\_loss: 0.4977  
Epoch 70/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2432 - val\_loss: 0.4953  
Epoch 71/100



50/50 [=====] - 2s 36ms/step - loss: 0.2437 - val\_loss: 0.5027  
Epoch 72/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2437 - val\_loss: 0.4944  
Epoch 73/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2411 - val\_loss: 0.4929  
Epoch 74/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2411 - val\_loss: 0.4856  
Epoch 75/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2434 - val\_loss: 0.4847  
Epoch 76/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2402 - val\_loss: 0.4833  
Epoch 77/100  
50/50 [=====] - 2s 39ms/step - loss: 0.2396 - val\_loss: 0.4827  
Epoch 78/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2418 - val\_loss: 0.4810  
Epoch 79/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2409 - val\_loss: 0.4766  
Epoch 80/100  
50/50 [=====] - 2s 38ms/step - loss: 0.2406 - val\_loss: 0.4760  
Epoch 81/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2402 - val\_loss: 0.4756  
Epoch 82/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2399 - val\_loss: 0.4799  
Epoch 83/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2391 - val\_loss: 0.4731  
Epoch 84/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2408 - val\_loss: 0.4714  
Epoch 85/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2397 - val\_loss: 0.4694  
Epoch 86/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2398 - val\_loss: 0.4689  
Epoch 87/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2380 - val\_loss: 0.4681  
Epoch 88/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2401 - val\_loss: 0.4727  
Epoch 89/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2402 - val\_loss: 0.4656  
Epoch 90/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2378 - val\_loss: 0.4670  
Epoch 91/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2401 - val\_loss: 0.4712  
Epoch 92/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2377 - val\_loss: 0.4674  
Epoch 93/100  
50/50 [=====] - 2s 37ms/step - loss: 0.2397 - val\_loss: 0.4632  
Epoch 94/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2406 - val\_loss: 0.4659  
Epoch 95/100

50/50 [=====] - 2s 36ms/step - loss: 0.2387 - val\_loss: 0.4652  
 Epoch 96/100  
 50/50 [=====] - 2s 36ms/step - loss: 0.2378 - val\_loss: 0.4696  
 Epoch 97/100  
 50/50 [=====] - 2s 36ms/step - loss: 0.2383 - val\_loss: 0.4631  
 Epoch 98/100  
 50/50 [=====] - 2s 36ms/step - loss: 0.2394 - val\_loss: 0.4666  
 Epoch 99/100  
 50/50 [=====] - 2s 37ms/step - loss: 0.2356 - val\_loss: 0.4646  
 Epoch 100/100  
 50/50 [=====] - 2s 37ms/step - loss: 0.2383 - val\_loss: 0.4656



CA\_2 - True Future: 5647  
 CA\_2 - Model Prediction: 5555  
 CA\_2 - Model Percentage Error: 1.63%

=====  
 =====

## Training Model for CA\_3...

Epoch 1/100  
50/50 [=====] - 2s 43ms/step - loss: 0.6302 - val\_loss: 0.6777  
Epoch 2/100  
50/50 [=====] - 2s 37ms/step - loss: 0.6149 - val\_loss: 0.6609  
Epoch 3/100  
50/50 [=====] - 2s 39ms/step - loss: 0.6044 - val\_loss: 0.6466  
Epoch 4/100  
50/50 [=====] - 2s 38ms/step - loss: 0.5898 - val\_loss: 0.6267  
Epoch 5/100  
50/50 [=====] - 2s 37ms/step - loss: 0.5751 - val\_loss: 0.6065  
Epoch 6/100  
50/50 [=====] - 2s 37ms/step - loss: 0.5556 - val\_loss: 0.5850  
Epoch 7/100  
50/50 [=====] - 2s 36ms/step - loss: 0.5336 - val\_loss: 0.5618  
Epoch 8/100  
50/50 [=====] - 2s 36ms/step - loss: 0.5198 - val\_loss: 0.5432  
Epoch 9/100  
50/50 [=====] - 2s 37ms/step - loss: 0.5016 - val\_loss: 0.5204  
Epoch 10/100  
50/50 [=====] - 2s 39ms/step - loss: 0.4967 - val\_loss: 0.5030  
Epoch 11/100  
50/50 [=====] - 2s 38ms/step - loss: 0.4802 - val\_loss: 0.4966  
Epoch 12/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4703 - val\_loss: 0.4782  
Epoch 13/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4589 - val\_loss: 0.4599  
Epoch 14/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4533 - val\_loss: 0.4457  
Epoch 15/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4450 - val\_loss: 0.4380  
Epoch 16/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4457 - val\_loss: 0.4387  
Epoch 17/100  
50/50 [=====] - 2s 38ms/step - loss: 0.4355 - val\_loss: 0.4334  
Epoch 18/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4310 - val\_loss: 0.4222  
Epoch 19/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4293 - val\_loss: 0.4128  
Epoch 20/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4269 - val\_loss: 0.4073  
Epoch 21/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4226 - val\_loss: 0.3995  
Epoch 22/100  
50/50 [=====] - 2s 38ms/step - loss: 0.4107 - val\_loss: 0.3962  
Epoch 23/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4099 - val\_loss: 0.3928

Epoch 24/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3983 - val\_loss: 0.3775  
Epoch 25/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3929 - val\_loss: 0.3709  
Epoch 26/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3843 - val\_loss: 0.3670  
Epoch 27/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3774 - val\_loss: 0.3624  
Epoch 28/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3685 - val\_loss: 0.3543  
Epoch 29/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3600 - val\_loss: 0.3545  
Epoch 30/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3564 - val\_loss: 0.3469  
Epoch 31/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3428 - val\_loss: 0.3315  
Epoch 32/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3419 - val\_loss: 0.3309  
Epoch 33/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3338 - val\_loss: 0.3211  
Epoch 34/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3322 - val\_loss: 0.3169  
Epoch 35/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3268 - val\_loss: 0.3009  
Epoch 36/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3287 - val\_loss: 0.2955  
Epoch 37/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3210 - val\_loss: 0.2957  
Epoch 38/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3214 - val\_loss: 0.2873  
Epoch 39/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3240 - val\_loss: 0.3271  
Epoch 40/100  
50/50 [=====] - 2s 39ms/step - loss: 0.3311 - val\_loss: 0.2791  
Epoch 41/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3180 - val\_loss: 0.2745  
Epoch 42/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3172 - val\_loss: 0.2941  
Epoch 43/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3210 - val\_loss: 0.2877  
Epoch 44/100  
50/50 [=====] - 2s 38ms/step - loss: 0.4185 - val\_loss: 0.4886  
Epoch 45/100  
50/50 [=====] - 2s 38ms/step - loss: 0.4514 - val\_loss: 0.3416  
Epoch 46/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3952 - val\_loss: 0.3177  
Epoch 47/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3762 - val\_loss: 0.3097

Epoch 48/100  
50/50 [=====] - 2s 39ms/step - loss: 0.3688 - val\_loss: 0.3053  
Epoch 49/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3561 - val\_loss: 0.2975  
Epoch 50/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3536 - val\_loss: 0.2965  
Epoch 51/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3455 - val\_loss: 0.2932  
Epoch 52/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3405 - val\_loss: 0.2884  
Epoch 53/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3346 - val\_loss: 0.2853  
Epoch 54/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3323 - val\_loss: 0.2855  
Epoch 55/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3275 - val\_loss: 0.2848  
Epoch 56/100  
50/50 [=====] - 2s 41ms/step - loss: 0.3253 - val\_loss: 0.2815  
Epoch 57/100  
50/50 [=====] - 2s 40ms/step - loss: 0.3232 - val\_loss: 0.2849  
Epoch 58/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3226 - val\_loss: 0.2827  
Epoch 59/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3194 - val\_loss: 0.2775  
Epoch 60/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3197 - val\_loss: 0.2751  
Epoch 61/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3174 - val\_loss: 0.2757  
Epoch 62/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3176 - val\_loss: 0.2828  
Epoch 63/100  
50/50 [=====] - 2s 39ms/step - loss: 0.3148 - val\_loss: 0.2753  
Epoch 64/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3133 - val\_loss: 0.2832  
Epoch 65/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3115 - val\_loss: 0.2727  
Epoch 66/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3113 - val\_loss: 0.2717  
Epoch 67/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3102 - val\_loss: 0.2746  
Epoch 68/100  
50/50 [=====] - 2s 39ms/step - loss: 0.3128 - val\_loss: 0.2712  
Epoch 69/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3084 - val\_loss: 0.2730  
Epoch 70/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3109 - val\_loss: 0.2771  
Epoch 71/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3085 - val\_loss: 0.2807

Epoch 72/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3903 - val\_loss: 0.3505  
Epoch 73/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3615 - val\_loss: 0.2892  
Epoch 74/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3368 - val\_loss: 0.2830  
Epoch 75/100  
50/50 [=====] - 2s 39ms/step - loss: 0.3209 - val\_loss: 0.2823  
Epoch 76/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3201 - val\_loss: 0.2776  
Epoch 77/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3138 - val\_loss: 0.2773  
Epoch 78/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3128 - val\_loss: 0.2739  
Epoch 79/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3092 - val\_loss: 0.2778  
Epoch 80/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3077 - val\_loss: 0.2700  
Epoch 81/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3068 - val\_loss: 0.2750  
Epoch 82/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3094 - val\_loss: 0.2727  
Epoch 83/100  
50/50 [=====] - 2s 38ms/step - loss: 0.4260 - val\_loss: 0.5575  
Epoch 84/100  
50/50 [=====] - 2s 37ms/step - loss: 0.5000 - val\_loss: 0.5113  
Epoch 85/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4857 - val\_loss: 0.4938  
Epoch 86/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4666 - val\_loss: 0.4716  
Epoch 87/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4555 - val\_loss: 0.4471  
Epoch 88/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4439 - val\_loss: 0.4278  
Epoch 89/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4329 - val\_loss: 0.4081  
Epoch 90/100  
50/50 [=====] - 2s 39ms/step - loss: 0.4198 - val\_loss: 0.3921  
Epoch 91/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4101 - val\_loss: 0.3759  
Epoch 92/100  
50/50 [=====] - 2s 41ms/step - loss: 0.3993 - val\_loss: 0.3639  
Epoch 93/100  
50/50 [=====] - 2s 39ms/step - loss: 0.3888 - val\_loss: 0.3512  
Epoch 94/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3849 - val\_loss: 0.3402  
Epoch 95/100  
50/50 [=====] - 2s 38ms/step - loss: 0.3695 - val\_loss: 0.3328

Epoch 96/100

50/50 [=====] - 2s 38ms/step - loss: 0.3701 - val\_loss: 0.3261

Epoch 97/100

50/50 [=====] - 2s 39ms/step - loss: 0.3620 - val\_loss: 0.3196

Epoch 98/100

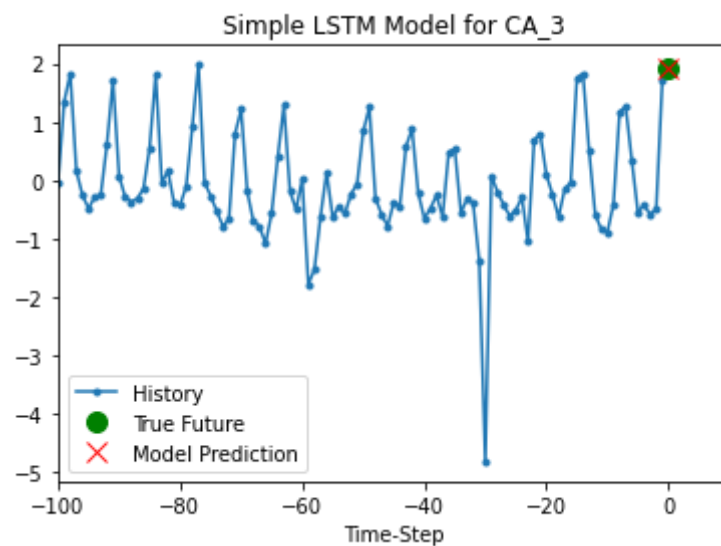
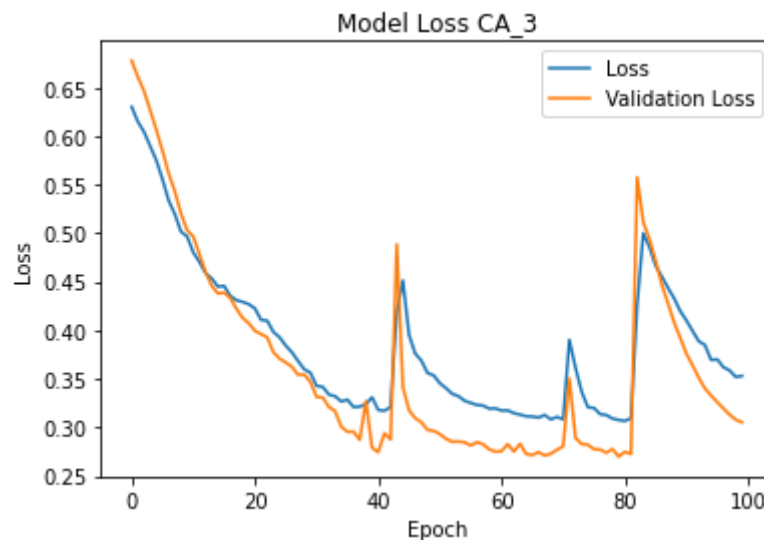
50/50 [=====] - 2s 38ms/step - loss: 0.3587 - val\_loss: 0.3132

Epoch 99/100

50/50 [=====] - 2s 38ms/step - loss: 0.3520 - val\_loss: 0.3080

Epoch 100/100

50/50 [=====] - 2s 37ms/step - loss: 0.3531 - val\_loss: 0.3053



CA\_3 - True Future: 8164

CA\_3 - Model Prediction: 8126

CA\_3 - Model Percentage Error: 0.47%

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Training Model for CA\_4...

Epoch 1/100  
50/50 [=====] - 2s 44ms/step - loss: 0.5569 - val\_loss: 0.6289  
Epoch 2/100  
50/50 [=====] - 2s 37ms/step - loss: 0.5245 - val\_loss: 0.6464  
Epoch 3/100  
50/50 [=====] - 2s 40ms/step - loss: 0.5221 - val\_loss: 0.6481  
Epoch 4/100  
50/50 [=====] - 2s 38ms/step - loss: 0.5205 - val\_loss: 0.6401  
Epoch 5/100  
50/50 [=====] - 2s 37ms/step - loss: 0.5114 - val\_loss: 0.6317  
Epoch 6/100  
50/50 [=====] - 2s 39ms/step - loss: 0.5089 - val\_loss: 0.6091  
Epoch 7/100  
50/50 [=====] - 2s 39ms/step - loss: 0.5042 - val\_loss: 0.6086  
Epoch 8/100  
50/50 [=====] - 2s 40ms/step - loss: 0.4955 - val\_loss: 0.5930  
Epoch 9/100  
50/50 [=====] - 2s 39ms/step - loss: 0.4892 - val\_loss: 0.5975  
Epoch 10/100  
50/50 [=====] - 2s 38ms/step - loss: 0.4812 - val\_loss: 0.5608  
Epoch 11/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4725 - val\_loss: 0.5515  
Epoch 12/100  
50/50 [=====] - 2s 38ms/step - loss: 0.4628 - val\_loss: 0.5494  
Epoch 13/100  
50/50 [=====] - 2s 39ms/step - loss: 0.4593 - val\_loss: 0.5633  
Epoch 14/100  
50/50 [=====] - 2s 50ms/step - loss: 0.4517 - val\_loss: 0.5289  
Epoch 15/100  
50/50 [=====] - 3s 53ms/step - loss: 0.4450 - val\_loss: 0.5440  
Epoch 16/100  
50/50 [=====] - 2s 41ms/step - loss: 0.4363 - val\_loss: 0.5231  
Epoch 17/100  
50/50 [=====] - 2s 42ms/step - loss: 0.4348 - val\_loss: 0.5257  
Epoch 18/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4261 - val\_loss: 0.5319  
Epoch 19/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4262 - val\_loss: 0.4944  
Epoch 20/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4205 - val\_loss: 0.5060  
Epoch 21/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4177 - val\_loss: 0.4890  
Epoch 22/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4133 - val\_loss: 0.4818  
Epoch 23/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4102 - val\_loss: 0.4769  
Epoch 24/100

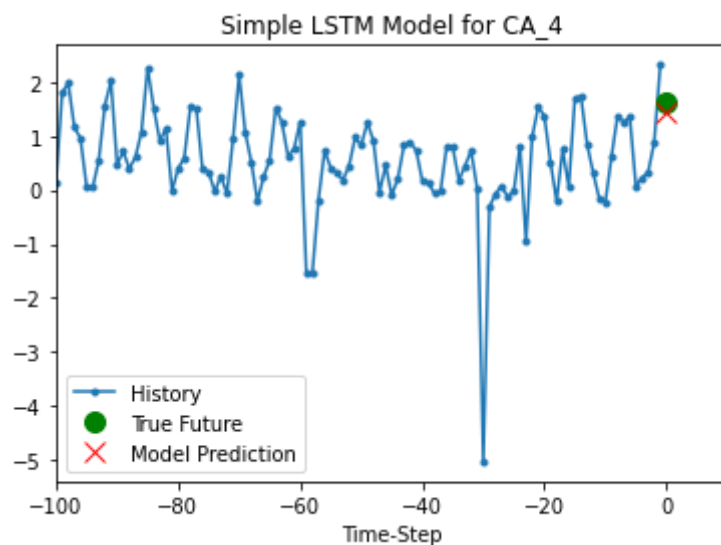
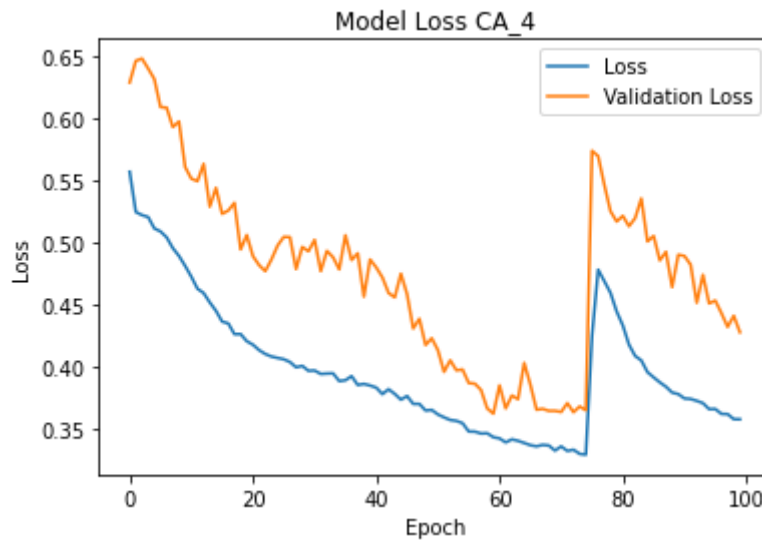


50/50 [=====] - 2s 34ms/step - loss: 0.4082 - val\_loss: 0.4863  
Epoch 25/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4070 - val\_loss: 0.4976  
Epoch 26/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4060 - val\_loss: 0.5045  
Epoch 27/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4038 - val\_loss: 0.5043  
Epoch 28/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3995 - val\_loss: 0.4786  
Epoch 29/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4006 - val\_loss: 0.4964  
Epoch 30/100  
50/50 [=====] - 2s 33ms/step - loss: 0.3967 - val\_loss: 0.4929  
Epoch 31/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3969 - val\_loss: 0.5021  
Epoch 32/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3941 - val\_loss: 0.4769  
Epoch 33/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3945 - val\_loss: 0.4933  
Epoch 34/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3946 - val\_loss: 0.4881  
Epoch 35/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3884 - val\_loss: 0.4783  
Epoch 36/100  
50/50 [=====] - 2s 33ms/step - loss: 0.3891 - val\_loss: 0.5059  
Epoch 37/100  
50/50 [=====] - 2s 33ms/step - loss: 0.3924 - val\_loss: 0.4859  
Epoch 38/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3853 - val\_loss: 0.4913  
Epoch 39/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3861 - val\_loss: 0.4564  
Epoch 40/100  
50/50 [=====] - 2s 33ms/step - loss: 0.3848 - val\_loss: 0.4863  
Epoch 41/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3831 - val\_loss: 0.4799  
Epoch 42/100  
50/50 [=====] - 2s 33ms/step - loss: 0.3779 - val\_loss: 0.4719  
Epoch 43/100  
50/50 [=====] - 2s 33ms/step - loss: 0.3818 - val\_loss: 0.4594  
Epoch 44/100  
50/50 [=====] - 2s 33ms/step - loss: 0.3780 - val\_loss: 0.4558  
Epoch 45/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3734 - val\_loss: 0.4749  
Epoch 46/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3763 - val\_loss: 0.4584  
Epoch 47/100  
50/50 [=====] - 2s 33ms/step - loss: 0.3700 - val\_loss: 0.4307  
Epoch 48/100

50/50 [=====] - 2s 33ms/step - loss: 0.3700 - val\_loss: 0.4386  
Epoch 49/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3647 - val\_loss: 0.4174  
Epoch 50/100  
50/50 [=====] - 2s 33ms/step - loss: 0.3652 - val\_loss: 0.4229  
Epoch 51/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3615 - val\_loss: 0.4133  
Epoch 52/100  
50/50 [=====] - 2s 33ms/step - loss: 0.3592 - val\_loss: 0.3958  
Epoch 53/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3571 - val\_loss: 0.4052  
Epoch 54/100  
50/50 [=====] - 2s 33ms/step - loss: 0.3563 - val\_loss: 0.3971  
Epoch 55/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3545 - val\_loss: 0.3977  
Epoch 56/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3478 - val\_loss: 0.3868  
Epoch 57/100  
50/50 [=====] - 3s 62ms/step - loss: 0.3477 - val\_loss: 0.3863  
Epoch 58/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3461 - val\_loss: 0.3812  
Epoch 59/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3464 - val\_loss: 0.3664  
Epoch 60/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3432 - val\_loss: 0.3621  
Epoch 61/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3422 - val\_loss: 0.3850  
Epoch 62/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3390 - val\_loss: 0.3664  
Epoch 63/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3414 - val\_loss: 0.3768  
Epoch 64/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3403 - val\_loss: 0.3738  
Epoch 65/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3386 - val\_loss: 0.4030  
Epoch 66/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3368 - val\_loss: 0.3856  
Epoch 67/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3358 - val\_loss: 0.3654  
Epoch 68/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3370 - val\_loss: 0.3660  
Epoch 69/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3365 - val\_loss: 0.3644  
Epoch 70/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3324 - val\_loss: 0.3644  
Epoch 71/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3358 - val\_loss: 0.3635  
Epoch 72/100

50/50 [=====] - 2s 35ms/step - loss: 0.3321 - val\_loss: 0.3706  
Epoch 73/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3331 - val\_loss: 0.3633  
Epoch 74/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3298 - val\_loss: 0.3679  
Epoch 75/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3291 - val\_loss: 0.3649  
Epoch 76/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4246 - val\_loss: 0.5739  
Epoch 77/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4781 - val\_loss: 0.5695  
Epoch 78/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4689 - val\_loss: 0.5464  
Epoch 79/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4595 - val\_loss: 0.5252  
Epoch 80/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4445 - val\_loss: 0.5169  
Epoch 81/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4332 - val\_loss: 0.5214  
Epoch 82/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4177 - val\_loss: 0.5131  
Epoch 83/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4086 - val\_loss: 0.5196  
Epoch 84/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4050 - val\_loss: 0.5355  
Epoch 85/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3956 - val\_loss: 0.5008  
Epoch 86/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3914 - val\_loss: 0.5053  
Epoch 87/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3874 - val\_loss: 0.4856  
Epoch 88/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3839 - val\_loss: 0.4925  
Epoch 89/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3791 - val\_loss: 0.4641  
Epoch 90/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3779 - val\_loss: 0.4901  
Epoch 91/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3744 - val\_loss: 0.4892  
Epoch 92/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3740 - val\_loss: 0.4822  
Epoch 93/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3725 - val\_loss: 0.4515  
Epoch 94/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3706 - val\_loss: 0.4740  
Epoch 95/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3658 - val\_loss: 0.4509  
Epoch 96/100

50/50 [=====] - 2s 35ms/step - loss: 0.3659 - val\_loss: 0.4533  
 Epoch 97/100  
 50/50 [=====] - 2s 35ms/step - loss: 0.3620 - val\_loss: 0.4431  
 Epoch 98/100  
 50/50 [=====] - 2s 35ms/step - loss: 0.3618 - val\_loss: 0.4320  
 Epoch 99/100  
 50/50 [=====] - 2s 35ms/step - loss: 0.3577 - val\_loss: 0.4410  
 Epoch 100/100  
 50/50 [=====] - 2s 35ms/step - loss: 0.3576 - val\_loss: 0.4277



CA\_4 - True Future: 2787  
 CA\_4 - Model Prediction: 2714  
 CA\_4 - Model Percentage Error: 2.62%

=====  
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Training Model for TX\_1...

Epoch 1/100  
50/50 [=====] - 2s 41ms/step - loss: 0.7145 - val\_loss: 0.7217  
Epoch 2/100  
50/50 [=====] - 2s 34ms/step - loss: 0.7052 - val\_loss: 0.7097  
Epoch 3/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6951 - val\_loss: 0.7033  
Epoch 4/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6800 - val\_loss: 0.6882  
Epoch 5/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6698 - val\_loss: 0.6685  
Epoch 6/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6567 - val\_loss: 0.6465  
Epoch 7/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6411 - val\_loss: 0.6356  
Epoch 8/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6335 - val\_loss: 0.6192  
Epoch 9/100  
50/50 [=====] - 2s 34ms/step - loss: 0.6161 - val\_loss: 0.6121  
Epoch 10/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6101 - val\_loss: 0.5987  
Epoch 11/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6026 - val\_loss: 0.5821  
Epoch 12/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5920 - val\_loss: 0.5765  
Epoch 13/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5845 - val\_loss: 0.5627  
Epoch 14/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5776 - val\_loss: 0.5579  
Epoch 15/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5673 - val\_loss: 0.5483  
Epoch 16/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5674 - val\_loss: 0.5439  
Epoch 17/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5569 - val\_loss: 0.5332  
Epoch 18/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5565 - val\_loss: 0.5261  
Epoch 19/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5491 - val\_loss: 0.5201  
Epoch 20/100  
50/50 [=====] - 2s 34ms/step - loss: 0.5464 - val\_loss: 0.5041  
Epoch 21/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5437 - val\_loss: 0.4937  
Epoch 22/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5333 - val\_loss: 0.4873  
Epoch 23/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5334 - val\_loss: 0.4778  
Epoch 24/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5282 - val\_loss: 0.4762

Epoch 25/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5228 - val\_loss: 0.4663  
Epoch 26/100  
50/50 [=====] - 2s 34ms/step - loss: 0.5182 - val\_loss: 0.4543  
Epoch 27/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5129 - val\_loss: 0.4494  
Epoch 28/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5073 - val\_loss: 0.4412  
Epoch 29/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5029 - val\_loss: 0.4480  
Epoch 30/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4974 - val\_loss: 0.4323  
Epoch 31/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4885 - val\_loss: 0.4308  
Epoch 32/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4884 - val\_loss: 0.4299  
Epoch 33/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4818 - val\_loss: 0.4284  
Epoch 34/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4739 - val\_loss: 0.4222  
Epoch 35/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4703 - val\_loss: 0.4200  
Epoch 36/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4652 - val\_loss: 0.4162  
Epoch 37/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4585 - val\_loss: 0.4030  
Epoch 38/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4502 - val\_loss: 0.3948  
Epoch 39/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4426 - val\_loss: 0.3807  
Epoch 40/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4364 - val\_loss: 0.3704  
Epoch 41/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4225 - val\_loss: 0.3498  
Epoch 42/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4132 - val\_loss: 0.3437  
Epoch 43/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4082 - val\_loss: 0.3376  
Epoch 44/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4019 - val\_loss: 0.3310  
Epoch 45/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3933 - val\_loss: 0.3260  
Epoch 46/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3926 - val\_loss: 0.3212  
Epoch 47/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3850 - val\_loss: 0.3373  
Epoch 48/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3900 - val\_loss: 0.3141

Epoch 49/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3967 - val\_loss: 0.3096  
Epoch 50/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5320 - val\_loss: 0.4949  
Epoch 51/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4826 - val\_loss: 0.3889  
Epoch 52/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4332 - val\_loss: 0.3567  
Epoch 53/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4175 - val\_loss: 0.3451  
Epoch 54/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4058 - val\_loss: 0.3350  
Epoch 55/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3992 - val\_loss: 0.3275  
Epoch 56/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3912 - val\_loss: 0.3190  
Epoch 57/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3880 - val\_loss: 0.3143  
Epoch 58/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3818 - val\_loss: 0.3124  
Epoch 59/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3801 - val\_loss: 0.3097  
Epoch 60/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3769 - val\_loss: 0.3024  
Epoch 61/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3756 - val\_loss: 0.3052  
Epoch 62/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3745 - val\_loss: 0.3025  
Epoch 63/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3703 - val\_loss: 0.2988  
Epoch 64/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3709 - val\_loss: 0.3043  
Epoch 65/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6235 - val\_loss: 0.8497  
Epoch 66/100  
50/50 [=====] - 2s 35ms/step - loss: 0.7477 - val\_loss: 0.8125  
Epoch 67/100  
50/50 [=====] - 2s 35ms/step - loss: 0.7045 - val\_loss: 0.7565  
Epoch 68/100  
50/50 [=====] - 2s 34ms/step - loss: 0.6870 - val\_loss: 0.7121  
Epoch 69/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6758 - val\_loss: 0.7270  
Epoch 70/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6628 - val\_loss: 0.6784  
Epoch 71/100  
50/50 [=====] - 2s 36ms/step - loss: 0.6563 - val\_loss: 0.6662  
Epoch 72/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6483 - val\_loss: 0.6472

Epoch 73/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6400 - val\_loss: 0.6255  
Epoch 74/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6356 - val\_loss: 0.6195  
Epoch 75/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6305 - val\_loss: 0.6154  
Epoch 76/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6294 - val\_loss: 0.6103  
Epoch 77/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6226 - val\_loss: 0.5893  
Epoch 78/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6205 - val\_loss: 0.6097  
Epoch 79/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6123 - val\_loss: 0.5995  
Epoch 80/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6160 - val\_loss: 0.5913  
Epoch 81/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6084 - val\_loss: 0.5876  
Epoch 82/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6056 - val\_loss: 0.5952  
Epoch 83/100  
50/50 [=====] - 2s 37ms/step - loss: 0.6010 - val\_loss: 0.5723  
Epoch 84/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6006 - val\_loss: 0.5769  
Epoch 85/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5952 - val\_loss: 0.5718  
Epoch 86/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5983 - val\_loss: 0.5614  
Epoch 87/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5933 - val\_loss: 0.5658  
Epoch 88/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5935 - val\_loss: 0.5694  
Epoch 89/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5961 - val\_loss: 0.5741  
Epoch 90/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5912 - val\_loss: 0.5676  
Epoch 91/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5916 - val\_loss: 0.5596  
Epoch 92/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5904 - val\_loss: 0.5653  
Epoch 93/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5897 - val\_loss: 0.5715  
Epoch 94/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5865 - val\_loss: 0.5706  
Epoch 95/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5831 - val\_loss: 0.5562  
Epoch 96/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5896 - val\_loss: 0.5625



Epoch 97/100

50/50 [=====] - 2s 35ms/step - loss: 0.5878 - val\_loss: 0.5673

Epoch 98/100

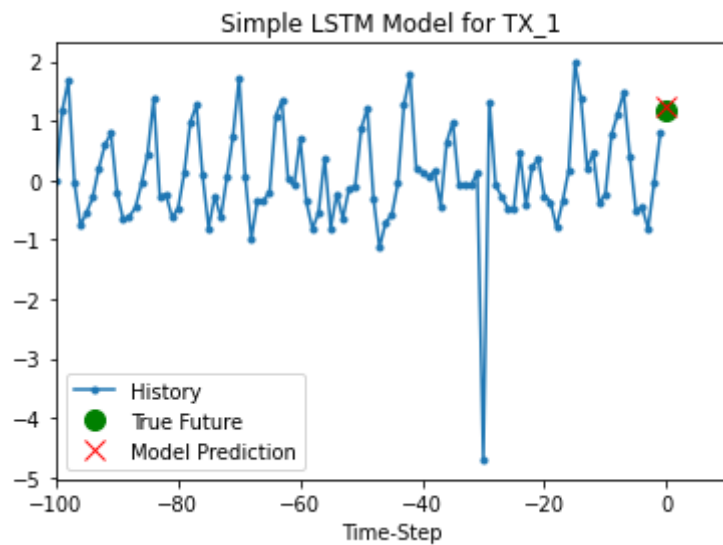
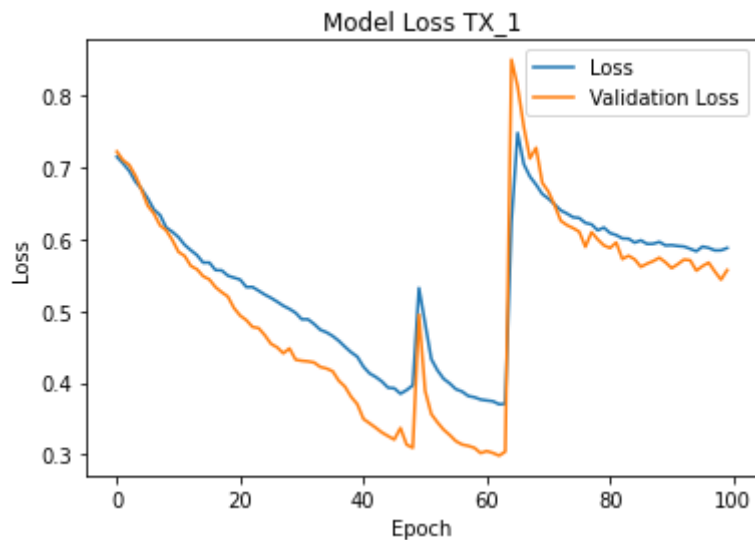
50/50 [=====] - 2s 35ms/step - loss: 0.5843 - val\_loss: 0.5549

Epoch 99/100

50/50 [=====] - 2s 35ms/step - loss: 0.5844 - val\_loss: 0.5436

Epoch 100/100

50/50 [=====] - 2s 35ms/step - loss: 0.5876 - val\_loss: 0.5569



TX\_1 - True Future: 3639

TX\_1 - Model Prediction: 3673

TX\_1 - Model Percentage Error: 0.93%

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Training Model for TX\_2...

Epoch 1/100

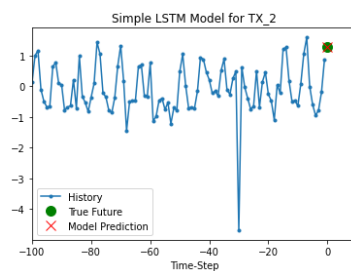
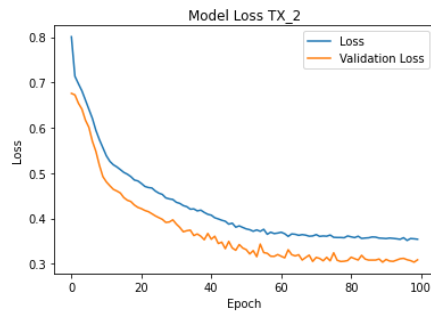
50/50 [=====] - 2s 41ms/step - loss: 0.8010 - val\_loss: 0.6760  
Epoch 2/100  
50/50 [=====] - 2s 35ms/step - loss: 0.7137 - val\_loss: 0.6726  
Epoch 3/100  
50/50 [=====] - 2s 36ms/step - loss: 0.6973 - val\_loss: 0.6543  
Epoch 4/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6816 - val\_loss: 0.6414  
Epoch 5/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6614 - val\_loss: 0.6170  
Epoch 6/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6409 - val\_loss: 0.6011  
Epoch 7/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6207 - val\_loss: 0.5702  
Epoch 8/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5944 - val\_loss: 0.5480  
Epoch 9/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5739 - val\_loss: 0.5175  
Epoch 10/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5561 - val\_loss: 0.4924  
Epoch 11/100  
50/50 [=====] - 2s 34ms/step - loss: 0.5382 - val\_loss: 0.4807  
Epoch 12/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5260 - val\_loss: 0.4721  
Epoch 13/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5185 - val\_loss: 0.4643  
Epoch 14/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5137 - val\_loss: 0.4606  
Epoch 15/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5078 - val\_loss: 0.4562  
Epoch 16/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5016 - val\_loss: 0.4460  
Epoch 17/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4977 - val\_loss: 0.4403  
Epoch 18/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4923 - val\_loss: 0.4374  
Epoch 19/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4849 - val\_loss: 0.4297  
Epoch 20/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4829 - val\_loss: 0.4245  
Epoch 21/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4773 - val\_loss: 0.4217  
Epoch 22/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4708 - val\_loss: 0.4177  
Epoch 23/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4683 - val\_loss: 0.4151  
Epoch 24/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4673 - val\_loss: 0.4105  
Epoch 25/100

50/50 [=====] - 2s 35ms/step - loss: 0.4606 - val\_loss: 0.4057  
Epoch 26/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4559 - val\_loss: 0.4018  
Epoch 27/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4531 - val\_loss: 0.3981  
Epoch 28/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4454 - val\_loss: 0.3913  
Epoch 29/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4433 - val\_loss: 0.3923  
Epoch 30/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4419 - val\_loss: 0.3971  
Epoch 31/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4358 - val\_loss: 0.3877  
Epoch 32/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4333 - val\_loss: 0.3802  
Epoch 33/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4284 - val\_loss: 0.3707  
Epoch 34/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4260 - val\_loss: 0.3731  
Epoch 35/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4205 - val\_loss: 0.3743  
Epoch 36/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4211 - val\_loss: 0.3624  
Epoch 37/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4168 - val\_loss: 0.3658  
Epoch 38/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4184 - val\_loss: 0.3609  
Epoch 39/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4134 - val\_loss: 0.3531  
Epoch 40/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4093 - val\_loss: 0.3670  
Epoch 41/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4073 - val\_loss: 0.3543  
Epoch 42/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4016 - val\_loss: 0.3609  
Epoch 43/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3991 - val\_loss: 0.3448  
Epoch 44/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3961 - val\_loss: 0.3478  
Epoch 45/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3940 - val\_loss: 0.3334  
Epoch 46/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3875 - val\_loss: 0.3495  
Epoch 47/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3896 - val\_loss: 0.3349  
Epoch 48/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3809 - val\_loss: 0.3299  
Epoch 49/100

50/50 [=====] - 2s 35ms/step - loss: 0.3837 - val\_loss: 0.3426  
Epoch 50/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3803 - val\_loss: 0.3348  
Epoch 51/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3771 - val\_loss: 0.3312  
Epoch 52/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3753 - val\_loss: 0.3217  
Epoch 53/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3719 - val\_loss: 0.3291  
Epoch 54/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3748 - val\_loss: 0.3157  
Epoch 55/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3717 - val\_loss: 0.3435  
Epoch 56/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3762 - val\_loss: 0.3247  
Epoch 57/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3651 - val\_loss: 0.3232  
Epoch 58/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3697 - val\_loss: 0.3167  
Epoch 59/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3667 - val\_loss: 0.3164  
Epoch 60/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3679 - val\_loss: 0.3204  
Epoch 61/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3696 - val\_loss: 0.3167  
Epoch 62/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3664 - val\_loss: 0.3132  
Epoch 63/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3605 - val\_loss: 0.3311  
Epoch 64/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3659 - val\_loss: 0.3202  
Epoch 65/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3651 - val\_loss: 0.3174  
Epoch 66/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3629 - val\_loss: 0.3200  
Epoch 67/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3644 - val\_loss: 0.3083  
Epoch 68/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3633 - val\_loss: 0.3140  
Epoch 69/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3609 - val\_loss: 0.3191  
Epoch 70/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3615 - val\_loss: 0.3053  
Epoch 71/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3645 - val\_loss: 0.3141  
Epoch 72/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3605 - val\_loss: 0.3118  
Epoch 73/100

50/50 [=====] - 2s 35ms/step - loss: 0.3615 - val\_loss: 0.3066  
Epoch 74/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3609 - val\_loss: 0.3143  
Epoch 75/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3636 - val\_loss: 0.3066  
Epoch 76/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3585 - val\_loss: 0.3243  
Epoch 77/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3581 - val\_loss: 0.3079  
Epoch 78/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3581 - val\_loss: 0.3052  
Epoch 79/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3575 - val\_loss: 0.3057  
Epoch 80/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3615 - val\_loss: 0.3072  
Epoch 81/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3595 - val\_loss: 0.3145  
Epoch 82/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3578 - val\_loss: 0.3114  
Epoch 83/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3609 - val\_loss: 0.3083  
Epoch 84/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3560 - val\_loss: 0.3187  
Epoch 85/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3569 - val\_loss: 0.3105  
Epoch 86/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3574 - val\_loss: 0.3082  
Epoch 87/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3593 - val\_loss: 0.3083  
Epoch 88/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3589 - val\_loss: 0.3083  
Epoch 89/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3568 - val\_loss: 0.3106  
Epoch 90/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3563 - val\_loss: 0.3037  
Epoch 91/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3557 - val\_loss: 0.3098  
Epoch 92/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3568 - val\_loss: 0.3062  
Epoch 93/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3561 - val\_loss: 0.3054  
Epoch 94/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3553 - val\_loss: 0.3082  
Epoch 95/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3541 - val\_loss: 0.3111  
Epoch 96/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3576 - val\_loss: 0.3121  
Epoch 97/100

50/50 [=====] - 2s 34ms/step - loss: 0.3516 - val\_loss: 0.3090  
 Epoch 98/100  
 50/50 [=====] - 2s 35ms/step - loss: 0.3558 - val\_loss: 0.3071  
 Epoch 99/100  
 50/50 [=====] - 2s 35ms/step - loss: 0.3552 - val\_loss: 0.3036  
 Epoch 100/100  
 50/50 [=====] - 2s 35ms/step - loss: 0.3542 - val\_loss: 0.3089



TX\_2 - True Future: 4794  
 TX\_2 - Model Prediction: 4775  
 TX\_2 - Model Percentage Error: 0.40%  
 =====  
 =====

Training Model for TX\_3...

Epoch 1/100  
 50/50 [=====] - 2s 42ms/step - loss: 0.6803 - val\_loss: 0.6448  
 Epoch 2/100  
 50/50 [=====] - 2s 36ms/step - loss: 0.6330 - val\_loss: 0.6404  
 Epoch 3/100  
 50/50 [=====] - 2s 35ms/step - loss: 0.6295 - val\_loss: 0.6450  
 Epoch 4/100  
 50/50 [=====] - 2s 36ms/step - loss: 0.6263 - val\_loss: 0.6455  
 Epoch 5/100  
 50/50 [=====] - 2s 35ms/step - loss: 0.6129 - val\_loss: 0.6239  
 Epoch 6/100  
 50/50 [=====] - 2s 35ms/step - loss: 0.5980 - val\_loss: 0.6296  
 Epoch 7/100  
 50/50 [=====] - 2s 34ms/step - loss: 0.5844 - val\_loss: 0.6116  
 Epoch 8/100  
 50/50 [=====] - 2s 35ms/step - loss: 0.5702 - val\_loss: 0.5950

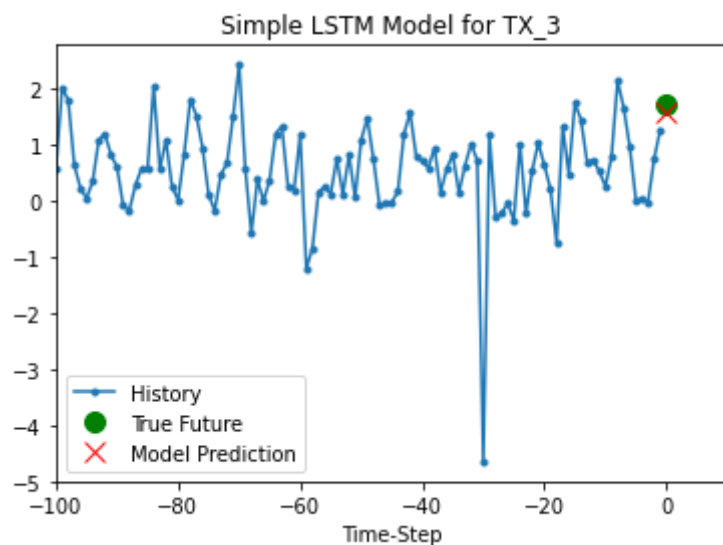
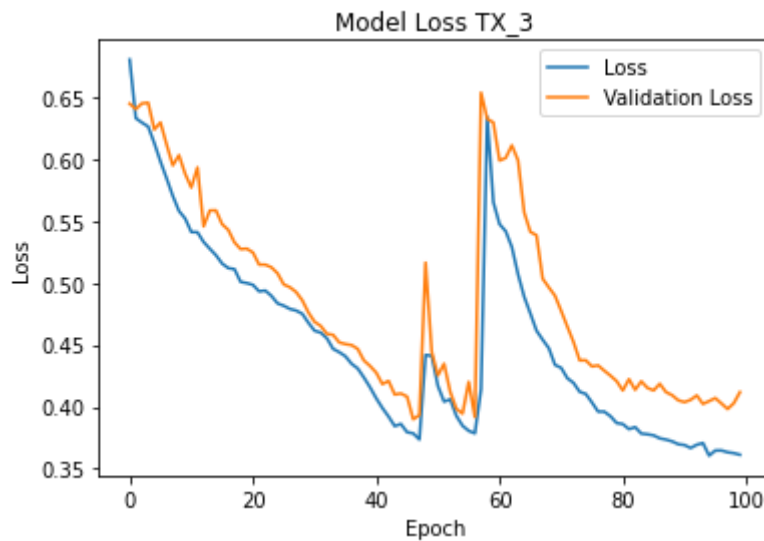
Epoch 9/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5581 - val\_loss: 0.6032  
Epoch 10/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5521 - val\_loss: 0.5882  
Epoch 11/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5411 - val\_loss: 0.5771  
Epoch 12/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5409 - val\_loss: 0.5932  
Epoch 13/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5331 - val\_loss: 0.5457  
Epoch 14/100  
50/50 [=====] - 2s 36ms/step - loss: 0.5276 - val\_loss: 0.5585  
Epoch 15/100  
50/50 [=====] - 2s 37ms/step - loss: 0.5224 - val\_loss: 0.5586  
Epoch 16/100  
50/50 [=====] - 2s 37ms/step - loss: 0.5157 - val\_loss: 0.5475  
Epoch 17/100  
50/50 [=====] - 2s 36ms/step - loss: 0.5120 - val\_loss: 0.5429  
Epoch 18/100  
50/50 [=====] - 2s 36ms/step - loss: 0.5112 - val\_loss: 0.5328  
Epoch 19/100  
50/50 [=====] - 2s 36ms/step - loss: 0.5009 - val\_loss: 0.5273  
Epoch 20/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4999 - val\_loss: 0.5277  
Epoch 21/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4985 - val\_loss: 0.5246  
Epoch 22/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4932 - val\_loss: 0.5148  
Epoch 23/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4939 - val\_loss: 0.5148  
Epoch 24/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4895 - val\_loss: 0.5126  
Epoch 25/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4835 - val\_loss: 0.5077  
Epoch 26/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4816 - val\_loss: 0.4988  
Epoch 27/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4790 - val\_loss: 0.4965  
Epoch 28/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4777 - val\_loss: 0.4927  
Epoch 29/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4751 - val\_loss: 0.4861  
Epoch 30/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4679 - val\_loss: 0.4761  
Epoch 31/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4614 - val\_loss: 0.4686  
Epoch 32/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4599 - val\_loss: 0.4653

Epoch 33/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4553 - val\_loss: 0.4589  
Epoch 34/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4468 - val\_loss: 0.4581  
Epoch 35/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4441 - val\_loss: 0.4520  
Epoch 36/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4408 - val\_loss: 0.4507  
Epoch 37/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4348 - val\_loss: 0.4498  
Epoch 38/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4310 - val\_loss: 0.4468  
Epoch 39/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4237 - val\_loss: 0.4374  
Epoch 40/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4157 - val\_loss: 0.4329  
Epoch 41/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4069 - val\_loss: 0.4276  
Epoch 42/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3991 - val\_loss: 0.4184  
Epoch 43/100  
50/50 [=====] - 3s 51ms/step - loss: 0.3922 - val\_loss: 0.4209  
Epoch 44/100  
50/50 [=====] - 3s 53ms/step - loss: 0.3844 - val\_loss: 0.4100  
Epoch 45/100  
50/50 [=====] - 3s 53ms/step - loss: 0.3862 - val\_loss: 0.4108  
Epoch 46/100  
50/50 [=====] - 2s 42ms/step - loss: 0.3795 - val\_loss: 0.4083  
Epoch 47/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3786 - val\_loss: 0.3899  
Epoch 48/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3736 - val\_loss: 0.3934  
Epoch 49/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4419 - val\_loss: 0.5164  
Epoch 50/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4412 - val\_loss: 0.4443  
Epoch 51/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4169 - val\_loss: 0.4254  
Epoch 52/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4042 - val\_loss: 0.4348  
Epoch 53/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4060 - val\_loss: 0.4121  
Epoch 54/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3927 - val\_loss: 0.3984  
Epoch 55/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3848 - val\_loss: 0.3945  
Epoch 56/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3806 - val\_loss: 0.4202



Epoch 57/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3786 - val\_loss: 0.3917  
Epoch 58/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4141 - val\_loss: 0.6536  
Epoch 59/100  
50/50 [=====] - 2s 35ms/step - loss: 0.6340 - val\_loss: 0.6325  
Epoch 60/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5652 - val\_loss: 0.6295  
Epoch 61/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5475 - val\_loss: 0.5988  
Epoch 62/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5418 - val\_loss: 0.6010  
Epoch 63/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5290 - val\_loss: 0.6111  
Epoch 64/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5070 - val\_loss: 0.5990  
Epoch 65/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4888 - val\_loss: 0.5570  
Epoch 66/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4754 - val\_loss: 0.5413  
Epoch 67/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4615 - val\_loss: 0.5385  
Epoch 68/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4542 - val\_loss: 0.5034  
Epoch 69/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4473 - val\_loss: 0.4964  
Epoch 70/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4338 - val\_loss: 0.4897  
Epoch 71/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4315 - val\_loss: 0.4774  
Epoch 72/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4231 - val\_loss: 0.4648  
Epoch 73/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4193 - val\_loss: 0.4524  
Epoch 74/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4122 - val\_loss: 0.4375  
Epoch 75/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4104 - val\_loss: 0.4375  
Epoch 76/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4035 - val\_loss: 0.4327  
Epoch 77/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3961 - val\_loss: 0.4334  
Epoch 78/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3961 - val\_loss: 0.4292  
Epoch 79/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3924 - val\_loss: 0.4252  
Epoch 80/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3869 - val\_loss: 0.4208

Epoch 81/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3861 - val\_loss: 0.4132  
Epoch 82/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3820 - val\_loss: 0.4224  
Epoch 83/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3836 - val\_loss: 0.4137  
Epoch 84/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3784 - val\_loss: 0.4206  
Epoch 85/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3778 - val\_loss: 0.4153  
Epoch 86/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3770 - val\_loss: 0.4133  
Epoch 87/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3746 - val\_loss: 0.4186  
Epoch 88/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3735 - val\_loss: 0.4119  
Epoch 89/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3721 - val\_loss: 0.4094  
Epoch 90/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3698 - val\_loss: 0.4053  
Epoch 91/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3692 - val\_loss: 0.4038  
Epoch 92/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3667 - val\_loss: 0.4056  
Epoch 93/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3694 - val\_loss: 0.4092  
Epoch 94/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3708 - val\_loss: 0.4024  
Epoch 95/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3606 - val\_loss: 0.4046  
Epoch 96/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3647 - val\_loss: 0.4071  
Epoch 97/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3648 - val\_loss: 0.4027  
Epoch 98/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3633 - val\_loss: 0.3983  
Epoch 99/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3626 - val\_loss: 0.4029  
Epoch 100/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3613 - val\_loss: 0.4119



TX\_3 - True Future: 4286

TX\_3 - Model Prediction: 4195

TX\_3 - Model Percentage Error: 2.12%

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Training Model for WI\_1...

Epoch 1/100

50/50 [=====] - 2s 41ms/step - loss: 0.6106 - val\_loss: 0.8536

Epoch 2/100

50/50 [=====] - 2s 35ms/step - loss: 0.5050 - val\_loss: 0.8642

Epoch 3/100

50/50 [=====] - 2s 35ms/step - loss: 0.4977 - val\_loss: 0.8484

Epoch 4/100

50/50 [=====] - 2s 35ms/step - loss: 0.4930 - val\_loss: 0.8568

Epoch 5/100

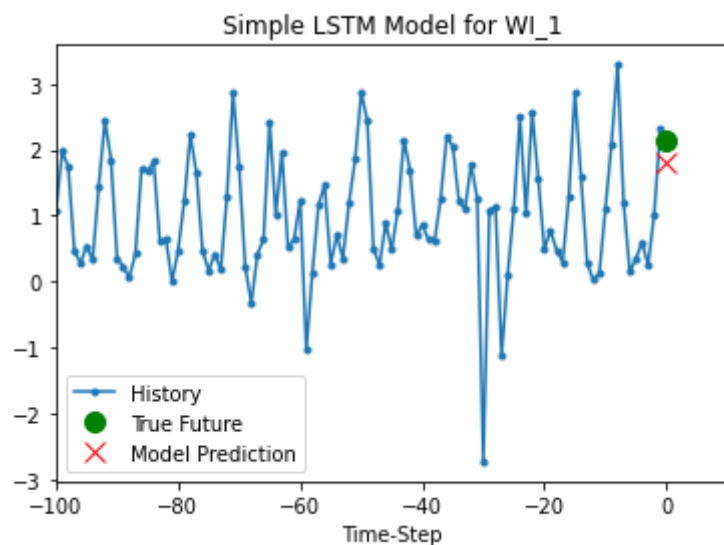
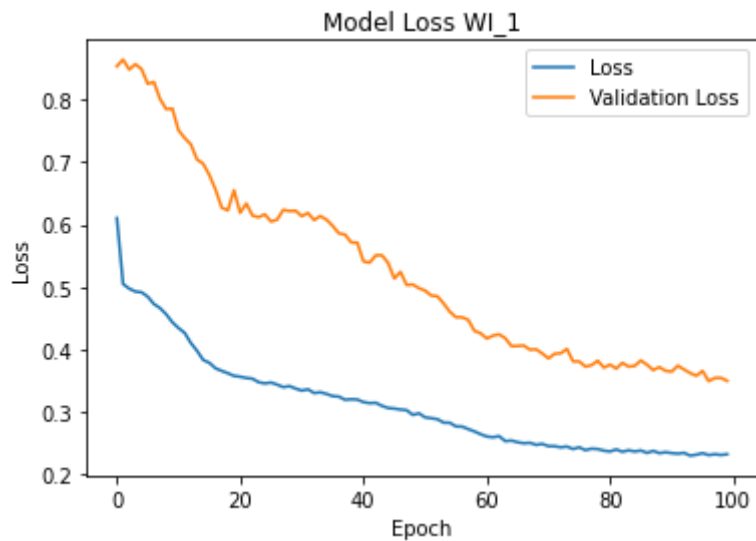
50/50 [=====] - 2s 35ms/step - loss: 0.4919 - val\_loss: 0.8491

Epoch 6/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4849 - val\_loss: 0.8256  
Epoch 7/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4731 - val\_loss: 0.8284  
Epoch 8/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4665 - val\_loss: 0.8012  
Epoch 9/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4566 - val\_loss: 0.7851  
Epoch 10/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4439 - val\_loss: 0.7858  
Epoch 11/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4347 - val\_loss: 0.7510  
Epoch 12/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4268 - val\_loss: 0.7388  
Epoch 13/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4107 - val\_loss: 0.7287  
Epoch 14/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3983 - val\_loss: 0.7044  
Epoch 15/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3836 - val\_loss: 0.6976  
Epoch 16/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3790 - val\_loss: 0.6796  
Epoch 17/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3702 - val\_loss: 0.6563  
Epoch 18/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3661 - val\_loss: 0.6274  
Epoch 19/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3623 - val\_loss: 0.6229  
Epoch 20/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3581 - val\_loss: 0.6552  
Epoch 21/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3568 - val\_loss: 0.6191  
Epoch 22/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3547 - val\_loss: 0.6340  
Epoch 23/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3535 - val\_loss: 0.6146  
Epoch 24/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3479 - val\_loss: 0.6120  
Epoch 25/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3460 - val\_loss: 0.6166  
Epoch 26/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3474 - val\_loss: 0.6051  
Epoch 27/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3441 - val\_loss: 0.6081  
Epoch 28/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3401 - val\_loss: 0.6239  
Epoch 29/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3417 - val\_loss: 0.6219

Epoch 30/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3377 - val\_loss: 0.6224  
Epoch 31/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3346 - val\_loss: 0.6137  
Epoch 32/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3366 - val\_loss: 0.6188  
Epoch 33/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3306 - val\_loss: 0.6074  
Epoch 34/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3319 - val\_loss: 0.6139  
Epoch 35/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3292 - val\_loss: 0.6082  
Epoch 36/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3257 - val\_loss: 0.5983  
Epoch 37/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3250 - val\_loss: 0.5862  
Epoch 38/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3199 - val\_loss: 0.5843  
Epoch 39/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3206 - val\_loss: 0.5717  
Epoch 40/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3202 - val\_loss: 0.5712  
Epoch 41/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3161 - val\_loss: 0.5413  
Epoch 42/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3144 - val\_loss: 0.5392  
Epoch 43/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3150 - val\_loss: 0.5510  
Epoch 44/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3101 - val\_loss: 0.5511  
Epoch 45/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3067 - val\_loss: 0.5388  
Epoch 46/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3057 - val\_loss: 0.5140  
Epoch 47/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3042 - val\_loss: 0.5246  
Epoch 48/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3032 - val\_loss: 0.5035  
Epoch 49/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2956 - val\_loss: 0.5044  
Epoch 50/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2981 - val\_loss: 0.4984  
Epoch 51/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2917 - val\_loss: 0.4946  
Epoch 52/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2903 - val\_loss: 0.4866  
Epoch 53/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2888 - val\_loss: 0.4855

Epoch 54/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2833 - val\_loss: 0.4739  
Epoch 55/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2831 - val\_loss: 0.4608  
Epoch 56/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2772 - val\_loss: 0.4520  
Epoch 57/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2769 - val\_loss: 0.4518  
Epoch 58/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2729 - val\_loss: 0.4477  
Epoch 59/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2692 - val\_loss: 0.4300  
Epoch 60/100  
50/50 [=====] - 2s 34ms/step - loss: 0.2647 - val\_loss: 0.4263  
Epoch 61/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2611 - val\_loss: 0.4179  
Epoch 62/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2598 - val\_loss: 0.4224  
Epoch 63/100  
50/50 [=====] - 2s 34ms/step - loss: 0.2616 - val\_loss: 0.4246  
Epoch 64/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2536 - val\_loss: 0.4183  
Epoch 65/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2546 - val\_loss: 0.4057  
Epoch 66/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2519 - val\_loss: 0.4059  
Epoch 67/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2502 - val\_loss: 0.4067  
Epoch 68/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2510 - val\_loss: 0.4000  
Epoch 69/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2477 - val\_loss: 0.4005  
Epoch 70/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2492 - val\_loss: 0.3940  
Epoch 71/100  
50/50 [=====] - 2s 34ms/step - loss: 0.2456 - val\_loss: 0.3861  
Epoch 72/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2456 - val\_loss: 0.3934  
Epoch 73/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2437 - val\_loss: 0.3942  
Epoch 74/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2449 - val\_loss: 0.4011  
Epoch 75/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2410 - val\_loss: 0.3813  
Epoch 76/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2438 - val\_loss: 0.3811  
Epoch 77/100  
50/50 [=====] - 2s 34ms/step - loss: 0.2392 - val\_loss: 0.3728

Epoch 78/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2416 - val\_loss: 0.3752  
Epoch 79/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2410 - val\_loss: 0.3824  
Epoch 80/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2384 - val\_loss: 0.3713  
Epoch 81/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2371 - val\_loss: 0.3761  
Epoch 82/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2403 - val\_loss: 0.3698  
Epoch 83/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2367 - val\_loss: 0.3788  
Epoch 84/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2390 - val\_loss: 0.3729  
Epoch 85/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2371 - val\_loss: 0.3740  
Epoch 86/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2386 - val\_loss: 0.3828  
Epoch 87/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2348 - val\_loss: 0.3758  
Epoch 88/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2380 - val\_loss: 0.3673  
Epoch 89/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2344 - val\_loss: 0.3722  
Epoch 90/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2359 - val\_loss: 0.3661  
Epoch 91/100  
50/50 [=====] - 2s 36ms/step - loss: 0.2344 - val\_loss: 0.3650  
Epoch 92/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2336 - val\_loss: 0.3744  
Epoch 93/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2349 - val\_loss: 0.3683  
Epoch 94/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2304 - val\_loss: 0.3625  
Epoch 95/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2319 - val\_loss: 0.3582  
Epoch 96/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2344 - val\_loss: 0.3659  
Epoch 97/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2314 - val\_loss: 0.3497  
Epoch 98/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2326 - val\_loss: 0.3548  
Epoch 99/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2315 - val\_loss: 0.3548  
Epoch 100/100  
50/50 [=====] - 2s 35ms/step - loss: 0.2326 - val\_loss: 0.3500



WI\_1 - True Future: 4600

WI\_1 - Model Prediction: 4273

WI\_1 - Model Percentage Error: 7.11%

=====

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Training Model for WI\_2...

Epoch 1/100

50/50 [=====] - 2s 41ms/step - loss: 0.5469 - val\_loss: 0.7830

Epoch 2/100

50/50 [=====] - 2s 36ms/step - loss: 0.4149 - val\_loss: 0.7628

Epoch 3/100

50/50 [=====] - 2s 35ms/step - loss: 0.4006 - val\_loss: 0.7249

Epoch 4/100

50/50 [=====] - 2s 35ms/step - loss: 0.3999 - val\_loss: 0.7329

Epoch 5/100

50/50 [=====] - 2s 35ms/step - loss: 0.3924 - val\_loss: 0.6944

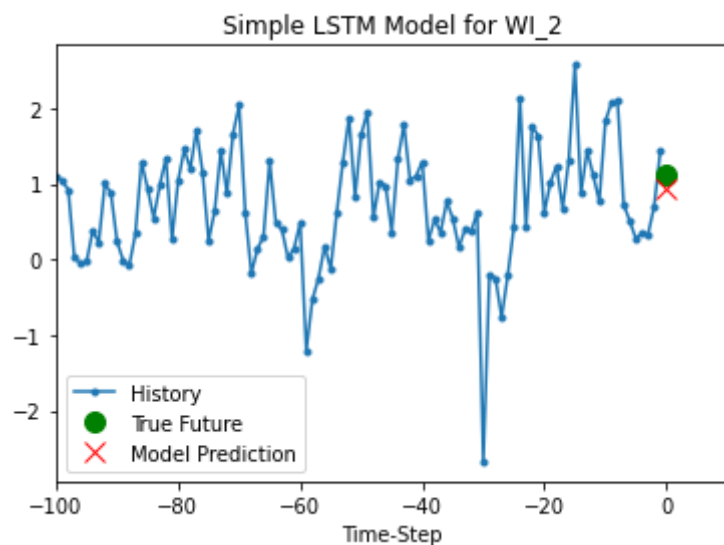
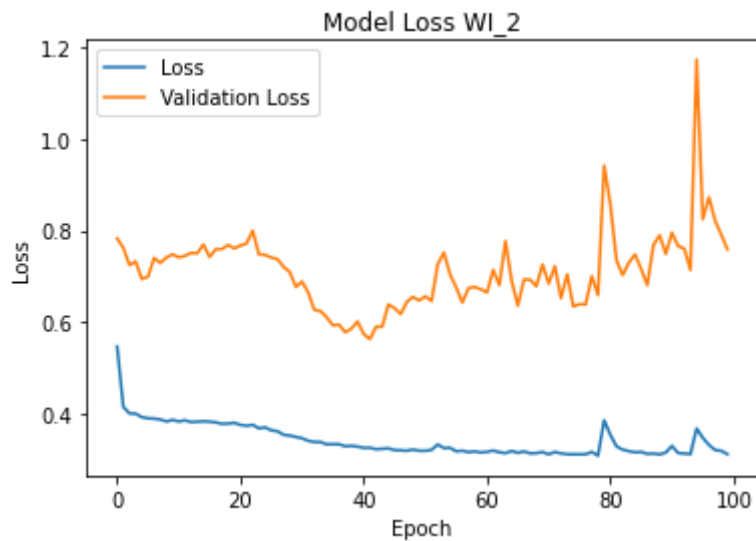


Epoch 6/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3897 - val\_loss: 0.6994  
Epoch 7/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3891 - val\_loss: 0.7405  
Epoch 8/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3871 - val\_loss: 0.7295  
Epoch 9/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3830 - val\_loss: 0.7416  
Epoch 10/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3861 - val\_loss: 0.7483  
Epoch 11/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3830 - val\_loss: 0.7419  
Epoch 12/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3853 - val\_loss: 0.7450  
Epoch 13/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3817 - val\_loss: 0.7513  
Epoch 14/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3825 - val\_loss: 0.7506  
Epoch 15/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3831 - val\_loss: 0.7700  
Epoch 16/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3825 - val\_loss: 0.7426  
Epoch 17/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3809 - val\_loss: 0.7595  
Epoch 18/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3777 - val\_loss: 0.7600  
Epoch 19/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3783 - val\_loss: 0.7688  
Epoch 20/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3799 - val\_loss: 0.7614  
Epoch 21/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3754 - val\_loss: 0.7676  
Epoch 22/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3734 - val\_loss: 0.7720  
Epoch 23/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3755 - val\_loss: 0.8000  
Epoch 24/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3679 - val\_loss: 0.7482  
Epoch 25/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3698 - val\_loss: 0.7473  
Epoch 26/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3635 - val\_loss: 0.7413  
Epoch 27/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3615 - val\_loss: 0.7382  
Epoch 28/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3538 - val\_loss: 0.7211  
Epoch 29/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3520 - val\_loss: 0.7095

Epoch 30/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3491 - val\_loss: 0.6773  
Epoch 31/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3462 - val\_loss: 0.6889  
Epoch 32/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3406 - val\_loss: 0.6646  
Epoch 33/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3381 - val\_loss: 0.6269  
Epoch 34/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3380 - val\_loss: 0.6242  
Epoch 35/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3328 - val\_loss: 0.6107  
Epoch 36/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3333 - val\_loss: 0.5931  
Epoch 37/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3330 - val\_loss: 0.5948  
Epoch 38/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3288 - val\_loss: 0.5780  
Epoch 39/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3296 - val\_loss: 0.5858  
Epoch 40/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3280 - val\_loss: 0.6016  
Epoch 41/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3251 - val\_loss: 0.5739  
Epoch 42/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3253 - val\_loss: 0.5629  
Epoch 43/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3223 - val\_loss: 0.5901  
Epoch 44/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3232 - val\_loss: 0.5902  
Epoch 45/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3241 - val\_loss: 0.6385  
Epoch 46/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3203 - val\_loss: 0.6308  
Epoch 47/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3198 - val\_loss: 0.6178  
Epoch 48/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3189 - val\_loss: 0.6447  
Epoch 49/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3214 - val\_loss: 0.6555  
Epoch 50/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3189 - val\_loss: 0.6471  
Epoch 51/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3189 - val\_loss: 0.6567  
Epoch 52/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3207 - val\_loss: 0.6462  
Epoch 53/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3326 - val\_loss: 0.7266

Epoch 54/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3247 - val\_loss: 0.7524  
Epoch 55/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3253 - val\_loss: 0.7047  
Epoch 56/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3176 - val\_loss: 0.6756  
Epoch 57/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3189 - val\_loss: 0.6430  
Epoch 58/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3159 - val\_loss: 0.6748  
Epoch 59/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3174 - val\_loss: 0.6770  
Epoch 60/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3151 - val\_loss: 0.6719  
Epoch 61/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3164 - val\_loss: 0.6651  
Epoch 62/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3193 - val\_loss: 0.7143  
Epoch 63/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3156 - val\_loss: 0.6810  
Epoch 64/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3137 - val\_loss: 0.7775  
Epoch 65/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3183 - val\_loss: 0.6899  
Epoch 66/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3142 - val\_loss: 0.6363  
Epoch 67/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3174 - val\_loss: 0.6931  
Epoch 68/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3130 - val\_loss: 0.6929  
Epoch 69/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3137 - val\_loss: 0.6783  
Epoch 70/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3160 - val\_loss: 0.7262  
Epoch 71/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3110 - val\_loss: 0.6844  
Epoch 72/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3160 - val\_loss: 0.7224  
Epoch 73/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3131 - val\_loss: 0.6527  
Epoch 74/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3112 - val\_loss: 0.7046  
Epoch 75/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3111 - val\_loss: 0.6343  
Epoch 76/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3110 - val\_loss: 0.6394  
Epoch 77/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3113 - val\_loss: 0.6388

Epoch 78/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3162 - val\_loss: 0.7008  
Epoch 79/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3081 - val\_loss: 0.6595  
Epoch 80/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3855 - val\_loss: 0.9421  
Epoch 81/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3537 - val\_loss: 0.8584  
Epoch 82/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3286 - val\_loss: 0.7353  
Epoch 83/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3213 - val\_loss: 0.7030  
Epoch 84/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3180 - val\_loss: 0.7300  
Epoch 85/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3155 - val\_loss: 0.7481  
Epoch 86/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3163 - val\_loss: 0.7162  
Epoch 87/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3120 - val\_loss: 0.6811  
Epoch 88/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3128 - val\_loss: 0.7688  
Epoch 89/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3109 - val\_loss: 0.7900  
Epoch 90/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3150 - val\_loss: 0.7493  
Epoch 91/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3295 - val\_loss: 0.7954  
Epoch 92/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3139 - val\_loss: 0.7666  
Epoch 93/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3128 - val\_loss: 0.7608  
Epoch 94/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3116 - val\_loss: 0.7141  
Epoch 95/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3676 - val\_loss: 1.1742  
Epoch 96/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3471 - val\_loss: 0.8251  
Epoch 97/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3317 - val\_loss: 0.8732  
Epoch 98/100  
50/50 [=====] - 2s 34ms/step - loss: 0.3204 - val\_loss: 0.8222  
Epoch 99/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3187 - val\_loss: 0.7913  
Epoch 100/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3113 - val\_loss: 0.7591



WI\_2 - True Future: 4670

WI\_2 - Model Prediction: 4434

WI\_2 - Model Percentage Error: 5.05%

=====

=====

Training Model for WI\_3...

Epoch 1/100

50/50 [=====] - 2s 40ms/step - loss: 0.6978 - val\_loss: 0.8345

Epoch 2/100

50/50 [=====] - 2s 35ms/step - loss: 0.6615 - val\_loss: 0.8042

Epoch 3/100

50/50 [=====] - 2s 35ms/step - loss: 0.6447 - val\_loss: 0.7807

Epoch 4/100

50/50 [=====] - 2s 35ms/step - loss: 0.6290 - val\_loss: 0.7500

Epoch 5/100

50/50 [=====] - 2s 35ms/step - loss: 0.6068 - val\_loss: 0.7190

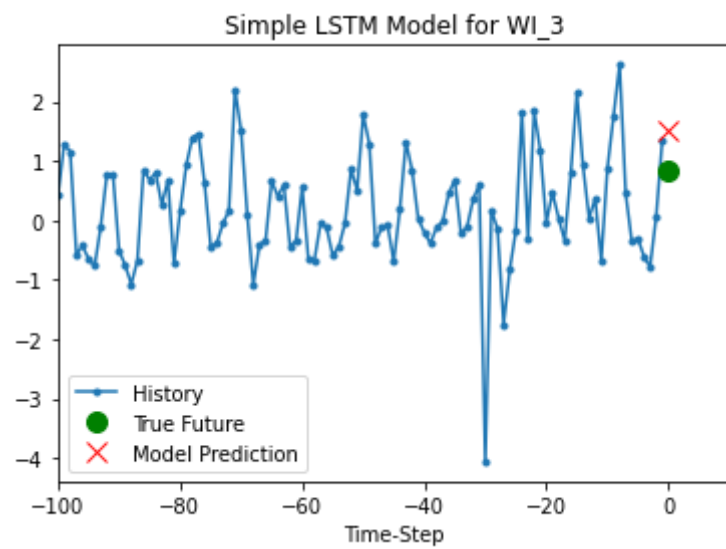
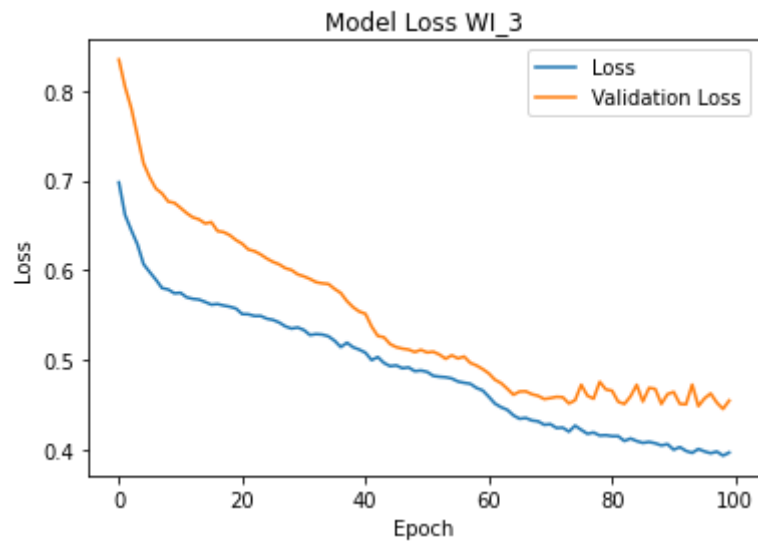
Epoch 6/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5979 - val\_loss: 0.7033  
Epoch 7/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5896 - val\_loss: 0.6909  
Epoch 8/100  
50/50 [=====] - 2s 37ms/step - loss: 0.5801 - val\_loss: 0.6855  
Epoch 9/100  
50/50 [=====] - 2s 37ms/step - loss: 0.5786 - val\_loss: 0.6765  
Epoch 10/100  
50/50 [=====] - 2s 37ms/step - loss: 0.5744 - val\_loss: 0.6750  
Epoch 11/100  
50/50 [=====] - 2s 36ms/step - loss: 0.5749 - val\_loss: 0.6695  
Epoch 12/100  
50/50 [=====] - 2s 36ms/step - loss: 0.5698 - val\_loss: 0.6636  
Epoch 13/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5682 - val\_loss: 0.6589  
Epoch 14/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5674 - val\_loss: 0.6566  
Epoch 15/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5647 - val\_loss: 0.6521  
Epoch 16/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5617 - val\_loss: 0.6535  
Epoch 17/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5624 - val\_loss: 0.6437  
Epoch 18/100  
50/50 [=====] - 2s 36ms/step - loss: 0.5607 - val\_loss: 0.6424  
Epoch 19/100  
50/50 [=====] - 2s 34ms/step - loss: 0.5594 - val\_loss: 0.6390  
Epoch 20/100  
50/50 [=====] - 2s 34ms/step - loss: 0.5574 - val\_loss: 0.6336  
Epoch 21/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5512 - val\_loss: 0.6296  
Epoch 22/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5510 - val\_loss: 0.6231  
Epoch 23/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5491 - val\_loss: 0.6212  
Epoch 24/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5491 - val\_loss: 0.6176  
Epoch 25/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5461 - val\_loss: 0.6130  
Epoch 26/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5447 - val\_loss: 0.6093  
Epoch 27/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5419 - val\_loss: 0.6066  
Epoch 28/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5376 - val\_loss: 0.6023  
Epoch 29/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5351 - val\_loss: 0.6003

Epoch 30/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5363 - val\_loss: 0.5955  
Epoch 31/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5335 - val\_loss: 0.5932  
Epoch 32/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5279 - val\_loss: 0.5903  
Epoch 33/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5289 - val\_loss: 0.5867  
Epoch 34/100  
50/50 [=====] - 2s 36ms/step - loss: 0.5284 - val\_loss: 0.5854  
Epoch 35/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5264 - val\_loss: 0.5847  
Epoch 36/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5215 - val\_loss: 0.5792  
Epoch 37/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5145 - val\_loss: 0.5747  
Epoch 38/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5193 - val\_loss: 0.5656  
Epoch 39/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5142 - val\_loss: 0.5588  
Epoch 40/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5116 - val\_loss: 0.5540  
Epoch 41/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5082 - val\_loss: 0.5515  
Epoch 42/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5000 - val\_loss: 0.5373  
Epoch 43/100  
50/50 [=====] - 2s 35ms/step - loss: 0.5034 - val\_loss: 0.5269  
Epoch 44/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4968 - val\_loss: 0.5254  
Epoch 45/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4932 - val\_loss: 0.5178  
Epoch 46/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4941 - val\_loss: 0.5144  
Epoch 47/100  
50/50 [=====] - 2s 34ms/step - loss: 0.4909 - val\_loss: 0.5127  
Epoch 48/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4918 - val\_loss: 0.5117  
Epoch 49/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4877 - val\_loss: 0.5089  
Epoch 50/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4884 - val\_loss: 0.5114  
Epoch 51/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4869 - val\_loss: 0.5085  
Epoch 52/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4824 - val\_loss: 0.5093  
Epoch 53/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4814 - val\_loss: 0.5062

Epoch 54/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4809 - val\_loss: 0.5015  
Epoch 55/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4795 - val\_loss: 0.5053  
Epoch 56/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4761 - val\_loss: 0.5018  
Epoch 57/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4747 - val\_loss: 0.5039  
Epoch 58/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4737 - val\_loss: 0.4969  
Epoch 59/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4690 - val\_loss: 0.4940  
Epoch 60/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4663 - val\_loss: 0.4900  
Epoch 61/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4592 - val\_loss: 0.4852  
Epoch 62/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4516 - val\_loss: 0.4781  
Epoch 63/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4475 - val\_loss: 0.4743  
Epoch 64/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4446 - val\_loss: 0.4681  
Epoch 65/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4385 - val\_loss: 0.4614  
Epoch 66/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4347 - val\_loss: 0.4650  
Epoch 67/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4356 - val\_loss: 0.4652  
Epoch 68/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4328 - val\_loss: 0.4620  
Epoch 69/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4318 - val\_loss: 0.4602  
Epoch 70/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4280 - val\_loss: 0.4566  
Epoch 71/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4287 - val\_loss: 0.4577  
Epoch 72/100  
50/50 [=====] - 2s 35ms/step - loss: 0.4244 - val\_loss: 0.4590  
Epoch 73/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4248 - val\_loss: 0.4587  
Epoch 74/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4203 - val\_loss: 0.4517  
Epoch 75/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4270 - val\_loss: 0.4552  
Epoch 76/100  
50/50 [=====] - 2s 38ms/step - loss: 0.4224 - val\_loss: 0.4725  
Epoch 77/100  
50/50 [=====] - 3s 54ms/step - loss: 0.4179 - val\_loss: 0.4603



Epoch 78/100  
50/50 [=====] - 3s 53ms/step - loss: 0.4194 - val\_loss: 0.4570  
Epoch 79/100  
50/50 [=====] - 2s 44ms/step - loss: 0.4160 - val\_loss: 0.4758  
Epoch 80/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4164 - val\_loss: 0.4673  
Epoch 81/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4153 - val\_loss: 0.4659  
Epoch 82/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4153 - val\_loss: 0.4536  
Epoch 83/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4099 - val\_loss: 0.4511  
Epoch 84/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4127 - val\_loss: 0.4596  
Epoch 85/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4098 - val\_loss: 0.4725  
Epoch 86/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4078 - val\_loss: 0.4538  
Epoch 87/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4089 - val\_loss: 0.4690  
Epoch 88/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4074 - val\_loss: 0.4680  
Epoch 89/100  
50/50 [=====] - 2s 37ms/step - loss: 0.4050 - val\_loss: 0.4511  
Epoch 90/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4064 - val\_loss: 0.4621  
Epoch 91/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4002 - val\_loss: 0.4644  
Epoch 92/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4031 - val\_loss: 0.4512  
Epoch 93/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3988 - val\_loss: 0.4508  
Epoch 94/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3967 - val\_loss: 0.4727  
Epoch 95/100  
50/50 [=====] - 2s 36ms/step - loss: 0.4010 - val\_loss: 0.4487  
Epoch 96/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3983 - val\_loss: 0.4573  
Epoch 97/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3963 - val\_loss: 0.4628  
Epoch 98/100  
50/50 [=====] - 2s 35ms/step - loss: 0.3981 - val\_loss: 0.4526  
Epoch 99/100  
50/50 [=====] - 2s 37ms/step - loss: 0.3936 - val\_loss: 0.4456  
Epoch 100/100  
50/50 [=====] - 2s 36ms/step - loss: 0.3970 - val\_loss: 0.4550



WI\_3 - True Future: 3998

WI\_3 - Model Prediction: 4549

WI\_3 - Model Percentage Error: 13.78%

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