

Training Model for CA_1...

Epoch 1/100

50/50 [=====] - 2s 45ms/step - loss: 0.7711 - val_loss: 0.7326

Epoch 2/100

50/50 [=====] - 2s 44ms/step - loss: 0.6805 - val_loss: 0.6758

Epoch 3/100

50/50 [=====] - 2s 43ms/step - loss: 0.6423 - val_loss: 0.6422

Epoch 4/100

50/50 [=====] - 2s 41ms/step - loss: 0.6209 - val_loss: 0.6102

Epoch 5/100

50/50 [=====] - 2s 42ms/step - loss: 0.5856 - val_loss: 0.5783

Epoch 6/100

50/50 [=====] - 2s 43ms/step - loss: 0.5500 - val_loss: 0.5198

Epoch 7/100

50/50 [=====] - 2s 38ms/step - loss: 0.5033 - val_loss: 0.4694

Epoch 8/100

50/50 [=====] - 2s 38ms/step - loss: 0.4582 - val_loss: 0.4253

Epoch 9/100

50/50 [=====] - 2s 38ms/step - loss: 0.4312 - val_loss: 0.4017

Epoch 10/100

50/50 [=====] - 2s 39ms/step - loss: 0.4174 - val_loss: 0.3846

Epoch 11/100

50/50 [=====] - 2s 38ms/step - loss: 0.4032 - val_loss: 0.3794

Epoch 12/100

50/50 [=====] - 2s 38ms/step - loss: 0.3969 - val_loss: 0.3656

Epoch 13/100

50/50 [=====] - 2s 39ms/step - loss: 0.3919 - val_loss: 0.3558

Epoch 14/100

50/50 [=====] - 2s 37ms/step - loss: 0.3861 - val_loss: 0.3484

Epoch 15/100

50/50 [=====] - 2s 38ms/step - loss: 0.3806 - val_loss: 0.3443

Epoch 16/100

50/50 [=====] - 2s 38ms/step - loss: 0.3776 - val_loss: 0.3423

Epoch 17/100

50/50 [=====] - 2s 38ms/step - loss: 0.3749 - val_loss: 0.3382

Epoch 18/100

50/50 [=====] - 2s 37ms/step - loss: 0.3716 - val_loss: 0.3338

Epoch 19/100

50/50 [=====] - 2s 37ms/step - loss: 0.3723 - val_loss: 0.3343

Epoch 20/100

50/50 [=====] - 2s 38ms/step - loss: 0.3639 - val_loss: 0.3303

Epoch 21/100

50/50 [=====] - 2s 39ms/step - loss: 0.3630 - val_loss: 0.3268

Epoch 22/100

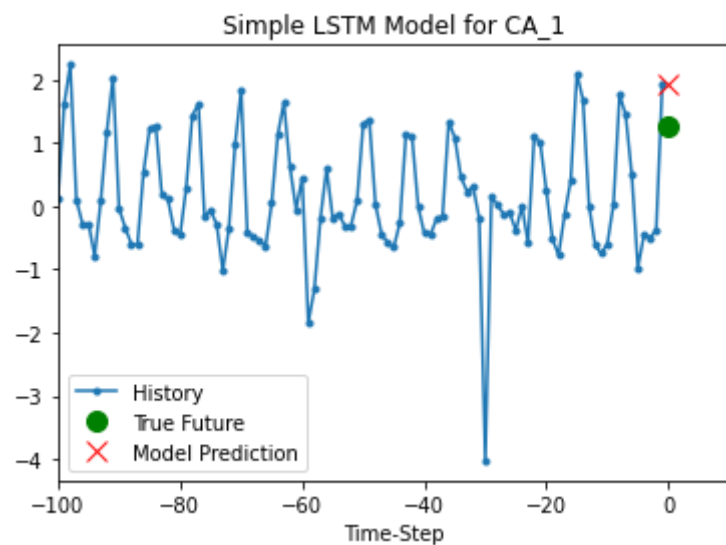
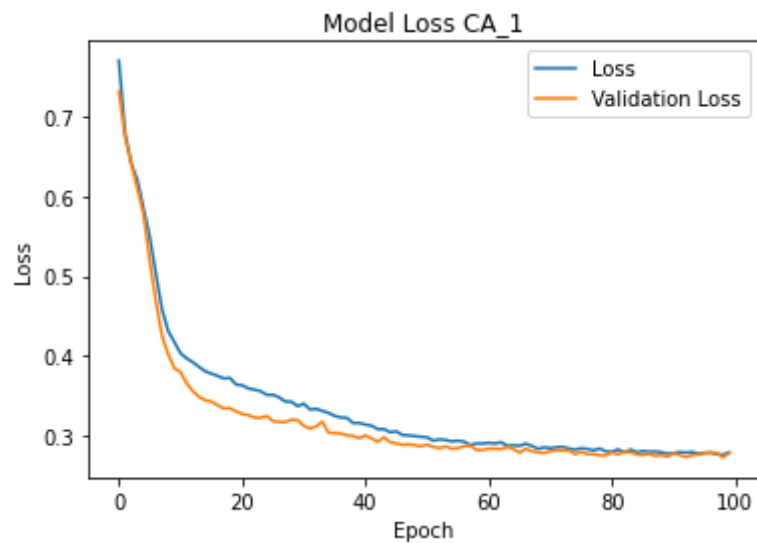
50/50 [=====] - 2s 39ms/step - loss: 0.3591 - val_loss: 0.3256

Epoch 23/100
50/50 [=====] - 2s 38ms/step - loss: 0.3576 - val_loss: 0.3223
Epoch 24/100
50/50 [=====] - 2s 38ms/step - loss: 0.3555 - val_loss: 0.3220
Epoch 25/100
50/50 [=====] - 2s 38ms/step - loss: 0.3509 - val_loss: 0.3245
Epoch 26/100
50/50 [=====] - 2s 38ms/step - loss: 0.3510 - val_loss: 0.3178
Epoch 27/100
50/50 [=====] - 2s 38ms/step - loss: 0.3478 - val_loss: 0.3170
Epoch 28/100
50/50 [=====] - 2s 37ms/step - loss: 0.3425 - val_loss: 0.3166
Epoch 29/100
50/50 [=====] - 2s 38ms/step - loss: 0.3424 - val_loss: 0.3196
Epoch 30/100
50/50 [=====] - 2s 37ms/step - loss: 0.3367 - val_loss: 0.3192
Epoch 31/100
50/50 [=====] - 2s 38ms/step - loss: 0.3399 - val_loss: 0.3120
Epoch 32/100
50/50 [=====] - 2s 38ms/step - loss: 0.3325 - val_loss: 0.3086
Epoch 33/100
50/50 [=====] - 2s 38ms/step - loss: 0.3333 - val_loss: 0.3113
Epoch 34/100
50/50 [=====] - 2s 38ms/step - loss: 0.3307 - val_loss: 0.3173
Epoch 35/100
50/50 [=====] - 2s 38ms/step - loss: 0.3283 - val_loss: 0.3033
Epoch 36/100
50/50 [=====] - 2s 38ms/step - loss: 0.3245 - val_loss: 0.3028
Epoch 37/100
50/50 [=====] - 2s 39ms/step - loss: 0.3224 - val_loss: 0.3023
Epoch 38/100
50/50 [=====] - 2s 38ms/step - loss: 0.3220 - val_loss: 0.3001
Epoch 39/100
50/50 [=====] - 2s 38ms/step - loss: 0.3154 - val_loss: 0.2993
Epoch 40/100
50/50 [=====] - 2s 37ms/step - loss: 0.3156 - val_loss: 0.2963
Epoch 41/100
50/50 [=====] - 2s 38ms/step - loss: 0.3134 - val_loss: 0.2999
Epoch 42/100
50/50 [=====] - 2s 40ms/step - loss: 0.3121 - val_loss: 0.2962
Epoch 43/100
50/50 [=====] - 2s 40ms/step - loss: 0.3078 - val_loss: 0.2919
Epoch 44/100
50/50 [=====] - 2s 40ms/step - loss: 0.3079 - val_loss: 0.2976
Epoch 45/100
50/50 [=====] - 2s 37ms/step - loss: 0.3039 - val_loss: 0.2914
Epoch 46/100
50/50 [=====] - 2s 38ms/step - loss: 0.3051 - val_loss: 0.2898

Epoch 47/100
50/50 [=====] - 2s 38ms/step - loss: 0.3005 - val_loss: 0.2881
Epoch 48/100
50/50 [=====] - 2s 38ms/step - loss: 0.2998 - val_loss: 0.2886
Epoch 49/100
50/50 [=====] - 2s 40ms/step - loss: 0.2991 - val_loss: 0.2877
Epoch 50/100
50/50 [=====] - 2s 38ms/step - loss: 0.2983 - val_loss: 0.2862
Epoch 51/100
50/50 [=====] - 2s 38ms/step - loss: 0.2975 - val_loss: 0.2885
Epoch 52/100
50/50 [=====] - 2s 39ms/step - loss: 0.2933 - val_loss: 0.2853
Epoch 53/100
50/50 [=====] - 2s 39ms/step - loss: 0.2949 - val_loss: 0.2841
Epoch 54/100
50/50 [=====] - 2s 39ms/step - loss: 0.2942 - val_loss: 0.2860
Epoch 55/100
50/50 [=====] - 2s 38ms/step - loss: 0.2924 - val_loss: 0.2832
Epoch 56/100
50/50 [=====] - 2s 39ms/step - loss: 0.2933 - val_loss: 0.2841
Epoch 57/100
50/50 [=====] - 2s 38ms/step - loss: 0.2921 - val_loss: 0.2863
Epoch 58/100
50/50 [=====] - 2s 39ms/step - loss: 0.2880 - val_loss: 0.2872
Epoch 59/100
50/50 [=====] - 2s 39ms/step - loss: 0.2898 - val_loss: 0.2816
Epoch 60/100
50/50 [=====] - 2s 39ms/step - loss: 0.2896 - val_loss: 0.2815
Epoch 61/100
50/50 [=====] - 2s 38ms/step - loss: 0.2906 - val_loss: 0.2832
Epoch 62/100
50/50 [=====] - 2s 38ms/step - loss: 0.2898 - val_loss: 0.2833
Epoch 63/100
50/50 [=====] - 2s 39ms/step - loss: 0.2914 - val_loss: 0.2828
Epoch 64/100
50/50 [=====] - 2s 38ms/step - loss: 0.2869 - val_loss: 0.2855
Epoch 65/100
50/50 [=====] - 2s 39ms/step - loss: 0.2875 - val_loss: 0.2828
Epoch 66/100
50/50 [=====] - 2s 38ms/step - loss: 0.2868 - val_loss: 0.2782
Epoch 67/100
50/50 [=====] - 2s 38ms/step - loss: 0.2894 - val_loss: 0.2831
Epoch 68/100
50/50 [=====] - 2s 39ms/step - loss: 0.2867 - val_loss: 0.2799
Epoch 69/100
50/50 [=====] - 2s 38ms/step - loss: 0.2831 - val_loss: 0.2787
Epoch 70/100
50/50 [=====] - 2s 38ms/step - loss: 0.2849 - val_loss: 0.2777

Epoch 71/100
50/50 [=====] - 2s 38ms/step - loss: 0.2839 - val_loss: 0.2801
Epoch 72/100
50/50 [=====] - 2s 38ms/step - loss: 0.2850 - val_loss: 0.2812
Epoch 73/100
50/50 [=====] - 2s 39ms/step - loss: 0.2855 - val_loss: 0.2808
Epoch 74/100
50/50 [=====] - 2s 38ms/step - loss: 0.2835 - val_loss: 0.2811
Epoch 75/100
50/50 [=====] - 2s 38ms/step - loss: 0.2819 - val_loss: 0.2762
Epoch 76/100
50/50 [=====] - 2s 41ms/step - loss: 0.2839 - val_loss: 0.2793
Epoch 77/100
50/50 [=====] - 2s 44ms/step - loss: 0.2829 - val_loss: 0.2764
Epoch 78/100
50/50 [=====] - 2s 45ms/step - loss: 0.2812 - val_loss: 0.2764
Epoch 79/100
50/50 [=====] - 2s 38ms/step - loss: 0.2834 - val_loss: 0.2748
Epoch 80/100
50/50 [=====] - 2s 37ms/step - loss: 0.2799 - val_loss: 0.2748
Epoch 81/100
50/50 [=====] - 2s 37ms/step - loss: 0.2793 - val_loss: 0.2784
Epoch 82/100
50/50 [=====] - 2s 38ms/step - loss: 0.2824 - val_loss: 0.2760
Epoch 83/100
50/50 [=====] - 2s 39ms/step - loss: 0.2782 - val_loss: 0.2796
Epoch 84/100
50/50 [=====] - 2s 37ms/step - loss: 0.2821 - val_loss: 0.2786
Epoch 85/100
50/50 [=====] - 2s 38ms/step - loss: 0.2788 - val_loss: 0.2760
Epoch 86/100
50/50 [=====] - 2s 38ms/step - loss: 0.2801 - val_loss: 0.2753
Epoch 87/100
50/50 [=====] - 2s 38ms/step - loss: 0.2794 - val_loss: 0.2769
Epoch 88/100
50/50 [=====] - 2s 38ms/step - loss: 0.2797 - val_loss: 0.2742
Epoch 89/100
50/50 [=====] - 2s 38ms/step - loss: 0.2788 - val_loss: 0.2752
Epoch 90/100
50/50 [=====] - 2s 38ms/step - loss: 0.2770 - val_loss: 0.2731
Epoch 91/100
50/50 [=====] - 2s 37ms/step - loss: 0.2778 - val_loss: 0.2777
Epoch 92/100
50/50 [=====] - 2s 37ms/step - loss: 0.2789 - val_loss: 0.2750
Epoch 93/100
50/50 [=====] - 2s 38ms/step - loss: 0.2783 - val_loss: 0.2726
Epoch 94/100
50/50 [=====] - 2s 38ms/step - loss: 0.2791 - val_loss: 0.2752

Epoch 95/100
 50/50 [=====] - 2s 38ms/step - loss: 0.2768 - val_loss: 0.2756
 Epoch 96/100
 50/50 [=====] - 2s 37ms/step - loss: 0.2781 - val_loss: 0.2775
 Epoch 97/100
 50/50 [=====] - 2s 38ms/step - loss: 0.2781 - val_loss: 0.2787
 Epoch 98/100
 50/50 [=====] - 2s 39ms/step - loss: 0.2764 - val_loss: 0.2778
 Epoch 99/100
 50/50 [=====] - 2s 38ms/step - loss: 0.2757 - val_loss: 0.2722
 Epoch 100/100
 50/50 [=====] - 2s 38ms/step - loss: 0.2786 - val_loss: 0.2778



CA_1 - True Future: 5247
 CA_1 - Model Prediction: 5903
 CA_1 - Model Percentage Error: 12.50%

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Training Model for CA_2...

Epoch 1/100

50/50 [=====] - 2s 45ms/step - loss: 0.7163 - val_loss: 1.1974

Epoch 2/100

50/50 [=====] - 2s 39ms/step - loss: 0.6849 - val_loss: 1.1941

Epoch 3/100

50/50 [=====] - 2s 38ms/step - loss: 0.6744 - val_loss: 1.2175

Epoch 4/100

50/50 [=====] - 2s 39ms/step - loss: 0.6442 - val_loss: 1.1075

Epoch 5/100

50/50 [=====] - 2s 38ms/step - loss: 0.6251 - val_loss: 1.1529

Epoch 6/100

50/50 [=====] - 2s 39ms/step - loss: 0.5863 - val_loss: 1.2564

Epoch 7/100

50/50 [=====] - 2s 39ms/step - loss: 0.5343 - val_loss: 1.1199

Epoch 8/100

50/50 [=====] - 2s 38ms/step - loss: 0.4717 - val_loss: 0.9623

Epoch 9/100

50/50 [=====] - 2s 38ms/step - loss: 0.4189 - val_loss: 0.9301

Epoch 10/100

50/50 [=====] - 2s 38ms/step - loss: 0.3870 - val_loss: 0.8876

Epoch 11/100

50/50 [=====] - 2s 38ms/step - loss: 0.3541 - val_loss: 0.8437

Epoch 12/100

50/50 [=====] - 2s 38ms/step - loss: 0.3279 - val_loss: 0.7889

Epoch 13/100

50/50 [=====] - 2s 37ms/step - loss: 0.3065 - val_loss: 0.7390

Epoch 14/100

50/50 [=====] - 2s 38ms/step - loss: 0.2939 - val_loss: 0.6966

Epoch 15/100

50/50 [=====] - 2s 38ms/step - loss: 0.2904 - val_loss: 0.6732

Epoch 16/100

50/50 [=====] - 2s 38ms/step - loss: 0.2816 - val_loss: 0.6471

Epoch 17/100

50/50 [=====] - 2s 38ms/step - loss: 0.2800 - val_loss: 0.6378

Epoch 18/100

50/50 [=====] - 2s 37ms/step - loss: 0.2760 - val_loss: 0.6149

Epoch 19/100

50/50 [=====] - 2s 38ms/step - loss: 0.2739 - val_loss: 0.6001

Epoch 20/100

50/50 [=====] - 2s 38ms/step - loss: 0.2707 - val_loss: 0.5878

Epoch 21/100

50/50 [=====] - 2s 37ms/step - loss: 0.2674 - val_loss: 0.5751

Epoch 22/100

50/50 [=====] - 2s 37ms/step - loss: 0.2632 - val_loss: 0.5631

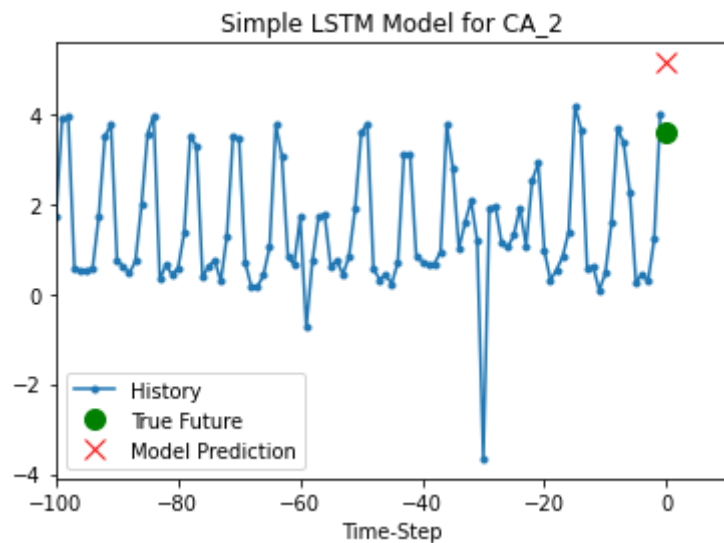
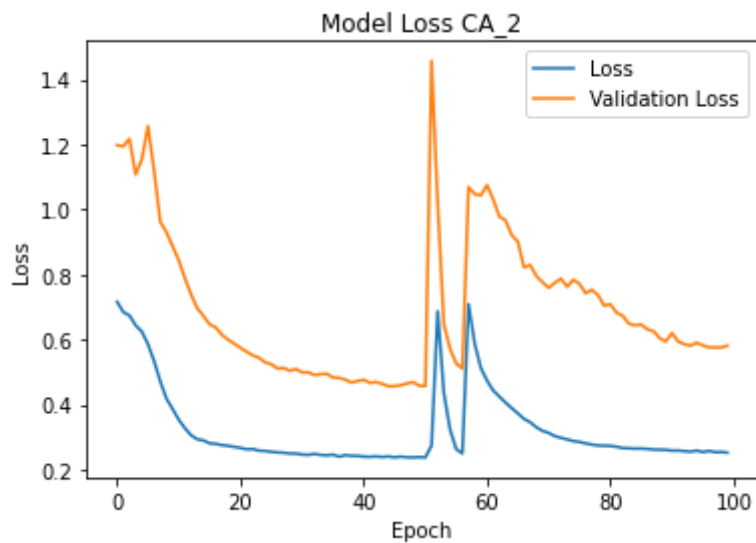
Epoch 23/100

50/50 [=====] - 2s 38ms/step - loss: 0.2639 - val_loss: 0.5518
Epoch 24/100
50/50 [=====] - 2s 38ms/step - loss: 0.2589 - val_loss: 0.5447
Epoch 25/100
50/50 [=====] - 2s 37ms/step - loss: 0.2580 - val_loss: 0.5303
Epoch 26/100
50/50 [=====] - 2s 38ms/step - loss: 0.2554 - val_loss: 0.5248
Epoch 27/100
50/50 [=====] - 2s 38ms/step - loss: 0.2536 - val_loss: 0.5117
Epoch 28/100
50/50 [=====] - 2s 38ms/step - loss: 0.2527 - val_loss: 0.5131
Epoch 29/100
50/50 [=====] - 2s 37ms/step - loss: 0.2501 - val_loss: 0.5048
Epoch 30/100
50/50 [=====] - 2s 37ms/step - loss: 0.2501 - val_loss: 0.5098
Epoch 31/100
50/50 [=====] - 2s 38ms/step - loss: 0.2471 - val_loss: 0.4995
Epoch 32/100
50/50 [=====] - 2s 37ms/step - loss: 0.2460 - val_loss: 0.4997
Epoch 33/100
50/50 [=====] - 2s 38ms/step - loss: 0.2492 - val_loss: 0.4916
Epoch 34/100
50/50 [=====] - 2s 38ms/step - loss: 0.2459 - val_loss: 0.4939
Epoch 35/100
50/50 [=====] - 2s 38ms/step - loss: 0.2445 - val_loss: 0.4954
Epoch 36/100
50/50 [=====] - 2s 37ms/step - loss: 0.2468 - val_loss: 0.4841
Epoch 37/100
50/50 [=====] - 2s 38ms/step - loss: 0.2404 - val_loss: 0.4826
Epoch 38/100
50/50 [=====] - 2s 39ms/step - loss: 0.2451 - val_loss: 0.4775
Epoch 39/100
50/50 [=====] - 2s 37ms/step - loss: 0.2430 - val_loss: 0.4682
Epoch 40/100
50/50 [=====] - 2s 37ms/step - loss: 0.2429 - val_loss: 0.4730
Epoch 41/100
50/50 [=====] - 2s 38ms/step - loss: 0.2407 - val_loss: 0.4769
Epoch 42/100
50/50 [=====] - 2s 38ms/step - loss: 0.2400 - val_loss: 0.4671
Epoch 43/100
50/50 [=====] - 2s 39ms/step - loss: 0.2413 - val_loss: 0.4700
Epoch 44/100
50/50 [=====] - 2s 38ms/step - loss: 0.2396 - val_loss: 0.4644
Epoch 45/100
50/50 [=====] - 2s 38ms/step - loss: 0.2413 - val_loss: 0.4569
Epoch 46/100
50/50 [=====] - 2s 38ms/step - loss: 0.2384 - val_loss: 0.4572
Epoch 47/100

50/50 [=====] - 2s 38ms/step - loss: 0.2407 - val_loss: 0.4600
Epoch 48/100
50/50 [=====] - 2s 38ms/step - loss: 0.2385 - val_loss: 0.4654
Epoch 49/100
50/50 [=====] - 2s 37ms/step - loss: 0.2382 - val_loss: 0.4697
Epoch 50/100
50/50 [=====] - 2s 38ms/step - loss: 0.2391 - val_loss: 0.4586
Epoch 51/100
50/50 [=====] - 2s 37ms/step - loss: 0.2380 - val_loss: 0.4574
Epoch 52/100
50/50 [=====] - 2s 37ms/step - loss: 0.2751 - val_loss: 1.4572
Epoch 53/100
50/50 [=====] - 2s 38ms/step - loss: 0.6877 - val_loss: 1.0173
Epoch 54/100
50/50 [=====] - 2s 38ms/step - loss: 0.4364 - val_loss: 0.6471
Epoch 55/100
50/50 [=====] - 2s 37ms/step - loss: 0.3244 - val_loss: 0.5720
Epoch 56/100
50/50 [=====] - 2s 37ms/step - loss: 0.2636 - val_loss: 0.5265
Epoch 57/100
50/50 [=====] - 2s 37ms/step - loss: 0.2503 - val_loss: 0.5116
Epoch 58/100
50/50 [=====] - 2s 38ms/step - loss: 0.7090 - val_loss: 1.0693
Epoch 59/100
50/50 [=====] - 2s 40ms/step - loss: 0.5880 - val_loss: 1.0471
Epoch 60/100
50/50 [=====] - 2s 43ms/step - loss: 0.5130 - val_loss: 1.0432
Epoch 61/100
50/50 [=====] - 2s 42ms/step - loss: 0.4742 - val_loss: 1.0752
Epoch 62/100
50/50 [=====] - 2s 42ms/step - loss: 0.4437 - val_loss: 1.0309
Epoch 63/100
50/50 [=====] - 2s 44ms/step - loss: 0.4254 - val_loss: 0.9782
Epoch 64/100
50/50 [=====] - 2s 40ms/step - loss: 0.4069 - val_loss: 0.9668
Epoch 65/100
50/50 [=====] - 2s 38ms/step - loss: 0.3899 - val_loss: 0.9214
Epoch 66/100
50/50 [=====] - 2s 38ms/step - loss: 0.3735 - val_loss: 0.9014
Epoch 67/100
50/50 [=====] - 2s 37ms/step - loss: 0.3567 - val_loss: 0.8221
Epoch 68/100
50/50 [=====] - 2s 37ms/step - loss: 0.3462 - val_loss: 0.8297
Epoch 69/100
50/50 [=====] - 2s 38ms/step - loss: 0.3309 - val_loss: 0.7956
Epoch 70/100
50/50 [=====] - 2s 38ms/step - loss: 0.3198 - val_loss: 0.7765
Epoch 71/100

50/50 [=====] - 2s 37ms/step - loss: 0.3136 - val_loss: 0.7595
Epoch 72/100
50/50 [=====] - 2s 37ms/step - loss: 0.3036 - val_loss: 0.7747
Epoch 73/100
50/50 [=====] - 2s 39ms/step - loss: 0.2985 - val_loss: 0.7875
Epoch 74/100
50/50 [=====] - 2s 38ms/step - loss: 0.2936 - val_loss: 0.7624
Epoch 75/100
50/50 [=====] - 2s 38ms/step - loss: 0.2886 - val_loss: 0.7842
Epoch 76/100
50/50 [=====] - 2s 38ms/step - loss: 0.2858 - val_loss: 0.7715
Epoch 77/100
50/50 [=====] - 2s 38ms/step - loss: 0.2813 - val_loss: 0.7429
Epoch 78/100
50/50 [=====] - 2s 38ms/step - loss: 0.2777 - val_loss: 0.7534
Epoch 79/100
50/50 [=====] - 2s 39ms/step - loss: 0.2749 - val_loss: 0.7367
Epoch 80/100
50/50 [=====] - 2s 38ms/step - loss: 0.2742 - val_loss: 0.7049
Epoch 81/100
50/50 [=====] - 2s 39ms/step - loss: 0.2735 - val_loss: 0.7088
Epoch 82/100
50/50 [=====] - 2s 38ms/step - loss: 0.2709 - val_loss: 0.6833
Epoch 83/100
50/50 [=====] - 2s 38ms/step - loss: 0.2670 - val_loss: 0.6735
Epoch 84/100
50/50 [=====] - 2s 38ms/step - loss: 0.2663 - val_loss: 0.6494
Epoch 85/100
50/50 [=====] - 2s 38ms/step - loss: 0.2652 - val_loss: 0.6442
Epoch 86/100
50/50 [=====] - 2s 38ms/step - loss: 0.2655 - val_loss: 0.6469
Epoch 87/100
50/50 [=====] - 2s 38ms/step - loss: 0.2644 - val_loss: 0.6318
Epoch 88/100
50/50 [=====] - 2s 38ms/step - loss: 0.2624 - val_loss: 0.6264
Epoch 89/100
50/50 [=====] - 2s 39ms/step - loss: 0.2619 - val_loss: 0.6050
Epoch 90/100
50/50 [=====] - 2s 37ms/step - loss: 0.2614 - val_loss: 0.5947
Epoch 91/100
50/50 [=====] - 2s 38ms/step - loss: 0.2590 - val_loss: 0.6205
Epoch 92/100
50/50 [=====] - 2s 38ms/step - loss: 0.2594 - val_loss: 0.5944
Epoch 93/100
50/50 [=====] - 2s 38ms/step - loss: 0.2574 - val_loss: 0.5865
Epoch 94/100
50/50 [=====] - 2s 39ms/step - loss: 0.2559 - val_loss: 0.5817
Epoch 95/100

50/50 [=====] - 2s 38ms/step - loss: 0.2592 - val_loss: 0.5904
 Epoch 96/100
 50/50 [=====] - 2s 39ms/step - loss: 0.2547 - val_loss: 0.5828
 Epoch 97/100
 50/50 [=====] - 2s 37ms/step - loss: 0.2581 - val_loss: 0.5762
 Epoch 98/100
 50/50 [=====] - 2s 38ms/step - loss: 0.2543 - val_loss: 0.5762
 Epoch 99/100
 50/50 [=====] - 2s 38ms/step - loss: 0.2549 - val_loss: 0.5761
 Epoch 100/100
 50/50 [=====] - 2s 39ms/step - loss: 0.2529 - val_loss: 0.5818



CA_2 - True Future: 5647
 CA_2 - Model Prediction: 6832
 CA_2 - Model Percentage Error: 20.98%

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Training Model for CA_3...

Epoch 1/100
50/50 [=====] - 2s 43ms/step - loss: 0.6696 - val_loss: 0.6802
Epoch 2/100
50/50 [=====] - 2s 38ms/step - loss: 0.6229 - val_loss: 0.6643
Epoch 3/100
50/50 [=====] - 2s 39ms/step - loss: 0.6083 - val_loss: 0.6466
Epoch 4/100
50/50 [=====] - 2s 38ms/step - loss: 0.5956 - val_loss: 0.6280
Epoch 5/100
50/50 [=====] - 2s 38ms/step - loss: 0.5819 - val_loss: 0.6192
Epoch 6/100
50/50 [=====] - 2s 38ms/step - loss: 0.5641 - val_loss: 0.5995
Epoch 7/100
50/50 [=====] - 2s 39ms/step - loss: 0.5514 - val_loss: 0.5876
Epoch 8/100
50/50 [=====] - 2s 39ms/step - loss: 0.5325 - val_loss: 0.5718
Epoch 9/100
50/50 [=====] - 2s 37ms/step - loss: 0.5247 - val_loss: 0.5543
Epoch 10/100
50/50 [=====] - 2s 38ms/step - loss: 0.5145 - val_loss: 0.5487
Epoch 11/100
50/50 [=====] - 2s 38ms/step - loss: 0.5042 - val_loss: 0.5283
Epoch 12/100
50/50 [=====] - 2s 39ms/step - loss: 0.4903 - val_loss: 0.5159
Epoch 13/100
50/50 [=====] - 2s 38ms/step - loss: 0.4856 - val_loss: 0.5030
Epoch 14/100
50/50 [=====] - 2s 37ms/step - loss: 0.4732 - val_loss: 0.4847
Epoch 15/100
50/50 [=====] - 2s 39ms/step - loss: 0.4676 - val_loss: 0.4730
Epoch 16/100
50/50 [=====] - 2s 39ms/step - loss: 0.4595 - val_loss: 0.4652
Epoch 17/100
50/50 [=====] - 2s 39ms/step - loss: 0.4499 - val_loss: 0.4551
Epoch 18/100
50/50 [=====] - 2s 39ms/step - loss: 0.4578 - val_loss: 0.4545
Epoch 19/100
50/50 [=====] - 2s 40ms/step - loss: 0.4484 - val_loss: 0.4405
Epoch 20/100
50/50 [=====] - 2s 48ms/step - loss: 0.4441 - val_loss: 0.4392
Epoch 21/100
50/50 [=====] - 3s 55ms/step - loss: 0.4446 - val_loss: 0.4320
Epoch 22/100
50/50 [=====] - 3s 58ms/step - loss: 0.4398 - val_loss: 0.4294
Epoch 23/100
50/50 [=====] - 2s 39ms/step - loss: 0.4383 - val_loss: 0.4286

Epoch 24/100
50/50 [=====] - 2s 40ms/step - loss: 0.4358 - val_loss: 0.4283
Epoch 25/100
50/50 [=====] - 2s 38ms/step - loss: 0.4359 - val_loss: 0.4274
Epoch 26/100
50/50 [=====] - 2s 39ms/step - loss: 0.4305 - val_loss: 0.4119
Epoch 27/100
50/50 [=====] - 2s 40ms/step - loss: 0.4277 - val_loss: 0.4096
Epoch 28/100
50/50 [=====] - 2s 38ms/step - loss: 0.4264 - val_loss: 0.4084
Epoch 29/100
50/50 [=====] - 2s 40ms/step - loss: 0.4263 - val_loss: 0.4035
Epoch 30/100
50/50 [=====] - 2s 45ms/step - loss: 0.4183 - val_loss: 0.3938
Epoch 31/100
50/50 [=====] - 2s 46ms/step - loss: 0.4152 - val_loss: 0.3883
Epoch 32/100
50/50 [=====] - 2s 47ms/step - loss: 0.4135 - val_loss: 0.3841
Epoch 33/100
50/50 [=====] - 2s 38ms/step - loss: 0.4065 - val_loss: 0.3748
Epoch 34/100
50/50 [=====] - 2s 39ms/step - loss: 0.4042 - val_loss: 0.3675
Epoch 35/100
50/50 [=====] - 2s 39ms/step - loss: 0.3962 - val_loss: 0.3607
Epoch 36/100
50/50 [=====] - 2s 38ms/step - loss: 0.3942 - val_loss: 0.3532
Epoch 37/100
50/50 [=====] - 2s 39ms/step - loss: 0.3908 - val_loss: 0.3435
Epoch 38/100
50/50 [=====] - 2s 38ms/step - loss: 0.3845 - val_loss: 0.3338
Epoch 39/100
50/50 [=====] - 2s 38ms/step - loss: 0.3814 - val_loss: 0.3251
Epoch 40/100
50/50 [=====] - 2s 38ms/step - loss: 0.3757 - val_loss: 0.3239
Epoch 41/100
50/50 [=====] - 2s 38ms/step - loss: 0.3675 - val_loss: 0.3226
Epoch 42/100
50/50 [=====] - 2s 38ms/step - loss: 0.3683 - val_loss: 0.3062
Epoch 43/100
50/50 [=====] - 2s 37ms/step - loss: 0.3551 - val_loss: 0.3023
Epoch 44/100
50/50 [=====] - 2s 38ms/step - loss: 0.3589 - val_loss: 0.2987
Epoch 45/100
50/50 [=====] - 2s 38ms/step - loss: 0.3495 - val_loss: 0.2986
Epoch 46/100
50/50 [=====] - 2s 38ms/step - loss: 0.3471 - val_loss: 0.2970
Epoch 47/100
50/50 [=====] - 2s 39ms/step - loss: 0.3402 - val_loss: 0.3003

Epoch 48/100
50/50 [=====] - 2s 37ms/step - loss: 0.3438 - val_loss: 0.2950
Epoch 49/100
50/50 [=====] - 2s 37ms/step - loss: 0.3347 - val_loss: 0.2925
Epoch 50/100
50/50 [=====] - 2s 38ms/step - loss: 0.3327 - val_loss: 0.2922
Epoch 51/100
50/50 [=====] - 2s 38ms/step - loss: 0.3323 - val_loss: 0.2899
Epoch 52/100
50/50 [=====] - 2s 39ms/step - loss: 0.3289 - val_loss: 0.2926
Epoch 53/100
50/50 [=====] - 2s 37ms/step - loss: 0.3269 - val_loss: 0.2904
Epoch 54/100
50/50 [=====] - 2s 38ms/step - loss: 0.3275 - val_loss: 0.2930
Epoch 55/100
50/50 [=====] - 2s 38ms/step - loss: 0.3220 - val_loss: 0.2893
Epoch 56/100
50/50 [=====] - 2s 38ms/step - loss: 0.3199 - val_loss: 0.2884
Epoch 57/100
50/50 [=====] - 2s 38ms/step - loss: 0.3193 - val_loss: 0.2898
Epoch 58/100
50/50 [=====] - 2s 39ms/step - loss: 0.3162 - val_loss: 0.2824
Epoch 59/100
50/50 [=====] - 2s 38ms/step - loss: 0.3162 - val_loss: 0.2858
Epoch 60/100
50/50 [=====] - 2s 37ms/step - loss: 0.3126 - val_loss: 0.2793
Epoch 61/100
50/50 [=====] - 2s 38ms/step - loss: 0.3155 - val_loss: 0.2801
Epoch 62/100
50/50 [=====] - 2s 38ms/step - loss: 0.3121 - val_loss: 0.2779
Epoch 63/100
50/50 [=====] - 2s 39ms/step - loss: 0.3246 - val_loss: 0.2841
Epoch 64/100
50/50 [=====] - 2s 37ms/step - loss: 0.3179 - val_loss: 0.2799
Epoch 65/100
50/50 [=====] - 2s 38ms/step - loss: 0.3139 - val_loss: 0.2861
Epoch 66/100
50/50 [=====] - 2s 38ms/step - loss: 0.3122 - val_loss: 0.2824
Epoch 67/100
50/50 [=====] - 2s 39ms/step - loss: 0.3106 - val_loss: 0.2835
Epoch 68/100
50/50 [=====] - 2s 38ms/step - loss: 0.3105 - val_loss: 0.2792
Epoch 69/100
50/50 [=====] - 2s 37ms/step - loss: 0.4154 - val_loss: 0.3417
Epoch 70/100
50/50 [=====] - 2s 38ms/step - loss: 0.3684 - val_loss: 0.2999
Epoch 71/100
50/50 [=====] - 2s 38ms/step - loss: 0.3482 - val_loss: 0.2936

Epoch 72/100
50/50 [=====] - 2s 38ms/step - loss: 0.3344 - val_loss: 0.2931
Epoch 73/100
50/50 [=====] - 2s 39ms/step - loss: 0.3247 - val_loss: 0.2939
Epoch 74/100
50/50 [=====] - 2s 37ms/step - loss: 0.3194 - val_loss: 0.2922
Epoch 75/100
50/50 [=====] - 2s 38ms/step - loss: 0.3164 - val_loss: 0.2873
Epoch 76/100
50/50 [=====] - 2s 38ms/step - loss: 0.3152 - val_loss: 0.2906
Epoch 77/100
50/50 [=====] - 2s 38ms/step - loss: 0.3124 - val_loss: 0.2833
Epoch 78/100
50/50 [=====] - 2s 38ms/step - loss: 0.3126 - val_loss: 0.2817
Epoch 79/100
50/50 [=====] - 2s 38ms/step - loss: 0.3104 - val_loss: 0.2816
Epoch 80/100
50/50 [=====] - 2s 37ms/step - loss: 0.3088 - val_loss: 0.2821
Epoch 81/100
50/50 [=====] - 2s 38ms/step - loss: 0.3080 - val_loss: 0.2827
Epoch 82/100
50/50 [=====] - 2s 39ms/step - loss: 0.3049 - val_loss: 0.2773
Epoch 83/100
50/50 [=====] - 2s 40ms/step - loss: 0.3067 - val_loss: 0.2795
Epoch 84/100
50/50 [=====] - 2s 38ms/step - loss: 0.3051 - val_loss: 0.2821
Epoch 85/100
50/50 [=====] - 2s 39ms/step - loss: 0.3064 - val_loss: 0.2819
Epoch 86/100
50/50 [=====] - 2s 38ms/step - loss: 0.3863 - val_loss: 0.5745
Epoch 87/100
50/50 [=====] - 2s 38ms/step - loss: 0.6022 - val_loss: 0.5468
Epoch 88/100
50/50 [=====] - 2s 40ms/step - loss: 0.5395 - val_loss: 0.5473
Epoch 89/100
50/50 [=====] - 2s 39ms/step - loss: 0.5174 - val_loss: 0.5222
Epoch 90/100
50/50 [=====] - 2s 39ms/step - loss: 0.5034 - val_loss: 0.5083
Epoch 91/100
50/50 [=====] - 2s 40ms/step - loss: 0.4914 - val_loss: 0.4932
Epoch 92/100
50/50 [=====] - 2s 39ms/step - loss: 0.4809 - val_loss: 0.4818
Epoch 93/100
50/50 [=====] - 2s 41ms/step - loss: 0.4808 - val_loss: 0.4778
Epoch 94/100
50/50 [=====] - 2s 40ms/step - loss: 0.4703 - val_loss: 0.4701
Epoch 95/100
50/50 [=====] - 2s 39ms/step - loss: 0.4623 - val_loss: 0.4636

Epoch 96/100

50/50 [=====] - 2s 39ms/step - loss: 0.4587 - val_loss: 0.4609

Epoch 97/100

50/50 [=====] - 2s 39ms/step - loss: 0.4583 - val_loss: 0.4571

Epoch 98/100

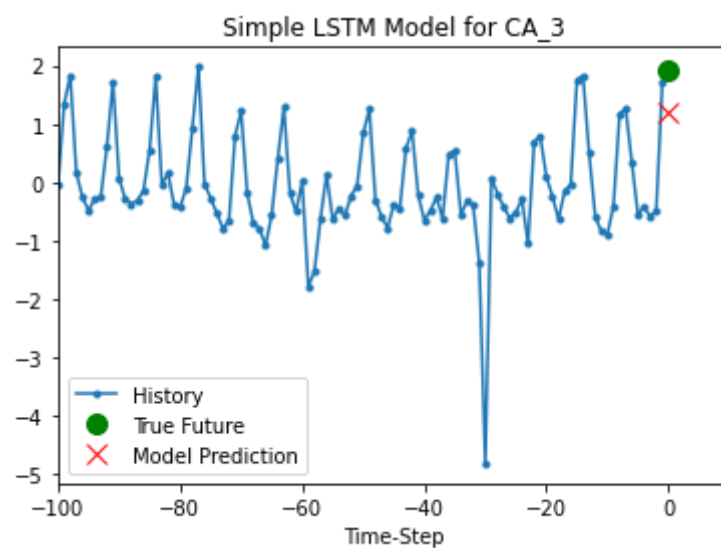
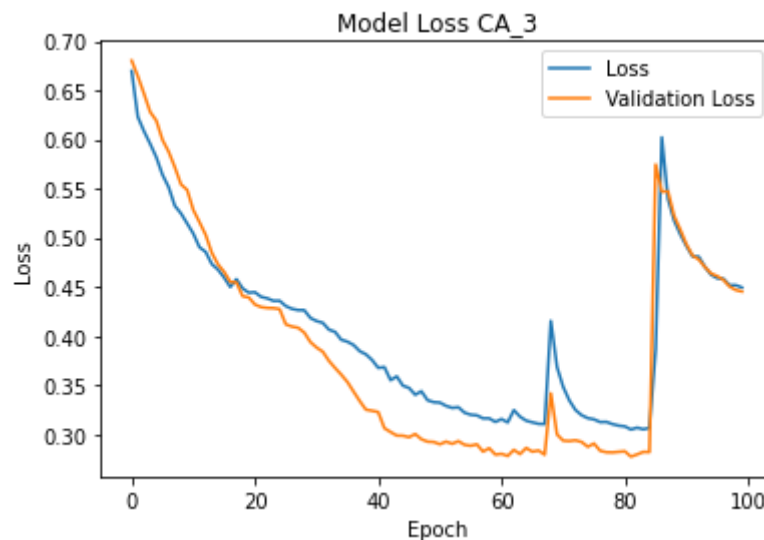
50/50 [=====] - 2s 38ms/step - loss: 0.4517 - val_loss: 0.4503

Epoch 99/100

50/50 [=====] - 2s 38ms/step - loss: 0.4517 - val_loss: 0.4468

Epoch 100/100

50/50 [=====] - 2s 37ms/step - loss: 0.4493 - val_loss: 0.4453



CA_3 - True Future: 8164

CA_3 - Model Prediction: 7259

CA_3 - Model Percentage Error: 11.09%

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Training Model for CA_4...

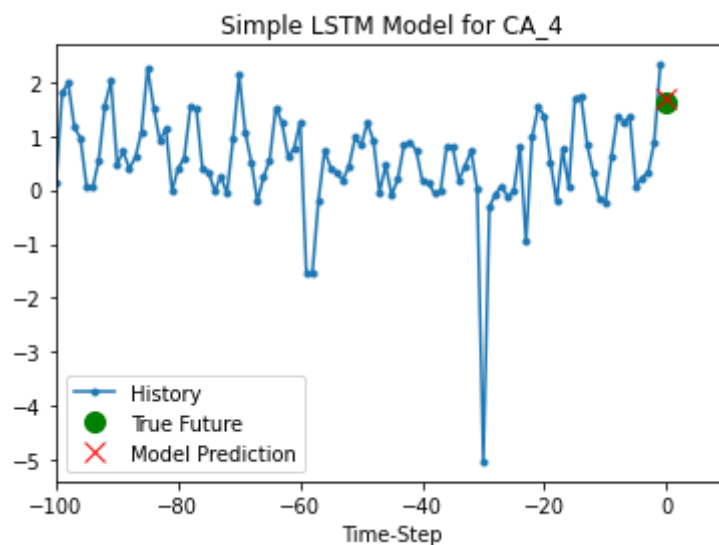
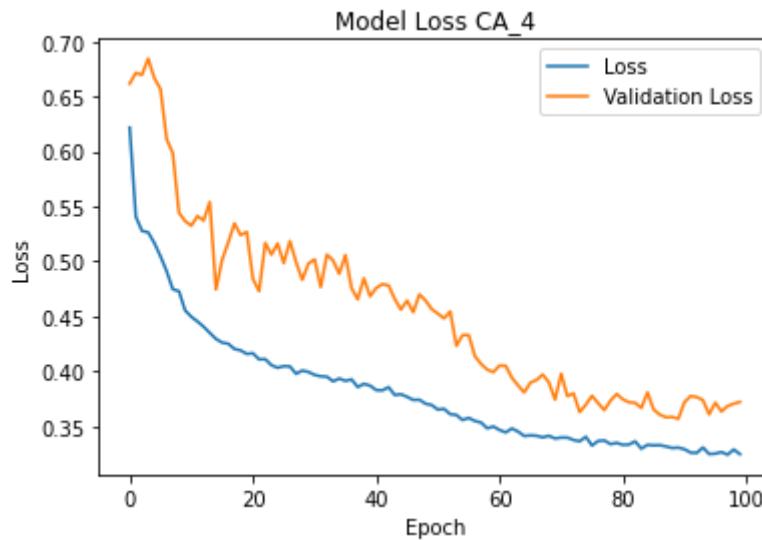
Epoch 1/100
50/50 [=====] - 2s 45ms/step - loss: 0.6217 - val_loss: 0.6617
Epoch 2/100
50/50 [=====] - 2s 38ms/step - loss: 0.5406 - val_loss: 0.6714
Epoch 3/100
50/50 [=====] - 2s 38ms/step - loss: 0.5276 - val_loss: 0.6697
Epoch 4/100
50/50 [=====] - 2s 38ms/step - loss: 0.5264 - val_loss: 0.6845
Epoch 5/100
50/50 [=====] - 2s 38ms/step - loss: 0.5167 - val_loss: 0.6667
Epoch 6/100
50/50 [=====] - 2s 37ms/step - loss: 0.5046 - val_loss: 0.6569
Epoch 7/100
50/50 [=====] - 2s 39ms/step - loss: 0.4909 - val_loss: 0.6113
Epoch 8/100
50/50 [=====] - 2s 37ms/step - loss: 0.4746 - val_loss: 0.5984
Epoch 9/100
50/50 [=====] - 2s 37ms/step - loss: 0.4728 - val_loss: 0.5442
Epoch 10/100
50/50 [=====] - 2s 38ms/step - loss: 0.4553 - val_loss: 0.5365
Epoch 11/100
50/50 [=====] - 2s 38ms/step - loss: 0.4495 - val_loss: 0.5324
Epoch 12/100
50/50 [=====] - 2s 38ms/step - loss: 0.4452 - val_loss: 0.5412
Epoch 13/100
50/50 [=====] - 2s 38ms/step - loss: 0.4404 - val_loss: 0.5371
Epoch 14/100
50/50 [=====] - 2s 43ms/step - loss: 0.4348 - val_loss: 0.5539
Epoch 15/100
50/50 [=====] - 2s 42ms/step - loss: 0.4294 - val_loss: 0.4744
Epoch 16/100
50/50 [=====] - 2s 41ms/step - loss: 0.4260 - val_loss: 0.5013
Epoch 17/100
50/50 [=====] - 2s 43ms/step - loss: 0.4250 - val_loss: 0.5173
Epoch 18/100
50/50 [=====] - 2s 41ms/step - loss: 0.4202 - val_loss: 0.5344
Epoch 19/100
50/50 [=====] - 2s 40ms/step - loss: 0.4189 - val_loss: 0.5239
Epoch 20/100
50/50 [=====] - 2s 40ms/step - loss: 0.4157 - val_loss: 0.5267
Epoch 21/100
50/50 [=====] - 2s 38ms/step - loss: 0.4163 - val_loss: 0.4840
Epoch 22/100
50/50 [=====] - 2s 38ms/step - loss: 0.4107 - val_loss: 0.4728
Epoch 23/100
50/50 [=====] - 2s 37ms/step - loss: 0.4109 - val_loss: 0.5167
Epoch 24/100

50/50 [=====] - 2s 37ms/step - loss: 0.4054 - val_loss: 0.5060
Epoch 25/100
50/50 [=====] - 2s 38ms/step - loss: 0.4031 - val_loss: 0.5162
Epoch 26/100
50/50 [=====] - 2s 38ms/step - loss: 0.4045 - val_loss: 0.4984
Epoch 27/100
50/50 [=====] - 2s 39ms/step - loss: 0.4043 - val_loss: 0.5184
Epoch 28/100
50/50 [=====] - 2s 37ms/step - loss: 0.3976 - val_loss: 0.4993
Epoch 29/100
50/50 [=====] - 2s 37ms/step - loss: 0.4006 - val_loss: 0.4831
Epoch 30/100
50/50 [=====] - 2s 37ms/step - loss: 0.3993 - val_loss: 0.4979
Epoch 31/100
50/50 [=====] - 2s 38ms/step - loss: 0.3966 - val_loss: 0.5018
Epoch 32/100
50/50 [=====] - 2s 39ms/step - loss: 0.3953 - val_loss: 0.4765
Epoch 33/100
50/50 [=====] - 2s 37ms/step - loss: 0.3950 - val_loss: 0.5061
Epoch 34/100
50/50 [=====] - 2s 37ms/step - loss: 0.3908 - val_loss: 0.5008
Epoch 35/100
50/50 [=====] - 2s 37ms/step - loss: 0.3933 - val_loss: 0.4886
Epoch 36/100
50/50 [=====] - 2s 38ms/step - loss: 0.3911 - val_loss: 0.5057
Epoch 37/100
50/50 [=====] - 2s 39ms/step - loss: 0.3925 - val_loss: 0.4755
Epoch 38/100
50/50 [=====] - 2s 37ms/step - loss: 0.3855 - val_loss: 0.4654
Epoch 39/100
50/50 [=====] - 2s 37ms/step - loss: 0.3885 - val_loss: 0.4846
Epoch 40/100
50/50 [=====] - 2s 37ms/step - loss: 0.3868 - val_loss: 0.4681
Epoch 41/100
50/50 [=====] - 2s 37ms/step - loss: 0.3827 - val_loss: 0.4757
Epoch 42/100
50/50 [=====] - 2s 39ms/step - loss: 0.3825 - val_loss: 0.4792
Epoch 43/100
50/50 [=====] - 2s 39ms/step - loss: 0.3854 - val_loss: 0.4781
Epoch 44/100
50/50 [=====] - 2s 38ms/step - loss: 0.3783 - val_loss: 0.4657
Epoch 45/100
50/50 [=====] - 2s 37ms/step - loss: 0.3790 - val_loss: 0.4560
Epoch 46/100
50/50 [=====] - 2s 37ms/step - loss: 0.3767 - val_loss: 0.4643
Epoch 47/100
50/50 [=====] - 2s 37ms/step - loss: 0.3738 - val_loss: 0.4536
Epoch 48/100

50/50 [=====] - 2s 39ms/step - loss: 0.3740 - val_loss: 0.4699
Epoch 49/100
50/50 [=====] - 2s 37ms/step - loss: 0.3704 - val_loss: 0.4642
Epoch 50/100
50/50 [=====] - 2s 37ms/step - loss: 0.3692 - val_loss: 0.4564
Epoch 51/100
50/50 [=====] - 2s 38ms/step - loss: 0.3650 - val_loss: 0.4524
Epoch 52/100
50/50 [=====] - 2s 38ms/step - loss: 0.3657 - val_loss: 0.4480
Epoch 53/100
50/50 [=====] - 2s 39ms/step - loss: 0.3609 - val_loss: 0.4543
Epoch 54/100
50/50 [=====] - 2s 38ms/step - loss: 0.3602 - val_loss: 0.4231
Epoch 55/100
50/50 [=====] - 2s 38ms/step - loss: 0.3555 - val_loss: 0.4328
Epoch 56/100
50/50 [=====] - 2s 38ms/step - loss: 0.3575 - val_loss: 0.4328
Epoch 57/100
50/50 [=====] - 2s 38ms/step - loss: 0.3547 - val_loss: 0.4137
Epoch 58/100
50/50 [=====] - 2s 39ms/step - loss: 0.3533 - val_loss: 0.4066
Epoch 59/100
50/50 [=====] - 2s 38ms/step - loss: 0.3480 - val_loss: 0.4015
Epoch 60/100
50/50 [=====] - 2s 38ms/step - loss: 0.3497 - val_loss: 0.3991
Epoch 61/100
50/50 [=====] - 2s 37ms/step - loss: 0.3465 - val_loss: 0.4052
Epoch 62/100
50/50 [=====] - 2s 37ms/step - loss: 0.3443 - val_loss: 0.4049
Epoch 63/100
50/50 [=====] - 2s 39ms/step - loss: 0.3478 - val_loss: 0.3940
Epoch 64/100
50/50 [=====] - 2s 38ms/step - loss: 0.3450 - val_loss: 0.3871
Epoch 65/100
50/50 [=====] - 2s 38ms/step - loss: 0.3410 - val_loss: 0.3806
Epoch 66/100
50/50 [=====] - 2s 37ms/step - loss: 0.3416 - val_loss: 0.3895
Epoch 67/100
50/50 [=====] - 2s 38ms/step - loss: 0.3412 - val_loss: 0.3920
Epoch 68/100
50/50 [=====] - 2s 38ms/step - loss: 0.3398 - val_loss: 0.3969
Epoch 69/100
50/50 [=====] - 2s 38ms/step - loss: 0.3412 - val_loss: 0.3899
Epoch 70/100
50/50 [=====] - 2s 38ms/step - loss: 0.3388 - val_loss: 0.3741
Epoch 71/100
50/50 [=====] - 2s 37ms/step - loss: 0.3396 - val_loss: 0.3977
Epoch 72/100

50/50 [=====] - 2s 38ms/step - loss: 0.3396 - val_loss: 0.3772
Epoch 73/100
50/50 [=====] - 2s 38ms/step - loss: 0.3374 - val_loss: 0.3799
Epoch 74/100
50/50 [=====] - 2s 38ms/step - loss: 0.3362 - val_loss: 0.3627
Epoch 75/100
50/50 [=====] - 2s 38ms/step - loss: 0.3403 - val_loss: 0.3695
Epoch 76/100
50/50 [=====] - 2s 37ms/step - loss: 0.3323 - val_loss: 0.3776
Epoch 77/100
50/50 [=====] - 2s 37ms/step - loss: 0.3365 - val_loss: 0.3708
Epoch 78/100
50/50 [=====] - 2s 37ms/step - loss: 0.3369 - val_loss: 0.3646
Epoch 79/100
50/50 [=====] - 2s 38ms/step - loss: 0.3336 - val_loss: 0.3732
Epoch 80/100
50/50 [=====] - 2s 38ms/step - loss: 0.3347 - val_loss: 0.3792
Epoch 81/100
50/50 [=====] - 2s 38ms/step - loss: 0.3330 - val_loss: 0.3744
Epoch 82/100
50/50 [=====] - 2s 37ms/step - loss: 0.3332 - val_loss: 0.3717
Epoch 83/100
50/50 [=====] - 2s 38ms/step - loss: 0.3361 - val_loss: 0.3712
Epoch 84/100
50/50 [=====] - 2s 39ms/step - loss: 0.3295 - val_loss: 0.3665
Epoch 85/100
50/50 [=====] - 2s 42ms/step - loss: 0.3329 - val_loss: 0.3807
Epoch 86/100
50/50 [=====] - 2s 42ms/step - loss: 0.3325 - val_loss: 0.3651
Epoch 87/100
50/50 [=====] - 2s 42ms/step - loss: 0.3327 - val_loss: 0.3604
Epoch 88/100
50/50 [=====] - 2s 38ms/step - loss: 0.3315 - val_loss: 0.3580
Epoch 89/100
50/50 [=====] - 2s 39ms/step - loss: 0.3301 - val_loss: 0.3583
Epoch 90/100
50/50 [=====] - 2s 38ms/step - loss: 0.3305 - val_loss: 0.3566
Epoch 91/100
50/50 [=====] - 2s 38ms/step - loss: 0.3290 - val_loss: 0.3718
Epoch 92/100
50/50 [=====] - 2s 37ms/step - loss: 0.3259 - val_loss: 0.3774
Epoch 93/100
50/50 [=====] - 2s 37ms/step - loss: 0.3256 - val_loss: 0.3765
Epoch 94/100
50/50 [=====] - 2s 38ms/step - loss: 0.3305 - val_loss: 0.3736
Epoch 95/100
50/50 [=====] - 2s 38ms/step - loss: 0.3246 - val_loss: 0.3607
Epoch 96/100

50/50 [=====] - 2s 37ms/step - loss: 0.3250 - val_loss: 0.3714
 Epoch 97/100
 50/50 [=====] - 2s 37ms/step - loss: 0.3264 - val_loss: 0.3633
 Epoch 98/100
 50/50 [=====] - 2s 38ms/step - loss: 0.3240 - val_loss: 0.3683
 Epoch 99/100
 50/50 [=====] - 2s 39ms/step - loss: 0.3287 - val_loss: 0.3704
 Epoch 100/100
 50/50 [=====] - 2s 37ms/step - loss: 0.3245 - val_loss: 0.3720



CA_4 - True Future: 2787
 CA_4 - Model Prediction: 2818
 CA_4 - Model Percentage Error: 1.11%

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Training Model for TX_1...

Epoch 1/100
50/50 [=====] - 2s 43ms/step - loss: 0.7130 - val_loss: 0.7163
Epoch 2/100
50/50 [=====] - 2s 38ms/step - loss: 0.7098 - val_loss: 0.7052
Epoch 3/100
50/50 [=====] - 2s 38ms/step - loss: 0.6975 - val_loss: 0.6969
Epoch 4/100
50/50 [=====] - 2s 37ms/step - loss: 0.6929 - val_loss: 0.7013
Epoch 5/100
50/50 [=====] - 2s 37ms/step - loss: 0.6851 - val_loss: 0.6900
Epoch 6/100
50/50 [=====] - 2s 37ms/step - loss: 0.6728 - val_loss: 0.6729
Epoch 7/100
50/50 [=====] - 2s 37ms/step - loss: 0.6614 - val_loss: 0.6617
Epoch 8/100
50/50 [=====] - 2s 37ms/step - loss: 0.6494 - val_loss: 0.6505
Epoch 9/100
50/50 [=====] - 2s 37ms/step - loss: 0.6356 - val_loss: 0.6532
Epoch 10/100
50/50 [=====] - 2s 37ms/step - loss: 0.6346 - val_loss: 0.6391
Epoch 11/100
50/50 [=====] - 2s 37ms/step - loss: 0.6188 - val_loss: 0.6132
Epoch 12/100
50/50 [=====] - 2s 38ms/step - loss: 0.6125 - val_loss: 0.5973
Epoch 13/100
50/50 [=====] - 2s 38ms/step - loss: 0.6003 - val_loss: 0.5790
Epoch 14/100
50/50 [=====] - 2s 38ms/step - loss: 0.5922 - val_loss: 0.5629
Epoch 15/100
50/50 [=====] - 2s 39ms/step - loss: 0.5818 - val_loss: 0.5527
Epoch 16/100
50/50 [=====] - 2s 37ms/step - loss: 0.5788 - val_loss: 0.5435
Epoch 17/100
50/50 [=====] - 2s 38ms/step - loss: 0.5690 - val_loss: 0.5212
Epoch 18/100
50/50 [=====] - 2s 38ms/step - loss: 0.5575 - val_loss: 0.5235
Epoch 19/100
50/50 [=====] - 2s 38ms/step - loss: 0.5518 - val_loss: 0.5018
Epoch 20/100
50/50 [=====] - 2s 37ms/step - loss: 0.5442 - val_loss: 0.4771
Epoch 21/100
50/50 [=====] - 2s 38ms/step - loss: 0.5362 - val_loss: 0.4747
Epoch 22/100
50/50 [=====] - 2s 38ms/step - loss: 0.5325 - val_loss: 0.4622
Epoch 23/100
50/50 [=====] - 2s 37ms/step - loss: 0.5324 - val_loss: 0.4517
Epoch 24/100
50/50 [=====] - 2s 37ms/step - loss: 0.5137 - val_loss: 0.4460

Epoch 25/100
50/50 [=====] - 2s 37ms/step - loss: 0.5139 - val_loss: 0.4417
Epoch 26/100
50/50 [=====] - 2s 38ms/step - loss: 0.5053 - val_loss: 0.4386
Epoch 27/100
50/50 [=====] - 2s 37ms/step - loss: 0.4986 - val_loss: 0.4274
Epoch 28/100
50/50 [=====] - 2s 37ms/step - loss: 0.4909 - val_loss: 0.4222
Epoch 29/100
50/50 [=====] - 2s 38ms/step - loss: 0.4790 - val_loss: 0.4196
Epoch 30/100
50/50 [=====] - 2s 37ms/step - loss: 0.4723 - val_loss: 0.4131
Epoch 31/100
50/50 [=====] - 2s 37ms/step - loss: 0.4682 - val_loss: 0.4165
Epoch 32/100
50/50 [=====] - 2s 37ms/step - loss: 0.4554 - val_loss: 0.4030
Epoch 33/100
50/50 [=====] - 2s 37ms/step - loss: 0.4446 - val_loss: 0.3779
Epoch 34/100
50/50 [=====] - 2s 37ms/step - loss: 0.4348 - val_loss: 0.3638
Epoch 35/100
50/50 [=====] - 2s 36ms/step - loss: 0.4232 - val_loss: 0.3412
Epoch 36/100
50/50 [=====] - 2s 37ms/step - loss: 0.4114 - val_loss: 0.3358
Epoch 37/100
50/50 [=====] - 2s 37ms/step - loss: 0.4063 - val_loss: 0.3261
Epoch 38/100
50/50 [=====] - 2s 38ms/step - loss: 0.4007 - val_loss: 0.3203
Epoch 39/100
50/50 [=====] - 2s 37ms/step - loss: 0.3959 - val_loss: 0.3161
Epoch 40/100
50/50 [=====] - 2s 38ms/step - loss: 0.3878 - val_loss: 0.3117
Epoch 41/100
50/50 [=====] - 2s 37ms/step - loss: 0.3837 - val_loss: 0.3196
Epoch 42/100
50/50 [=====] - 2s 38ms/step - loss: 0.3817 - val_loss: 0.3038
Epoch 43/100
50/50 [=====] - 2s 37ms/step - loss: 0.4118 - val_loss: 0.5683
Epoch 44/100
50/50 [=====] - 2s 37ms/step - loss: 0.5232 - val_loss: 0.3443
Epoch 45/100
50/50 [=====] - 2s 39ms/step - loss: 0.4011 - val_loss: 0.3039
Epoch 46/100
50/50 [=====] - 2s 38ms/step - loss: 0.3863 - val_loss: 0.2975
Epoch 47/100
50/50 [=====] - 2s 38ms/step - loss: 0.3799 - val_loss: 0.3009
Epoch 48/100
50/50 [=====] - 2s 38ms/step - loss: 0.6650 - val_loss: 0.6825

Epoch 49/100
50/50 [=====] - 2s 37ms/step - loss: 0.6589 - val_loss: 0.6673
Epoch 50/100
50/50 [=====] - 2s 38ms/step - loss: 0.6175 - val_loss: 0.5943
Epoch 51/100
50/50 [=====] - 2s 37ms/step - loss: 0.5782 - val_loss: 0.5615
Epoch 52/100
50/50 [=====] - 2s 37ms/step - loss: 0.5555 - val_loss: 0.5306
Epoch 53/100
50/50 [=====] - 2s 37ms/step - loss: 0.5331 - val_loss: 0.4987
Epoch 54/100
50/50 [=====] - 2s 37ms/step - loss: 0.5196 - val_loss: 0.4795
Epoch 55/100
50/50 [=====] - 2s 38ms/step - loss: 0.5008 - val_loss: 0.4597
Epoch 56/100
50/50 [=====] - 2s 37ms/step - loss: 0.4912 - val_loss: 0.4576
Epoch 57/100
50/50 [=====] - 2s 37ms/step - loss: 0.4743 - val_loss: 0.4317
Epoch 58/100
50/50 [=====] - 2s 37ms/step - loss: 0.4654 - val_loss: 0.4139
Epoch 59/100
50/50 [=====] - 2s 37ms/step - loss: 0.4516 - val_loss: 0.3998
Epoch 60/100
50/50 [=====] - 2s 37ms/step - loss: 0.4395 - val_loss: 0.3901
Epoch 61/100
50/50 [=====] - 2s 38ms/step - loss: 0.4364 - val_loss: 0.3756
Epoch 62/100
50/50 [=====] - 2s 37ms/step - loss: 0.4300 - val_loss: 0.3646
Epoch 63/100
50/50 [=====] - 2s 37ms/step - loss: 0.4206 - val_loss: 0.3517
Epoch 64/100
50/50 [=====] - 2s 37ms/step - loss: 0.4178 - val_loss: 0.3502
Epoch 65/100
50/50 [=====] - 2s 37ms/step - loss: 0.4091 - val_loss: 0.3421
Epoch 66/100
50/50 [=====] - 2s 38ms/step - loss: 0.4043 - val_loss: 0.3260
Epoch 67/100
50/50 [=====] - 2s 37ms/step - loss: 0.3971 - val_loss: 0.3157
Epoch 68/100
50/50 [=====] - 2s 37ms/step - loss: 0.3930 - val_loss: 0.3099
Epoch 69/100
50/50 [=====] - 2s 38ms/step - loss: 0.3912 - val_loss: 0.3058
Epoch 70/100
50/50 [=====] - 2s 38ms/step - loss: 0.3837 - val_loss: 0.2966
Epoch 71/100
50/50 [=====] - 2s 38ms/step - loss: 0.3845 - val_loss: 0.2952
Epoch 72/100
50/50 [=====] - 2s 37ms/step - loss: 0.3784 - val_loss: 0.2906

Epoch 73/100
50/50 [=====] - 2s 39ms/step - loss: 0.3747 - val_loss: 0.2854
Epoch 74/100
50/50 [=====] - 2s 42ms/step - loss: 0.3755 - val_loss: 0.2846
Epoch 75/100
50/50 [=====] - 2s 42ms/step - loss: 0.3712 - val_loss: 0.2808
Epoch 76/100
50/50 [=====] - 2s 42ms/step - loss: 0.3772 - val_loss: 0.2868
Epoch 77/100
50/50 [=====] - 2s 42ms/step - loss: 0.3708 - val_loss: 0.2932
Epoch 78/100
50/50 [=====] - 2s 41ms/step - loss: 0.3698 - val_loss: 0.2795
Epoch 79/100
50/50 [=====] - 2s 38ms/step - loss: 0.3676 - val_loss: 0.2796
Epoch 80/100
50/50 [=====] - 2s 38ms/step - loss: 0.3670 - val_loss: 0.2829
Epoch 81/100
50/50 [=====] - 2s 38ms/step - loss: 0.3611 - val_loss: 0.2785
Epoch 82/100
50/50 [=====] - 2s 37ms/step - loss: 0.3758 - val_loss: 0.7553
Epoch 83/100
50/50 [=====] - 2s 37ms/step - loss: 0.7094 - val_loss: 0.6234
Epoch 84/100
50/50 [=====] - 2s 37ms/step - loss: 0.6519 - val_loss: 0.6230
Epoch 85/100
50/50 [=====] - 2s 38ms/step - loss: 0.6393 - val_loss: 0.6149
Epoch 86/100
50/50 [=====] - 2s 38ms/step - loss: 0.6271 - val_loss: 0.6173
Epoch 87/100
50/50 [=====] - 2s 37ms/step - loss: 0.6279 - val_loss: 0.6002
Epoch 88/100
50/50 [=====] - 2s 37ms/step - loss: 0.6181 - val_loss: 0.6013
Epoch 89/100
50/50 [=====] - 2s 37ms/step - loss: 0.6196 - val_loss: 0.6100
Epoch 90/100
50/50 [=====] - 2s 37ms/step - loss: 0.6149 - val_loss: 0.5732
Epoch 91/100
50/50 [=====] - 2s 38ms/step - loss: 0.6140 - val_loss: 0.5801
Epoch 92/100
50/50 [=====] - 2s 37ms/step - loss: 0.6094 - val_loss: 0.5791
Epoch 93/100
50/50 [=====] - 2s 37ms/step - loss: 0.6048 - val_loss: 0.5675
Epoch 94/100
50/50 [=====] - 2s 37ms/step - loss: 0.5979 - val_loss: 0.5683
Epoch 95/100
50/50 [=====] - 2s 38ms/step - loss: 0.5999 - val_loss: 0.5825
Epoch 96/100
50/50 [=====] - 2s 38ms/step - loss: 0.5951 - val_loss: 0.5771

Epoch 97/100

50/50 [=====] - 2s 38ms/step - loss: 0.5919 - val_loss: 0.5617

Epoch 98/100

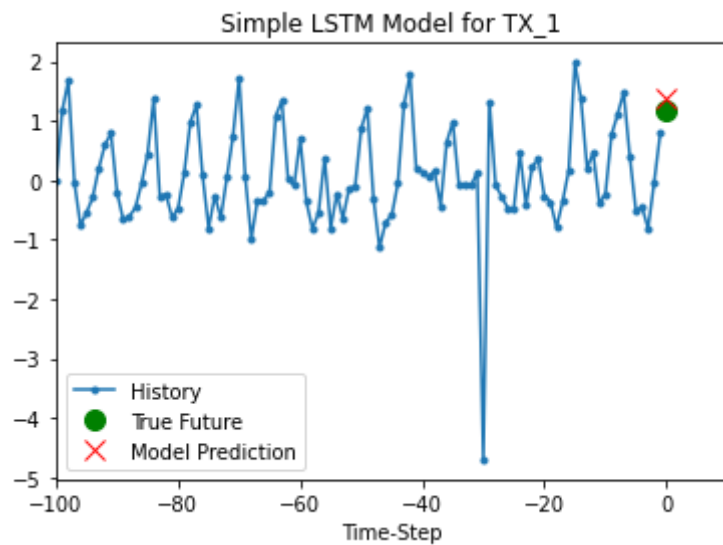
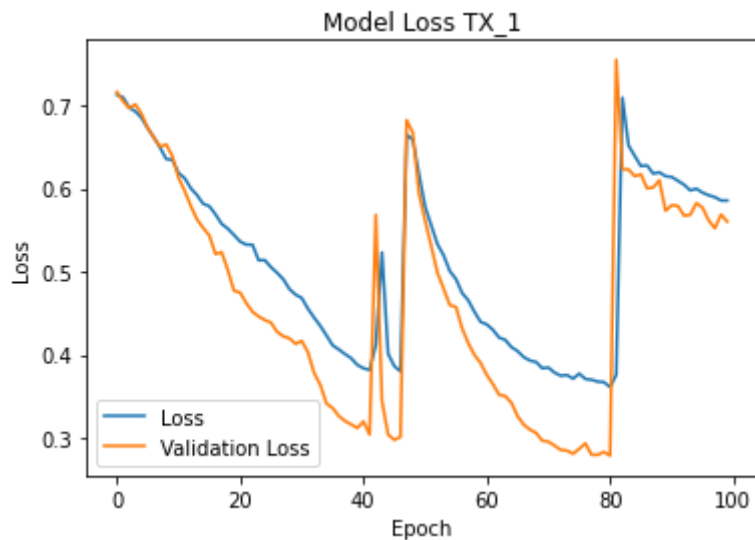
50/50 [=====] - 2s 37ms/step - loss: 0.5897 - val_loss: 0.5521

Epoch 99/100

50/50 [=====] - 2s 37ms/step - loss: 0.5856 - val_loss: 0.5688

Epoch 100/100

50/50 [=====] - 2s 37ms/step - loss: 0.5857 - val_loss: 0.5604



TX_1 - True Future: 3639

TX_1 - Model Prediction: 3768

TX_1 - Model Percentage Error: 3.54%

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Training Model for TX_2...

Epoch 1/100

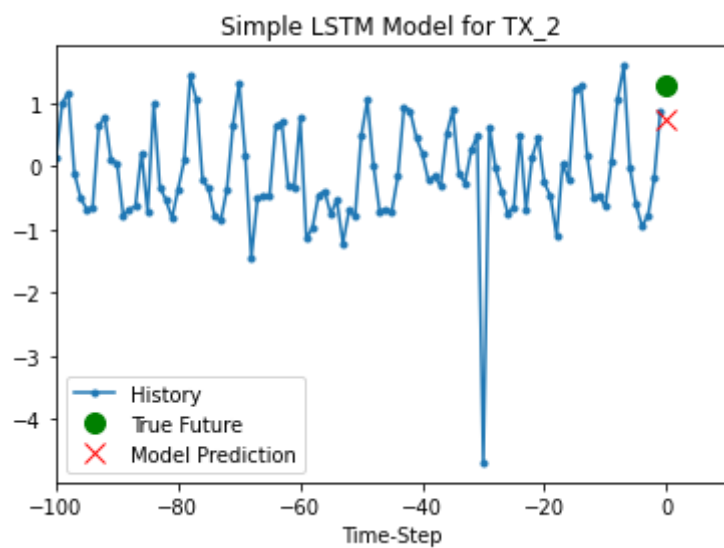
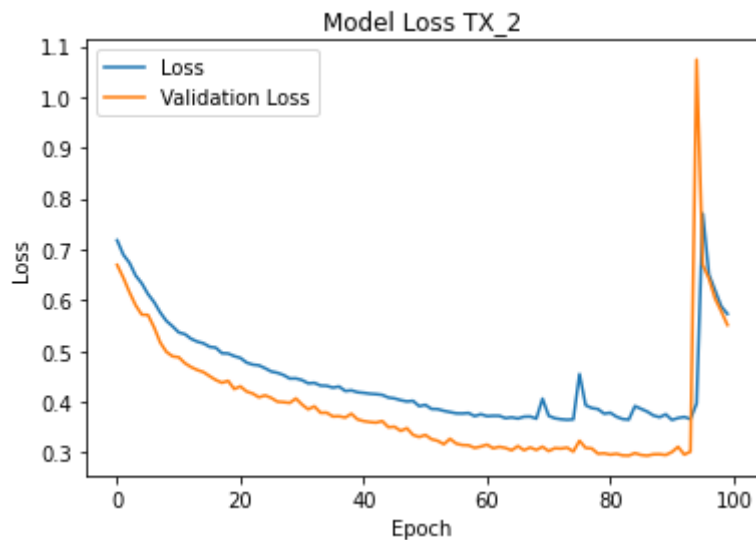
50/50 [=====] - 2s 44ms/step - loss: 0.7179 - val_loss: 0.6695
Epoch 2/100
50/50 [=====] - 2s 37ms/step - loss: 0.6896 - val_loss: 0.6442
Epoch 3/100
50/50 [=====] - 2s 38ms/step - loss: 0.6736 - val_loss: 0.6156
Epoch 4/100
50/50 [=====] - 2s 37ms/step - loss: 0.6485 - val_loss: 0.5900
Epoch 5/100
50/50 [=====] - 2s 38ms/step - loss: 0.6331 - val_loss: 0.5715
Epoch 6/100
50/50 [=====] - 2s 37ms/step - loss: 0.6121 - val_loss: 0.5711
Epoch 7/100
50/50 [=====] - 2s 37ms/step - loss: 0.5962 - val_loss: 0.5465
Epoch 8/100
50/50 [=====] - 2s 36ms/step - loss: 0.5756 - val_loss: 0.5165
Epoch 9/100
50/50 [=====] - 2s 37ms/step - loss: 0.5591 - val_loss: 0.4982
Epoch 10/100
50/50 [=====] - 2s 38ms/step - loss: 0.5486 - val_loss: 0.4895
Epoch 11/100
50/50 [=====] - 2s 37ms/step - loss: 0.5366 - val_loss: 0.4877
Epoch 12/100
50/50 [=====] - 2s 37ms/step - loss: 0.5331 - val_loss: 0.4760
Epoch 13/100
50/50 [=====] - 2s 37ms/step - loss: 0.5240 - val_loss: 0.4684
Epoch 14/100
50/50 [=====] - 2s 40ms/step - loss: 0.5185 - val_loss: 0.4627
Epoch 15/100
50/50 [=====] - 2s 42ms/step - loss: 0.5152 - val_loss: 0.4585
Epoch 16/100
50/50 [=====] - 2s 42ms/step - loss: 0.5083 - val_loss: 0.4506
Epoch 17/100
50/50 [=====] - 2s 40ms/step - loss: 0.5066 - val_loss: 0.4430
Epoch 18/100
50/50 [=====] - 2s 37ms/step - loss: 0.4957 - val_loss: 0.4376
Epoch 19/100
50/50 [=====] - 2s 37ms/step - loss: 0.4951 - val_loss: 0.4412
Epoch 20/100
50/50 [=====] - 2s 37ms/step - loss: 0.4899 - val_loss: 0.4253
Epoch 21/100
50/50 [=====] - 2s 38ms/step - loss: 0.4864 - val_loss: 0.4304
Epoch 22/100
50/50 [=====] - 2s 37ms/step - loss: 0.4772 - val_loss: 0.4204
Epoch 23/100
50/50 [=====] - 2s 37ms/step - loss: 0.4732 - val_loss: 0.4163
Epoch 24/100
50/50 [=====] - 2s 36ms/step - loss: 0.4717 - val_loss: 0.4089
Epoch 25/100

50/50 [=====] - 2s 37ms/step - loss: 0.4661 - val_loss: 0.4127
Epoch 26/100
50/50 [=====] - 2s 38ms/step - loss: 0.4597 - val_loss: 0.4078
Epoch 27/100
50/50 [=====] - 2s 37ms/step - loss: 0.4571 - val_loss: 0.4003
Epoch 28/100
50/50 [=====] - 3s 53ms/step - loss: 0.4527 - val_loss: 0.3994
Epoch 29/100
50/50 [=====] - 3s 55ms/step - loss: 0.4459 - val_loss: 0.3979
Epoch 30/100
50/50 [=====] - 3s 55ms/step - loss: 0.4461 - val_loss: 0.4066
Epoch 31/100
50/50 [=====] - 2s 43ms/step - loss: 0.4428 - val_loss: 0.3945
Epoch 32/100
50/50 [=====] - 2s 37ms/step - loss: 0.4364 - val_loss: 0.3853
Epoch 33/100
50/50 [=====] - 2s 37ms/step - loss: 0.4373 - val_loss: 0.3911
Epoch 34/100
50/50 [=====] - 2s 37ms/step - loss: 0.4320 - val_loss: 0.3784
Epoch 35/100
50/50 [=====] - 2s 39ms/step - loss: 0.4315 - val_loss: 0.3786
Epoch 36/100
50/50 [=====] - 2s 37ms/step - loss: 0.4279 - val_loss: 0.3712
Epoch 37/100
50/50 [=====] - 2s 38ms/step - loss: 0.4301 - val_loss: 0.3716
Epoch 38/100
50/50 [=====] - 2s 37ms/step - loss: 0.4213 - val_loss: 0.3691
Epoch 39/100
50/50 [=====] - 2s 37ms/step - loss: 0.4226 - val_loss: 0.3765
Epoch 40/100
50/50 [=====] - 2s 44ms/step - loss: 0.4189 - val_loss: 0.3654
Epoch 41/100
50/50 [=====] - 2s 40ms/step - loss: 0.4176 - val_loss: 0.3620
Epoch 42/100
50/50 [=====] - 2s 41ms/step - loss: 0.4160 - val_loss: 0.3602
Epoch 43/100
50/50 [=====] - 2s 37ms/step - loss: 0.4151 - val_loss: 0.3591
Epoch 44/100
50/50 [=====] - 2s 37ms/step - loss: 0.4137 - val_loss: 0.3622
Epoch 45/100
50/50 [=====] - 2s 37ms/step - loss: 0.4084 - val_loss: 0.3500
Epoch 46/100
50/50 [=====] - 2s 37ms/step - loss: 0.4068 - val_loss: 0.3510
Epoch 47/100
50/50 [=====] - 2s 37ms/step - loss: 0.4032 - val_loss: 0.3428
Epoch 48/100
50/50 [=====] - 2s 36ms/step - loss: 0.4008 - val_loss: 0.3481
Epoch 49/100

50/50 [=====] - 2s 37ms/step - loss: 0.4019 - val_loss: 0.3349
Epoch 50/100
50/50 [=====] - 2s 37ms/step - loss: 0.3914 - val_loss: 0.3308
Epoch 51/100
50/50 [=====] - 2s 38ms/step - loss: 0.3940 - val_loss: 0.3349
Epoch 52/100
50/50 [=====] - 2s 37ms/step - loss: 0.3860 - val_loss: 0.3264
Epoch 53/100
50/50 [=====] - 2s 37ms/step - loss: 0.3856 - val_loss: 0.3233
Epoch 54/100
50/50 [=====] - 2s 37ms/step - loss: 0.3822 - val_loss: 0.3166
Epoch 55/100
50/50 [=====] - 2s 37ms/step - loss: 0.3798 - val_loss: 0.3272
Epoch 56/100
50/50 [=====] - 2s 37ms/step - loss: 0.3774 - val_loss: 0.3178
Epoch 57/100
50/50 [=====] - 2s 37ms/step - loss: 0.3771 - val_loss: 0.3149
Epoch 58/100
50/50 [=====] - 2s 37ms/step - loss: 0.3780 - val_loss: 0.3145
Epoch 59/100
50/50 [=====] - 2s 37ms/step - loss: 0.3719 - val_loss: 0.3093
Epoch 60/100
50/50 [=====] - 2s 37ms/step - loss: 0.3756 - val_loss: 0.3121
Epoch 61/100
50/50 [=====] - 2s 38ms/step - loss: 0.3718 - val_loss: 0.3157
Epoch 62/100
50/50 [=====] - 2s 37ms/step - loss: 0.3725 - val_loss: 0.3086
Epoch 63/100
50/50 [=====] - 2s 37ms/step - loss: 0.3724 - val_loss: 0.3115
Epoch 64/100
50/50 [=====] - 2s 37ms/step - loss: 0.3679 - val_loss: 0.3092
Epoch 65/100
50/50 [=====] - 2s 37ms/step - loss: 0.3694 - val_loss: 0.3046
Epoch 66/100
50/50 [=====] - 2s 37ms/step - loss: 0.3672 - val_loss: 0.3129
Epoch 67/100
50/50 [=====] - 2s 38ms/step - loss: 0.3707 - val_loss: 0.3048
Epoch 68/100
50/50 [=====] - 2s 39ms/step - loss: 0.3711 - val_loss: 0.3102
Epoch 69/100
50/50 [=====] - 2s 37ms/step - loss: 0.3670 - val_loss: 0.3053
Epoch 70/100
50/50 [=====] - 2s 37ms/step - loss: 0.4062 - val_loss: 0.3116
Epoch 71/100
50/50 [=====] - 2s 37ms/step - loss: 0.3725 - val_loss: 0.3032
Epoch 72/100
50/50 [=====] - 2s 38ms/step - loss: 0.3677 - val_loss: 0.3088
Epoch 73/100

50/50 [=====] - 2s 37ms/step - loss: 0.3657 - val_loss: 0.3080
Epoch 74/100
50/50 [=====] - 2s 38ms/step - loss: 0.3647 - val_loss: 0.3098
Epoch 75/100
50/50 [=====] - 2s 37ms/step - loss: 0.3655 - val_loss: 0.3022
Epoch 76/100
50/50 [=====] - 2s 37ms/step - loss: 0.4547 - val_loss: 0.3234
Epoch 77/100
50/50 [=====] - 2s 39ms/step - loss: 0.3932 - val_loss: 0.3093
Epoch 78/100
50/50 [=====] - 2s 38ms/step - loss: 0.3878 - val_loss: 0.3083
Epoch 79/100
50/50 [=====] - 2s 38ms/step - loss: 0.3858 - val_loss: 0.2979
Epoch 80/100
50/50 [=====] - 2s 37ms/step - loss: 0.3767 - val_loss: 0.2987
Epoch 81/100
50/50 [=====] - 2s 37ms/step - loss: 0.3785 - val_loss: 0.2961
Epoch 82/100
50/50 [=====] - 2s 38ms/step - loss: 0.3707 - val_loss: 0.2977
Epoch 83/100
50/50 [=====] - 2s 37ms/step - loss: 0.3661 - val_loss: 0.2946
Epoch 84/100
50/50 [=====] - 2s 38ms/step - loss: 0.3650 - val_loss: 0.2942
Epoch 85/100
50/50 [=====] - 2s 37ms/step - loss: 0.3916 - val_loss: 0.2990
Epoch 86/100
50/50 [=====] - 2s 37ms/step - loss: 0.3861 - val_loss: 0.2954
Epoch 87/100
50/50 [=====] - 2s 38ms/step - loss: 0.3807 - val_loss: 0.2941
Epoch 88/100
50/50 [=====] - 2s 36ms/step - loss: 0.3731 - val_loss: 0.2967
Epoch 89/100
50/50 [=====] - 2s 39ms/step - loss: 0.3698 - val_loss: 0.2969
Epoch 90/100
50/50 [=====] - 2s 37ms/step - loss: 0.3754 - val_loss: 0.2954
Epoch 91/100
50/50 [=====] - 2s 37ms/step - loss: 0.3643 - val_loss: 0.3013
Epoch 92/100
50/50 [=====] - 2s 38ms/step - loss: 0.3682 - val_loss: 0.3115
Epoch 93/100
50/50 [=====] - 2s 38ms/step - loss: 0.3702 - val_loss: 0.2962
Epoch 94/100
50/50 [=====] - 2s 37ms/step - loss: 0.3662 - val_loss: 0.3020
Epoch 95/100
50/50 [=====] - 2s 38ms/step - loss: 0.3968 - val_loss: 1.0735
Epoch 96/100
50/50 [=====] - 2s 38ms/step - loss: 0.7702 - val_loss: 0.6699
Epoch 97/100

50/50 [=====] - 2s 37ms/step - loss: 0.6505 - val_loss: 0.6424
 Epoch 98/100
 50/50 [=====] - 2s 39ms/step - loss: 0.6193 - val_loss: 0.6030
 Epoch 99/100
 50/50 [=====] - 2s 37ms/step - loss: 0.5877 - val_loss: 0.5782
 Epoch 100/100
 50/50 [=====] - 2s 37ms/step - loss: 0.5731 - val_loss: 0.5512



TX_2 - True Future: 4794
 TX_2 - Model Prediction: 4359
 TX_2 - Model Percentage Error: 9.07%

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Training Model for TX_3...

Epoch 1/100
 50/50 [=====] - 2s 45ms/step - loss: 0.6476 - val_loss: 0.6730

Epoch 2/100
50/50 [=====] - 2s 37ms/step - loss: 0.6441 - val_loss: 0.6624
Epoch 3/100
50/50 [=====] - 2s 38ms/step - loss: 0.6359 - val_loss: 0.6554
Epoch 4/100
50/50 [=====] - 2s 37ms/step - loss: 0.6289 - val_loss: 0.6534
Epoch 5/100
50/50 [=====] - 2s 37ms/step - loss: 0.6211 - val_loss: 0.6313
Epoch 6/100
50/50 [=====] - 2s 37ms/step - loss: 0.6117 - val_loss: 0.6222
Epoch 7/100
50/50 [=====] - 2s 37ms/step - loss: 0.5997 - val_loss: 0.6173
Epoch 8/100
50/50 [=====] - 2s 37ms/step - loss: 0.5851 - val_loss: 0.5975
Epoch 9/100
50/50 [=====] - 2s 37ms/step - loss: 0.5739 - val_loss: 0.5975
Epoch 10/100
50/50 [=====] - 2s 37ms/step - loss: 0.5549 - val_loss: 0.5885
Epoch 11/100
50/50 [=====] - 2s 37ms/step - loss: 0.5501 - val_loss: 0.5666
Epoch 12/100
50/50 [=====] - 2s 38ms/step - loss: 0.5409 - val_loss: 0.5596
Epoch 13/100
50/50 [=====] - 2s 37ms/step - loss: 0.5314 - val_loss: 0.5348
Epoch 14/100
50/50 [=====] - 2s 38ms/step - loss: 0.5219 - val_loss: 0.5405
Epoch 15/100
50/50 [=====] - 2s 37ms/step - loss: 0.5149 - val_loss: 0.5402
Epoch 16/100
50/50 [=====] - 2s 37ms/step - loss: 0.5084 - val_loss: 0.5188
Epoch 17/100
50/50 [=====] - 2s 38ms/step - loss: 0.4979 - val_loss: 0.5321
Epoch 18/100
50/50 [=====] - 2s 37ms/step - loss: 0.4975 - val_loss: 0.5133
Epoch 19/100
50/50 [=====] - 2s 37ms/step - loss: 0.4922 - val_loss: 0.5195
Epoch 20/100
50/50 [=====] - 2s 38ms/step - loss: 0.4911 - val_loss: 0.5080
Epoch 21/100
50/50 [=====] - 2s 37ms/step - loss: 0.4880 - val_loss: 0.5082
Epoch 22/100
50/50 [=====] - 2s 37ms/step - loss: 0.4833 - val_loss: 0.5101
Epoch 23/100
50/50 [=====] - 2s 38ms/step - loss: 0.4780 - val_loss: 0.4884
Epoch 24/100
50/50 [=====] - 2s 38ms/step - loss: 0.4787 - val_loss: 0.4914
Epoch 25/100
50/50 [=====] - 2s 38ms/step - loss: 0.4724 - val_loss: 0.4898

Epoch 26/100
50/50 [=====] - 2s 38ms/step - loss: 0.4711 - val_loss: 0.4769
Epoch 27/100
50/50 [=====] - 2s 37ms/step - loss: 0.4677 - val_loss: 0.4803
Epoch 28/100
50/50 [=====] - 2s 38ms/step - loss: 0.4633 - val_loss: 0.4738
Epoch 29/100
50/50 [=====] - 2s 38ms/step - loss: 0.4614 - val_loss: 0.4735
Epoch 30/100
50/50 [=====] - 2s 39ms/step - loss: 0.4558 - val_loss: 0.4699
Epoch 31/100
50/50 [=====] - 2s 45ms/step - loss: 0.4547 - val_loss: 0.4686
Epoch 32/100
50/50 [=====] - 2s 42ms/step - loss: 0.4445 - val_loss: 0.4573
Epoch 33/100
50/50 [=====] - 2s 41ms/step - loss: 0.4452 - val_loss: 0.4668
Epoch 34/100
50/50 [=====] - 2s 41ms/step - loss: 0.4361 - val_loss: 0.4607
Epoch 35/100
50/50 [=====] - 2s 39ms/step - loss: 0.4393 - val_loss: 0.4557
Epoch 36/100
50/50 [=====] - 2s 37ms/step - loss: 0.4292 - val_loss: 0.4440
Epoch 37/100
50/50 [=====] - 2s 37ms/step - loss: 0.4280 - val_loss: 0.4408
Epoch 38/100
50/50 [=====] - 2s 37ms/step - loss: 0.4235 - val_loss: 0.4405
Epoch 39/100
50/50 [=====] - 2s 37ms/step - loss: 0.4154 - val_loss: 0.4361
Epoch 40/100
50/50 [=====] - 2s 37ms/step - loss: 0.4128 - val_loss: 0.4332
Epoch 41/100
50/50 [=====] - 2s 38ms/step - loss: 0.4066 - val_loss: 0.4293
Epoch 42/100
50/50 [=====] - 2s 37ms/step - loss: 0.4061 - val_loss: 0.4252
Epoch 43/100
50/50 [=====] - 2s 38ms/step - loss: 0.4019 - val_loss: 0.4207
Epoch 44/100
50/50 [=====] - 2s 38ms/step - loss: 0.3957 - val_loss: 0.4204
Epoch 45/100
50/50 [=====] - 2s 38ms/step - loss: 0.3940 - val_loss: 0.4238
Epoch 46/100
50/50 [=====] - 2s 38ms/step - loss: 0.3915 - val_loss: 0.4092
Epoch 47/100
50/50 [=====] - 2s 37ms/step - loss: 0.3864 - val_loss: 0.4047
Epoch 48/100
50/50 [=====] - 2s 38ms/step - loss: 0.3834 - val_loss: 0.4059
Epoch 49/100
50/50 [=====] - 2s 37ms/step - loss: 0.3825 - val_loss: 0.3974

Epoch 50/100
50/50 [=====] - 2s 37ms/step - loss: 0.3824 - val_loss: 0.3912
Epoch 51/100
50/50 [=====] - 2s 37ms/step - loss: 0.3785 - val_loss: 0.3880
Epoch 52/100
50/50 [=====] - 2s 38ms/step - loss: 0.3736 - val_loss: 0.3901
Epoch 53/100
50/50 [=====] - 2s 38ms/step - loss: 0.3744 - val_loss: 0.3856
Epoch 54/100
50/50 [=====] - 2s 37ms/step - loss: 0.3729 - val_loss: 0.3869
Epoch 55/100
50/50 [=====] - 2s 37ms/step - loss: 0.3720 - val_loss: 0.3879
Epoch 56/100
50/50 [=====] - 2s 37ms/step - loss: 0.3675 - val_loss: 0.3897
Epoch 57/100
50/50 [=====] - 2s 37ms/step - loss: 0.3679 - val_loss: 0.3869
Epoch 58/100
50/50 [=====] - 2s 37ms/step - loss: 0.3672 - val_loss: 0.3846
Epoch 59/100
50/50 [=====] - 2s 38ms/step - loss: 0.3686 - val_loss: 0.3850
Epoch 60/100
50/50 [=====] - 2s 38ms/step - loss: 0.3656 - val_loss: 0.3879
Epoch 61/100
50/50 [=====] - 2s 37ms/step - loss: 0.3668 - val_loss: 0.3987
Epoch 62/100
50/50 [=====] - 2s 38ms/step - loss: 0.3672 - val_loss: 0.3856
Epoch 63/100
50/50 [=====] - 2s 38ms/step - loss: 0.3631 - val_loss: 0.3955
Epoch 64/100
50/50 [=====] - 2s 38ms/step - loss: 0.3639 - val_loss: 0.3849
Epoch 65/100
50/50 [=====] - 2s 37ms/step - loss: 0.3642 - val_loss: 0.3869
Epoch 66/100
50/50 [=====] - 2s 37ms/step - loss: 0.3628 - val_loss: 0.3847
Epoch 67/100
50/50 [=====] - 2s 37ms/step - loss: 0.3630 - val_loss: 0.3913
Epoch 68/100
50/50 [=====] - 2s 38ms/step - loss: 0.3617 - val_loss: 0.3859
Epoch 69/100
50/50 [=====] - 2s 37ms/step - loss: 0.3614 - val_loss: 0.3846
Epoch 70/100
50/50 [=====] - 2s 36ms/step - loss: 0.3642 - val_loss: 0.3887
Epoch 71/100
50/50 [=====] - 2s 37ms/step - loss: 0.3600 - val_loss: 0.3889
Epoch 72/100
50/50 [=====] - 2s 37ms/step - loss: 0.3597 - val_loss: 0.3925
Epoch 73/100
50/50 [=====] - 2s 38ms/step - loss: 0.3590 - val_loss: 0.4056

Epoch 74/100
50/50 [=====] - 2s 38ms/step - loss: 0.3593 - val_loss: 0.3956
Epoch 75/100
50/50 [=====] - 2s 36ms/step - loss: 0.3589 - val_loss: 0.4131
Epoch 76/100
50/50 [=====] - 2s 36ms/step - loss: 0.3671 - val_loss: 0.3830
Epoch 77/100
50/50 [=====] - 2s 37ms/step - loss: 0.3649 - val_loss: 0.3786
Epoch 78/100
50/50 [=====] - 2s 38ms/step - loss: 0.3600 - val_loss: 0.4030
Epoch 79/100
50/50 [=====] - 2s 38ms/step - loss: 0.3599 - val_loss: 0.3813
Epoch 80/100
50/50 [=====] - 2s 37ms/step - loss: 0.3607 - val_loss: 0.4735
Epoch 81/100
50/50 [=====] - 2s 37ms/step - loss: 0.3730 - val_loss: 0.3928
Epoch 82/100
50/50 [=====] - 2s 36ms/step - loss: 0.3664 - val_loss: 0.3770
Epoch 83/100
50/50 [=====] - 2s 36ms/step - loss: 0.3583 - val_loss: 0.4044
Epoch 84/100
50/50 [=====] - 2s 37ms/step - loss: 0.3593 - val_loss: 0.3804
Epoch 85/100
50/50 [=====] - 2s 38ms/step - loss: 0.3593 - val_loss: 0.3944
Epoch 86/100
50/50 [=====] - 2s 37ms/step - loss: 0.3624 - val_loss: 0.3791
Epoch 87/100
50/50 [=====] - 2s 37ms/step - loss: 0.3555 - val_loss: 0.3964
Epoch 88/100
50/50 [=====] - 2s 37ms/step - loss: 0.5767 - val_loss: 0.6331
Epoch 89/100
50/50 [=====] - 2s 37ms/step - loss: 0.6389 - val_loss: 0.5798
Epoch 90/100
50/50 [=====] - 2s 39ms/step - loss: 0.6011 - val_loss: 0.5880
Epoch 91/100
50/50 [=====] - 2s 37ms/step - loss: 0.5868 - val_loss: 0.5628
Epoch 92/100
50/50 [=====] - 2s 37ms/step - loss: 0.5662 - val_loss: 0.5823
Epoch 93/100
50/50 [=====] - 2s 38ms/step - loss: 0.5465 - val_loss: 0.5998
Epoch 94/100
50/50 [=====] - 2s 37ms/step - loss: 0.5361 - val_loss: 0.5948
Epoch 95/100
50/50 [=====] - 2s 38ms/step - loss: 0.5273 - val_loss: 0.5926
Epoch 96/100
50/50 [=====] - 2s 37ms/step - loss: 0.5175 - val_loss: 0.5772
Epoch 97/100
50/50 [=====] - 2s 38ms/step - loss: 0.5063 - val_loss: 0.5805

Epoch 98/100

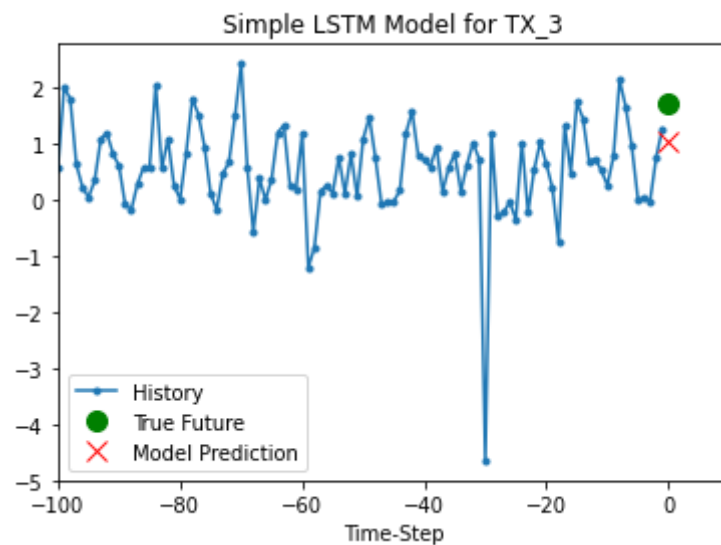
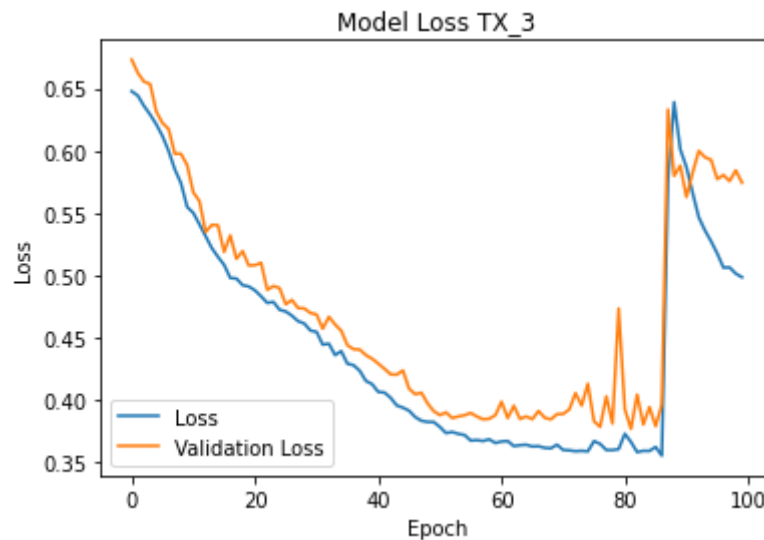
50/50 [=====] - 2s 37ms/step - loss: 0.5064 - val_loss: 0.5756

Epoch 99/100

50/50 [=====] - 2s 41ms/step - loss: 0.5015 - val_loss: 0.5842

Epoch 100/100

50/50 [=====] - 2s 43ms/step - loss: 0.4985 - val_loss: 0.5744



TX_3 - True Future: 4286

TX_3 - Model Prediction: 3841

TX_3 - Model Percentage Error: 10.38%

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Training Model for WI_1...

Epoch 1/100

50/50 [=====] - 2s 43ms/step - loss: 0.5615 - val_loss: 0.8435

Epoch 2/100

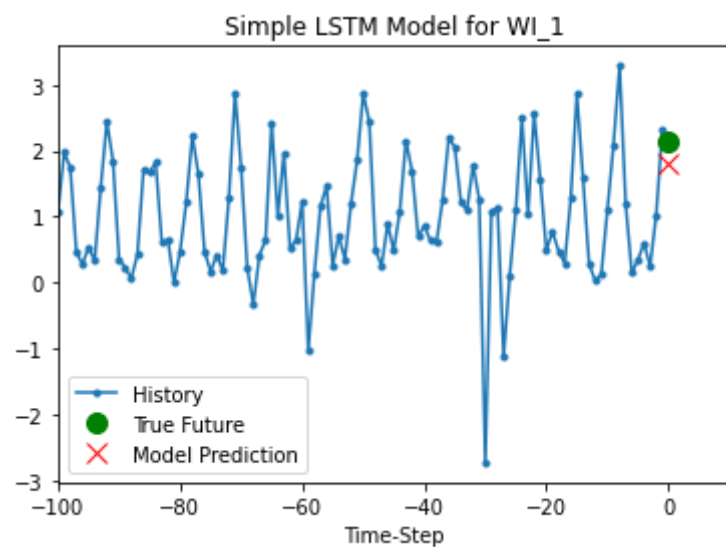
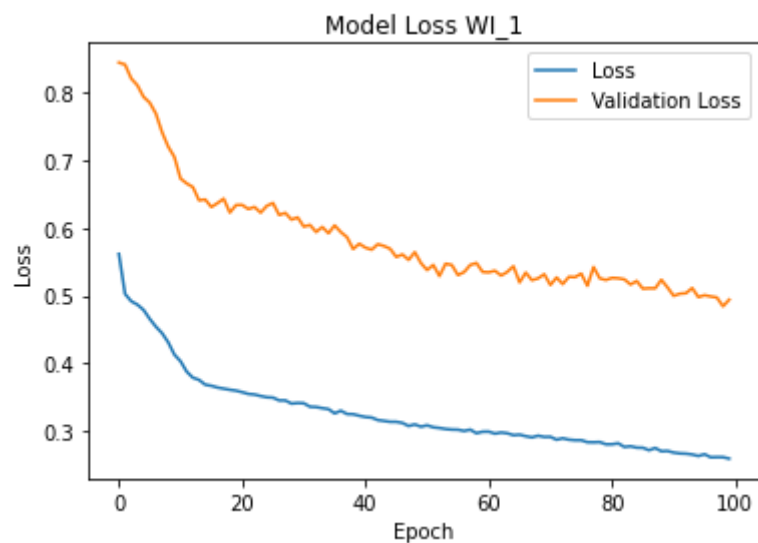
50/50 [=====] - 2s 37ms/step - loss: 0.5026 - val_loss: 0.8406
Epoch 3/100
50/50 [=====] - 2s 38ms/step - loss: 0.4918 - val_loss: 0.8201
Epoch 4/100
50/50 [=====] - 2s 39ms/step - loss: 0.4868 - val_loss: 0.8101
Epoch 5/100
50/50 [=====] - 2s 38ms/step - loss: 0.4791 - val_loss: 0.7930
Epoch 6/100
50/50 [=====] - 2s 37ms/step - loss: 0.4658 - val_loss: 0.7845
Epoch 7/100
50/50 [=====] - 2s 37ms/step - loss: 0.4544 - val_loss: 0.7684
Epoch 8/100
50/50 [=====] - 2s 37ms/step - loss: 0.4448 - val_loss: 0.7410
Epoch 9/100
50/50 [=====] - 2s 39ms/step - loss: 0.4314 - val_loss: 0.7197
Epoch 10/100
50/50 [=====] - 2s 37ms/step - loss: 0.4132 - val_loss: 0.7045
Epoch 11/100
50/50 [=====] - 2s 38ms/step - loss: 0.4034 - val_loss: 0.6726
Epoch 12/100
50/50 [=====] - 2s 38ms/step - loss: 0.3881 - val_loss: 0.6654
Epoch 13/100
50/50 [=====] - 2s 37ms/step - loss: 0.3792 - val_loss: 0.6601
Epoch 14/100
50/50 [=====] - 2s 38ms/step - loss: 0.3759 - val_loss: 0.6406
Epoch 15/100
50/50 [=====] - 2s 38ms/step - loss: 0.3689 - val_loss: 0.6418
Epoch 16/100
50/50 [=====] - 2s 37ms/step - loss: 0.3672 - val_loss: 0.6307
Epoch 17/100
50/50 [=====] - 2s 37ms/step - loss: 0.3646 - val_loss: 0.6364
Epoch 18/100
50/50 [=====] - 2s 37ms/step - loss: 0.3630 - val_loss: 0.6430
Epoch 19/100
50/50 [=====] - 2s 38ms/step - loss: 0.3613 - val_loss: 0.6225
Epoch 20/100
50/50 [=====] - 2s 38ms/step - loss: 0.3600 - val_loss: 0.6336
Epoch 21/100
50/50 [=====] - 2s 38ms/step - loss: 0.3578 - val_loss: 0.6338
Epoch 22/100
50/50 [=====] - 2s 37ms/step - loss: 0.3552 - val_loss: 0.6277
Epoch 23/100
50/50 [=====] - 2s 38ms/step - loss: 0.3543 - val_loss: 0.6307
Epoch 24/100
50/50 [=====] - 2s 38ms/step - loss: 0.3521 - val_loss: 0.6224
Epoch 25/100
50/50 [=====] - 2s 38ms/step - loss: 0.3503 - val_loss: 0.6324
Epoch 26/100

50/50 [=====] - 2s 38ms/step - loss: 0.3498 - val_loss: 0.6366
Epoch 27/100
50/50 [=====] - 2s 37ms/step - loss: 0.3456 - val_loss: 0.6189
Epoch 28/100
50/50 [=====] - 2s 37ms/step - loss: 0.3456 - val_loss: 0.6220
Epoch 29/100
50/50 [=====] - 2s 37ms/step - loss: 0.3410 - val_loss: 0.6122
Epoch 30/100
50/50 [=====] - 2s 38ms/step - loss: 0.3419 - val_loss: 0.6154
Epoch 31/100
50/50 [=====] - 2s 37ms/step - loss: 0.3415 - val_loss: 0.6018
Epoch 32/100
50/50 [=====] - 2s 37ms/step - loss: 0.3363 - val_loss: 0.6042
Epoch 33/100
50/50 [=====] - 2s 37ms/step - loss: 0.3359 - val_loss: 0.5939
Epoch 34/100
50/50 [=====] - 2s 37ms/step - loss: 0.3342 - val_loss: 0.6012
Epoch 35/100
50/50 [=====] - 2s 39ms/step - loss: 0.3329 - val_loss: 0.5920
Epoch 36/100
50/50 [=====] - 2s 37ms/step - loss: 0.3265 - val_loss: 0.6036
Epoch 37/100
50/50 [=====] - 2s 38ms/step - loss: 0.3305 - val_loss: 0.5937
Epoch 38/100
50/50 [=====] - 2s 38ms/step - loss: 0.3256 - val_loss: 0.5863
Epoch 39/100
50/50 [=====] - 2s 37ms/step - loss: 0.3253 - val_loss: 0.5688
Epoch 40/100
50/50 [=====] - 2s 38ms/step - loss: 0.3230 - val_loss: 0.5765
Epoch 41/100
50/50 [=====] - 2s 37ms/step - loss: 0.3212 - val_loss: 0.5708
Epoch 42/100
50/50 [=====] - 2s 38ms/step - loss: 0.3204 - val_loss: 0.5678
Epoch 43/100
50/50 [=====] - 2s 37ms/step - loss: 0.3167 - val_loss: 0.5759
Epoch 44/100
50/50 [=====] - 2s 37ms/step - loss: 0.3154 - val_loss: 0.5732
Epoch 45/100
50/50 [=====] - 2s 38ms/step - loss: 0.3142 - val_loss: 0.5691
Epoch 46/100
50/50 [=====] - 2s 37ms/step - loss: 0.3141 - val_loss: 0.5571
Epoch 47/100
50/50 [=====] - 2s 38ms/step - loss: 0.3125 - val_loss: 0.5608
Epoch 48/100
50/50 [=====] - 2s 37ms/step - loss: 0.3080 - val_loss: 0.5528
Epoch 49/100
50/50 [=====] - 2s 38ms/step - loss: 0.3103 - val_loss: 0.5642
Epoch 50/100

50/50 [=====] - 2s 37ms/step - loss: 0.3069 - val_loss: 0.5481
Epoch 51/100
50/50 [=====] - 2s 38ms/step - loss: 0.3090 - val_loss: 0.5378
Epoch 52/100
50/50 [=====] - 2s 38ms/step - loss: 0.3060 - val_loss: 0.5454
Epoch 53/100
50/50 [=====] - 2s 37ms/step - loss: 0.3050 - val_loss: 0.5290
Epoch 54/100
50/50 [=====] - 2s 37ms/step - loss: 0.3035 - val_loss: 0.5471
Epoch 55/100
50/50 [=====] - 2s 38ms/step - loss: 0.3027 - val_loss: 0.5454
Epoch 56/100
50/50 [=====] - 2s 38ms/step - loss: 0.3025 - val_loss: 0.5304
Epoch 57/100
50/50 [=====] - 2s 37ms/step - loss: 0.3006 - val_loss: 0.5348
Epoch 58/100
50/50 [=====] - 2s 38ms/step - loss: 0.3026 - val_loss: 0.5453
Epoch 59/100
50/50 [=====] - 2s 37ms/step - loss: 0.2973 - val_loss: 0.5481
Epoch 60/100
50/50 [=====] - 2s 37ms/step - loss: 0.2995 - val_loss: 0.5350
Epoch 61/100
50/50 [=====] - 2s 38ms/step - loss: 0.2997 - val_loss: 0.5345
Epoch 62/100
50/50 [=====] - 2s 37ms/step - loss: 0.2967 - val_loss: 0.5368
Epoch 63/100
50/50 [=====] - 2s 37ms/step - loss: 0.2983 - val_loss: 0.5297
Epoch 64/100
50/50 [=====] - 2s 38ms/step - loss: 0.2973 - val_loss: 0.5350
Epoch 65/100
50/50 [=====] - 2s 37ms/step - loss: 0.2944 - val_loss: 0.5434
Epoch 66/100
50/50 [=====] - 2s 38ms/step - loss: 0.2952 - val_loss: 0.5196
Epoch 67/100
50/50 [=====] - 2s 36ms/step - loss: 0.2929 - val_loss: 0.5341
Epoch 68/100
50/50 [=====] - 2s 38ms/step - loss: 0.2912 - val_loss: 0.5229
Epoch 69/100
50/50 [=====] - 2s 37ms/step - loss: 0.2936 - val_loss: 0.5255
Epoch 70/100
50/50 [=====] - 2s 38ms/step - loss: 0.2918 - val_loss: 0.5316
Epoch 71/100
50/50 [=====] - 2s 38ms/step - loss: 0.2920 - val_loss: 0.5158
Epoch 72/100
50/50 [=====] - 2s 37ms/step - loss: 0.2878 - val_loss: 0.5268
Epoch 73/100
50/50 [=====] - 2s 37ms/step - loss: 0.2898 - val_loss: 0.5172
Epoch 74/100

50/50 [=====] - 2s 37ms/step - loss: 0.2878 - val_loss: 0.5278
Epoch 75/100
50/50 [=====] - 2s 38ms/step - loss: 0.2870 - val_loss: 0.5273
Epoch 76/100
50/50 [=====] - 2s 38ms/step - loss: 0.2870 - val_loss: 0.5325
Epoch 77/100
50/50 [=====] - 2s 38ms/step - loss: 0.2841 - val_loss: 0.5146
Epoch 78/100
50/50 [=====] - 2s 37ms/step - loss: 0.2839 - val_loss: 0.5422
Epoch 79/100
50/50 [=====] - 2s 38ms/step - loss: 0.2843 - val_loss: 0.5256
Epoch 80/100
50/50 [=====] - 2s 37ms/step - loss: 0.2810 - val_loss: 0.5232
Epoch 81/100
50/50 [=====] - 2s 37ms/step - loss: 0.2810 - val_loss: 0.5262
Epoch 82/100
50/50 [=====] - 2s 38ms/step - loss: 0.2824 - val_loss: 0.5256
Epoch 83/100
50/50 [=====] - 2s 38ms/step - loss: 0.2770 - val_loss: 0.5241
Epoch 84/100
50/50 [=====] - 2s 38ms/step - loss: 0.2781 - val_loss: 0.5165
Epoch 85/100
50/50 [=====] - 2s 38ms/step - loss: 0.2761 - val_loss: 0.5217
Epoch 86/100
50/50 [=====] - 2s 38ms/step - loss: 0.2759 - val_loss: 0.5104
Epoch 87/100
50/50 [=====] - 2s 39ms/step - loss: 0.2722 - val_loss: 0.5110
Epoch 88/100
50/50 [=====] - 2s 37ms/step - loss: 0.2755 - val_loss: 0.5109
Epoch 89/100
50/50 [=====] - 2s 37ms/step - loss: 0.2707 - val_loss: 0.5234
Epoch 90/100
50/50 [=====] - 2s 38ms/step - loss: 0.2712 - val_loss: 0.5121
Epoch 91/100
50/50 [=====] - 2s 40ms/step - loss: 0.2687 - val_loss: 0.4997
Epoch 92/100
50/50 [=====] - 2s 41ms/step - loss: 0.2675 - val_loss: 0.5029
Epoch 93/100
50/50 [=====] - 2s 39ms/step - loss: 0.2671 - val_loss: 0.5037
Epoch 94/100
50/50 [=====] - 2s 40ms/step - loss: 0.2660 - val_loss: 0.5112
Epoch 95/100
50/50 [=====] - 2s 41ms/step - loss: 0.2638 - val_loss: 0.4979
Epoch 96/100
50/50 [=====] - 2s 39ms/step - loss: 0.2663 - val_loss: 0.5007
Epoch 97/100
50/50 [=====] - 2s 39ms/step - loss: 0.2618 - val_loss: 0.4988
Epoch 98/100

50/50 [=====] - 2s 37ms/step - loss: 0.2621 - val_loss: 0.4974
 Epoch 99/100
 50/50 [=====] - 2s 38ms/step - loss: 0.2620 - val_loss: 0.4844
 Epoch 100/100
 50/50 [=====] - 2s 38ms/step - loss: 0.2598 - val_loss: 0.4941



WI_1 - True Future: 4600
 WI_1 - Model Prediction: 4275
 WI_1 - Model Percentage Error: 7.07%

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Training Model for WI_2...

Epoch 1/100
 50/50 [=====] - 2s 45ms/step - loss: 0.5552 - val_loss: 0.7214
 Epoch 2/100
 50/50 [=====] - 2s 36ms/step - loss: 0.4091 - val_loss: 0.7282

Epoch 3/100
50/50 [=====] - 2s 37ms/step - loss: 0.3986 - val_loss: 0.7261
Epoch 4/100
50/50 [=====] - 2s 37ms/step - loss: 0.3937 - val_loss: 0.6895
Epoch 5/100
50/50 [=====] - 2s 37ms/step - loss: 0.3908 - val_loss: 0.6987
Epoch 6/100
50/50 [=====] - 2s 37ms/step - loss: 0.3855 - val_loss: 0.6998
Epoch 7/100
50/50 [=====] - 2s 37ms/step - loss: 0.3852 - val_loss: 0.6887
Epoch 8/100
50/50 [=====] - 2s 37ms/step - loss: 0.3826 - val_loss: 0.6928
Epoch 9/100
50/50 [=====] - 2s 37ms/step - loss: 0.3832 - val_loss: 0.6777
Epoch 10/100
50/50 [=====] - 2s 38ms/step - loss: 0.3854 - val_loss: 0.6814
Epoch 11/100
50/50 [=====] - 2s 37ms/step - loss: 0.3789 - val_loss: 0.6795
Epoch 12/100
50/50 [=====] - 2s 37ms/step - loss: 0.3809 - val_loss: 0.6785
Epoch 13/100
50/50 [=====] - 2s 37ms/step - loss: 0.3798 - val_loss: 0.6813
Epoch 14/100
50/50 [=====] - 2s 37ms/step - loss: 0.3796 - val_loss: 0.6711
Epoch 15/100
50/50 [=====] - 2s 38ms/step - loss: 0.3796 - val_loss: 0.6654
Epoch 16/100
50/50 [=====] - 2s 37ms/step - loss: 0.3766 - val_loss: 0.6661
Epoch 17/100
50/50 [=====] - 2s 37ms/step - loss: 0.3779 - val_loss: 0.6691
Epoch 18/100
50/50 [=====] - 2s 37ms/step - loss: 0.3769 - val_loss: 0.6804
Epoch 19/100
50/50 [=====] - 2s 36ms/step - loss: 0.3752 - val_loss: 0.6792
Epoch 20/100
50/50 [=====] - 2s 38ms/step - loss: 0.3760 - val_loss: 0.6708
Epoch 21/100
50/50 [=====] - 2s 37ms/step - loss: 0.3736 - val_loss: 0.6869
Epoch 22/100
50/50 [=====] - 2s 38ms/step - loss: 0.3716 - val_loss: 0.6891
Epoch 23/100
50/50 [=====] - 2s 37ms/step - loss: 0.3701 - val_loss: 0.6889
Epoch 24/100
50/50 [=====] - 2s 37ms/step - loss: 0.3711 - val_loss: 0.6889
Epoch 25/100
50/50 [=====] - 2s 37ms/step - loss: 0.3657 - val_loss: 0.6980
Epoch 26/100
50/50 [=====] - 2s 38ms/step - loss: 0.3652 - val_loss: 0.7063

Epoch 27/100
50/50 [=====] - 2s 38ms/step - loss: 0.3622 - val_loss: 0.7054
Epoch 28/100
50/50 [=====] - 2s 37ms/step - loss: 0.3600 - val_loss: 0.7447
Epoch 29/100
50/50 [=====] - 2s 37ms/step - loss: 0.3586 - val_loss: 0.7333
Epoch 30/100
50/50 [=====] - 2s 37ms/step - loss: 0.3558 - val_loss: 0.7697
Epoch 31/100
50/50 [=====] - 2s 38ms/step - loss: 0.3532 - val_loss: 0.7795
Epoch 32/100
50/50 [=====] - 2s 38ms/step - loss: 0.3486 - val_loss: 0.7568
Epoch 33/100
50/50 [=====] - 2s 37ms/step - loss: 0.3487 - val_loss: 0.7593
Epoch 34/100
50/50 [=====] - 2s 39ms/step - loss: 0.3432 - val_loss: 0.7419
Epoch 35/100
50/50 [=====] - 2s 37ms/step - loss: 0.3453 - val_loss: 0.7331
Epoch 36/100
50/50 [=====] - 2s 37ms/step - loss: 0.3426 - val_loss: 0.6994
Epoch 37/100
50/50 [=====] - 2s 37ms/step - loss: 0.3412 - val_loss: 0.7162
Epoch 38/100
50/50 [=====] - 2s 38ms/step - loss: 0.3360 - val_loss: 0.7285
Epoch 39/100
50/50 [=====] - 2s 43ms/step - loss: 0.3394 - val_loss: 0.6787
Epoch 40/100
50/50 [=====] - 3s 54ms/step - loss: 0.3341 - val_loss: 0.6963
Epoch 41/100
50/50 [=====] - 3s 56ms/step - loss: 0.3355 - val_loss: 0.7067
Epoch 42/100
50/50 [=====] - 2s 42ms/step - loss: 0.3313 - val_loss: 0.7207
Epoch 43/100
50/50 [=====] - 2s 38ms/step - loss: 0.3325 - val_loss: 0.7027
Epoch 44/100
50/50 [=====] - 2s 38ms/step - loss: 0.3295 - val_loss: 0.6994
Epoch 45/100
50/50 [=====] - 2s 38ms/step - loss: 0.3333 - val_loss: 0.7334
Epoch 46/100
50/50 [=====] - 2s 38ms/step - loss: 0.3295 - val_loss: 0.7207
Epoch 47/100
50/50 [=====] - 2s 38ms/step - loss: 0.3305 - val_loss: 0.7040
Epoch 48/100
50/50 [=====] - 2s 37ms/step - loss: 0.3278 - val_loss: 0.7080
Epoch 49/100
50/50 [=====] - 2s 38ms/step - loss: 0.3480 - val_loss: 0.7190
Epoch 50/100
50/50 [=====] - 2s 37ms/step - loss: 0.3401 - val_loss: 0.8000

Epoch 51/100
50/50 [=====] - 2s 38ms/step - loss: 0.3392 - val_loss: 0.6122
Epoch 52/100
50/50 [=====] - 2s 38ms/step - loss: 0.3369 - val_loss: 0.7539
Epoch 53/100
50/50 [=====] - 2s 37ms/step - loss: 0.3302 - val_loss: 0.6777
Epoch 54/100
50/50 [=====] - 2s 40ms/step - loss: 0.3270 - val_loss: 0.6683
Epoch 55/100
50/50 [=====] - 2s 41ms/step - loss: 0.3249 - val_loss: 0.7103
Epoch 56/100
50/50 [=====] - 2s 43ms/step - loss: 0.3244 - val_loss: 0.7163
Epoch 57/100
50/50 [=====] - 2s 42ms/step - loss: 0.3246 - val_loss: 0.7551
Epoch 58/100
50/50 [=====] - 2s 37ms/step - loss: 0.3235 - val_loss: 0.7230
Epoch 59/100
50/50 [=====] - 2s 37ms/step - loss: 0.3227 - val_loss: 0.7501
Epoch 60/100
50/50 [=====] - 2s 37ms/step - loss: 0.3211 - val_loss: 0.7357
Epoch 61/100
50/50 [=====] - 2s 37ms/step - loss: 0.3186 - val_loss: 0.7684
Epoch 62/100
50/50 [=====] - 2s 38ms/step - loss: 0.3189 - val_loss: 0.7182
Epoch 63/100
50/50 [=====] - 2s 37ms/step - loss: 0.3210 - val_loss: 0.7769
Epoch 64/100
50/50 [=====] - 2s 37ms/step - loss: 0.3173 - val_loss: 0.8202
Epoch 65/100
50/50 [=====] - 2s 37ms/step - loss: 0.3188 - val_loss: 0.9353
Epoch 66/100
50/50 [=====] - 2s 38ms/step - loss: 0.3188 - val_loss: 0.8988
Epoch 67/100
50/50 [=====] - 2s 38ms/step - loss: 0.3147 - val_loss: 0.8740
Epoch 68/100
50/50 [=====] - 2s 37ms/step - loss: 0.3162 - val_loss: 0.8410
Epoch 69/100
50/50 [=====] - 2s 37ms/step - loss: 0.3156 - val_loss: 0.8467
Epoch 70/100
50/50 [=====] - 2s 37ms/step - loss: 0.3143 - val_loss: 0.8329
Epoch 71/100
50/50 [=====] - 2s 38ms/step - loss: 0.3146 - val_loss: 0.8929
Epoch 72/100
50/50 [=====] - 2s 37ms/step - loss: 0.3126 - val_loss: 0.8206
Epoch 73/100
50/50 [=====] - 2s 38ms/step - loss: 0.3117 - val_loss: 0.8850
Epoch 74/100
50/50 [=====] - 2s 38ms/step - loss: 0.3097 - val_loss: 0.9197

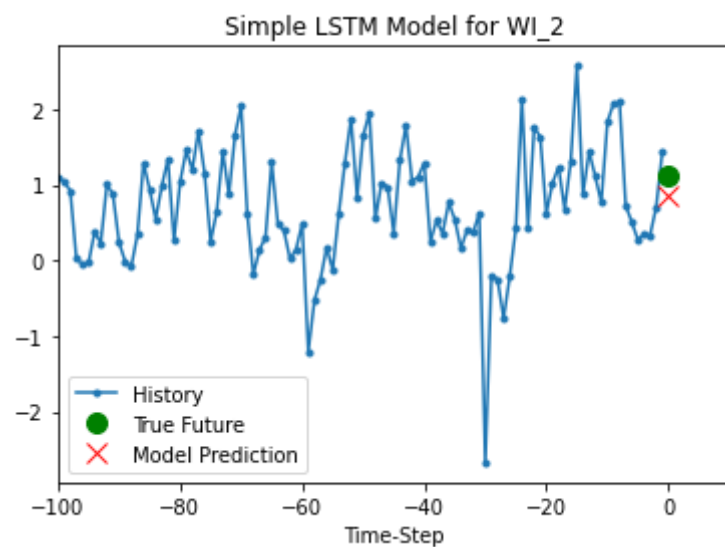
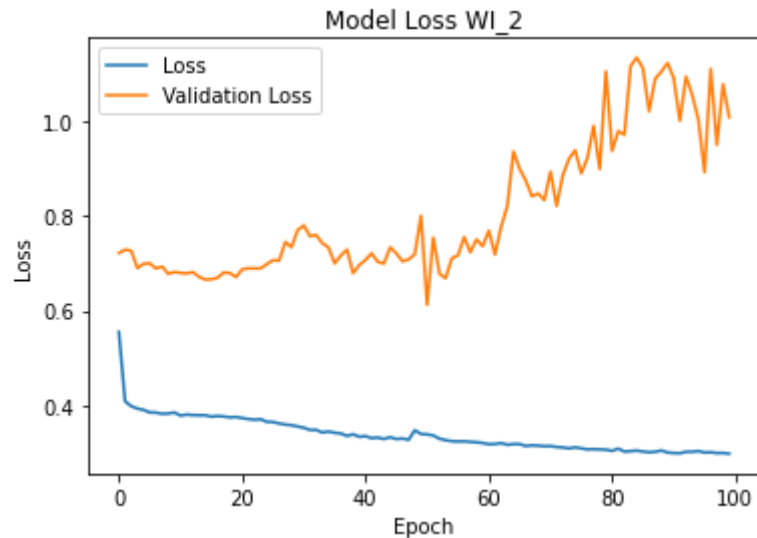
Epoch 75/100
50/50 [=====] - 2s 37ms/step - loss: 0.3119 - val_loss: 0.9378
Epoch 76/100
50/50 [=====] - 2s 37ms/step - loss: 0.3098 - val_loss: 0.8893
Epoch 77/100
50/50 [=====] - 2s 37ms/step - loss: 0.3076 - val_loss: 0.9216
Epoch 78/100
50/50 [=====] - 2s 38ms/step - loss: 0.3082 - val_loss: 0.9893
Epoch 79/100
50/50 [=====] - 2s 36ms/step - loss: 0.3076 - val_loss: 0.8980
Epoch 80/100
50/50 [=====] - 2s 37ms/step - loss: 0.3070 - val_loss: 1.1042
Epoch 81/100
50/50 [=====] - 2s 37ms/step - loss: 0.3045 - val_loss: 0.9363
Epoch 82/100
50/50 [=====] - 2s 37ms/step - loss: 0.3092 - val_loss: 0.9783
Epoch 83/100
50/50 [=====] - 2s 39ms/step - loss: 0.3030 - val_loss: 0.9705
Epoch 84/100
50/50 [=====] - 2s 37ms/step - loss: 0.3039 - val_loss: 1.1153
Epoch 85/100
50/50 [=====] - 2s 37ms/step - loss: 0.3052 - val_loss: 1.1331
Epoch 86/100
50/50 [=====] - 2s 37ms/step - loss: 0.3031 - val_loss: 1.1109
Epoch 87/100
50/50 [=====] - 2s 37ms/step - loss: 0.3016 - val_loss: 1.0200
Epoch 88/100
50/50 [=====] - 2s 38ms/step - loss: 0.3025 - val_loss: 1.0887
Epoch 89/100
50/50 [=====] - 2s 37ms/step - loss: 0.3053 - val_loss: 1.1036
Epoch 90/100
50/50 [=====] - 2s 37ms/step - loss: 0.3011 - val_loss: 1.1217
Epoch 91/100
50/50 [=====] - 2s 37ms/step - loss: 0.3000 - val_loss: 1.0898
Epoch 92/100
50/50 [=====] - 2s 37ms/step - loss: 0.2995 - val_loss: 0.9997
Epoch 93/100
50/50 [=====] - 2s 38ms/step - loss: 0.3026 - val_loss: 1.0929
Epoch 94/100
50/50 [=====] - 2s 38ms/step - loss: 0.3025 - val_loss: 1.0545
Epoch 95/100
50/50 [=====] - 2s 37ms/step - loss: 0.3042 - val_loss: 1.0024
Epoch 96/100
50/50 [=====] - 2s 37ms/step - loss: 0.3010 - val_loss: 0.8917
Epoch 97/100
50/50 [=====] - 2s 37ms/step - loss: 0.3015 - val_loss: 1.1092
Epoch 98/100
50/50 [=====] - 2s 38ms/step - loss: 0.2999 - val_loss: 0.9492

Epoch 99/100

50/50 [=====] - 2s 39ms/step - loss: 0.3001 - val_loss: 1.0769

Epoch 100/100

50/50 [=====] - 2s 37ms/step - loss: 0.2986 - val_loss: 1.0075



WI_2 - True Future: 4670

WI_2 - Model Prediction: 4326

WI_2 - Model Percentage Error: 7.37%

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Training Model for WI_3...

Epoch 1/100

50/50 [=====] - 2s 44ms/step - loss: 0.6763 - val_loss: 0.8232

Epoch 2/100

50/50 [=====] - 2s 38ms/step - loss: 0.6728 - val_loss: 0.8135

Epoch 3/100

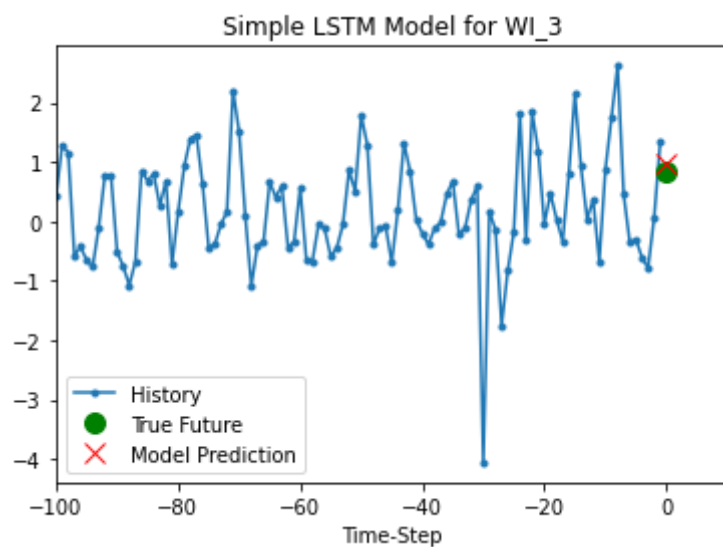
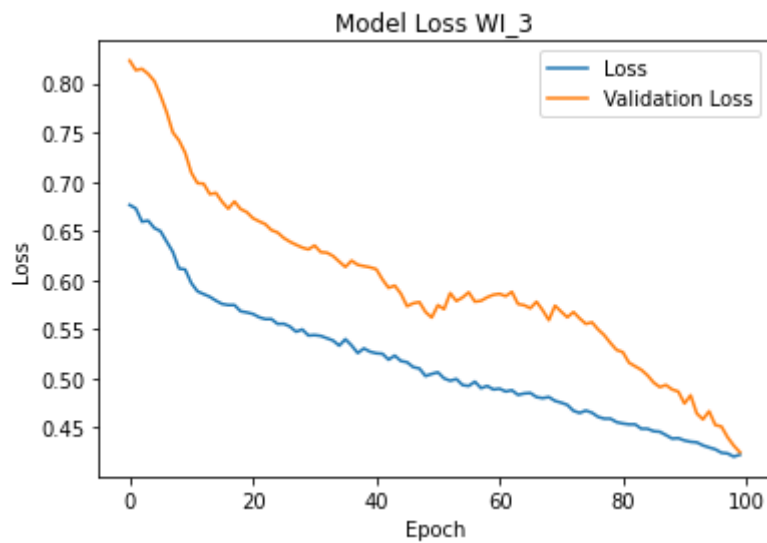
50/50 [=====] - 2s 38ms/step - loss: 0.6593 - val_loss: 0.8148
Epoch 4/100
50/50 [=====] - 2s 38ms/step - loss: 0.6604 - val_loss: 0.8097
Epoch 5/100
50/50 [=====] - 2s 38ms/step - loss: 0.6529 - val_loss: 0.8025
Epoch 6/100
50/50 [=====] - 2s 38ms/step - loss: 0.6497 - val_loss: 0.7878
Epoch 7/100
50/50 [=====] - 2s 38ms/step - loss: 0.6390 - val_loss: 0.7708
Epoch 8/100
50/50 [=====] - 2s 38ms/step - loss: 0.6286 - val_loss: 0.7502
Epoch 9/100
50/50 [=====] - 2s 38ms/step - loss: 0.6117 - val_loss: 0.7420
Epoch 10/100
50/50 [=====] - 2s 38ms/step - loss: 0.6107 - val_loss: 0.7295
Epoch 11/100
50/50 [=====] - 2s 38ms/step - loss: 0.5969 - val_loss: 0.7092
Epoch 12/100
50/50 [=====] - 2s 38ms/step - loss: 0.5885 - val_loss: 0.6985
Epoch 13/100
50/50 [=====] - 2s 37ms/step - loss: 0.5857 - val_loss: 0.6979
Epoch 14/100
50/50 [=====] - 2s 37ms/step - loss: 0.5829 - val_loss: 0.6874
Epoch 15/100
50/50 [=====] - 2s 37ms/step - loss: 0.5790 - val_loss: 0.6885
Epoch 16/100
50/50 [=====] - 2s 38ms/step - loss: 0.5756 - val_loss: 0.6795
Epoch 17/100
50/50 [=====] - 2s 37ms/step - loss: 0.5745 - val_loss: 0.6725
Epoch 18/100
50/50 [=====] - 2s 38ms/step - loss: 0.5745 - val_loss: 0.6798
Epoch 19/100
50/50 [=====] - 2s 38ms/step - loss: 0.5682 - val_loss: 0.6722
Epoch 20/100
50/50 [=====] - 2s 38ms/step - loss: 0.5670 - val_loss: 0.6690
Epoch 21/100
50/50 [=====] - 2s 37ms/step - loss: 0.5655 - val_loss: 0.6629
Epoch 22/100
50/50 [=====] - 2s 37ms/step - loss: 0.5621 - val_loss: 0.6597
Epoch 23/100
50/50 [=====] - 2s 38ms/step - loss: 0.5602 - val_loss: 0.6568
Epoch 24/100
50/50 [=====] - 2s 38ms/step - loss: 0.5603 - val_loss: 0.6508
Epoch 25/100
50/50 [=====] - 2s 38ms/step - loss: 0.5553 - val_loss: 0.6483
Epoch 26/100
50/50 [=====] - 2s 37ms/step - loss: 0.5555 - val_loss: 0.6428
Epoch 27/100

50/50 [=====] - 2s 37ms/step - loss: 0.5527 - val_loss: 0.6389
Epoch 28/100
50/50 [=====] - 2s 38ms/step - loss: 0.5474 - val_loss: 0.6358
Epoch 29/100
50/50 [=====] - 2s 37ms/step - loss: 0.5497 - val_loss: 0.6330
Epoch 30/100
50/50 [=====] - 2s 38ms/step - loss: 0.5435 - val_loss: 0.6311
Epoch 31/100
50/50 [=====] - 2s 38ms/step - loss: 0.5440 - val_loss: 0.6351
Epoch 32/100
50/50 [=====] - 2s 38ms/step - loss: 0.5431 - val_loss: 0.6283
Epoch 33/100
50/50 [=====] - 2s 38ms/step - loss: 0.5408 - val_loss: 0.6278
Epoch 34/100
50/50 [=====] - 2s 38ms/step - loss: 0.5384 - val_loss: 0.6244
Epoch 35/100
50/50 [=====] - 2s 39ms/step - loss: 0.5332 - val_loss: 0.6187
Epoch 36/100
50/50 [=====] - 2s 38ms/step - loss: 0.5398 - val_loss: 0.6133
Epoch 37/100
50/50 [=====] - 2s 38ms/step - loss: 0.5335 - val_loss: 0.6197
Epoch 38/100
50/50 [=====] - 2s 38ms/step - loss: 0.5257 - val_loss: 0.6155
Epoch 39/100
50/50 [=====] - 2s 38ms/step - loss: 0.5304 - val_loss: 0.6141
Epoch 40/100
50/50 [=====] - 2s 37ms/step - loss: 0.5271 - val_loss: 0.6129
Epoch 41/100
50/50 [=====] - 2s 38ms/step - loss: 0.5255 - val_loss: 0.6111
Epoch 42/100
50/50 [=====] - 2s 37ms/step - loss: 0.5250 - val_loss: 0.6007
Epoch 43/100
50/50 [=====] - 2s 38ms/step - loss: 0.5190 - val_loss: 0.5920
Epoch 44/100
50/50 [=====] - 2s 39ms/step - loss: 0.5231 - val_loss: 0.5943
Epoch 45/100
50/50 [=====] - 2s 38ms/step - loss: 0.5177 - val_loss: 0.5861
Epoch 46/100
50/50 [=====] - 2s 38ms/step - loss: 0.5164 - val_loss: 0.5733
Epoch 47/100
50/50 [=====] - 2s 38ms/step - loss: 0.5114 - val_loss: 0.5763
Epoch 48/100
50/50 [=====] - 2s 38ms/step - loss: 0.5100 - val_loss: 0.5776
Epoch 49/100
50/50 [=====] - 2s 42ms/step - loss: 0.5023 - val_loss: 0.5674
Epoch 50/100
50/50 [=====] - 2s 39ms/step - loss: 0.5044 - val_loss: 0.5618
Epoch 51/100

50/50 [=====] - 2s 40ms/step - loss: 0.5062 - val_loss: 0.5744
Epoch 52/100
50/50 [=====] - 2s 40ms/step - loss: 0.5000 - val_loss: 0.5704
Epoch 53/100
50/50 [=====] - 2s 41ms/step - loss: 0.4975 - val_loss: 0.5867
Epoch 54/100
50/50 [=====] - 2s 39ms/step - loss: 0.4993 - val_loss: 0.5786
Epoch 55/100
50/50 [=====] - 2s 37ms/step - loss: 0.4932 - val_loss: 0.5822
Epoch 56/100
50/50 [=====] - 2s 38ms/step - loss: 0.4922 - val_loss: 0.5875
Epoch 57/100
50/50 [=====] - 2s 37ms/step - loss: 0.4966 - val_loss: 0.5780
Epoch 58/100
50/50 [=====] - 2s 38ms/step - loss: 0.4900 - val_loss: 0.5789
Epoch 59/100
50/50 [=====] - 2s 39ms/step - loss: 0.4922 - val_loss: 0.5824
Epoch 60/100
50/50 [=====] - 2s 38ms/step - loss: 0.4887 - val_loss: 0.5850
Epoch 61/100
50/50 [=====] - 2s 38ms/step - loss: 0.4895 - val_loss: 0.5860
Epoch 62/100
50/50 [=====] - 2s 38ms/step - loss: 0.4866 - val_loss: 0.5836
Epoch 63/100
50/50 [=====] - 2s 38ms/step - loss: 0.4879 - val_loss: 0.5880
Epoch 64/100
50/50 [=====] - 2s 39ms/step - loss: 0.4831 - val_loss: 0.5756
Epoch 65/100
50/50 [=====] - 2s 38ms/step - loss: 0.4846 - val_loss: 0.5744
Epoch 66/100
50/50 [=====] - 2s 38ms/step - loss: 0.4851 - val_loss: 0.5713
Epoch 67/100
50/50 [=====] - 2s 38ms/step - loss: 0.4809 - val_loss: 0.5779
Epoch 68/100
50/50 [=====] - 2s 38ms/step - loss: 0.4798 - val_loss: 0.5693
Epoch 69/100
50/50 [=====] - 2s 39ms/step - loss: 0.4810 - val_loss: 0.5592
Epoch 70/100
50/50 [=====] - 2s 38ms/step - loss: 0.4770 - val_loss: 0.5739
Epoch 71/100
50/50 [=====] - 2s 38ms/step - loss: 0.4752 - val_loss: 0.5678
Epoch 72/100
50/50 [=====] - 2s 38ms/step - loss: 0.4730 - val_loss: 0.5621
Epoch 73/100
50/50 [=====] - 2s 38ms/step - loss: 0.4670 - val_loss: 0.5674
Epoch 74/100
50/50 [=====] - 2s 39ms/step - loss: 0.4648 - val_loss: 0.5609
Epoch 75/100

50/50 [=====] - 2s 37ms/step - loss: 0.4672 - val_loss: 0.5554
Epoch 76/100
50/50 [=====] - 2s 38ms/step - loss: 0.4650 - val_loss: 0.5569
Epoch 77/100
50/50 [=====] - 2s 38ms/step - loss: 0.4608 - val_loss: 0.5497
Epoch 78/100
50/50 [=====] - 2s 38ms/step - loss: 0.4590 - val_loss: 0.5438
Epoch 79/100
50/50 [=====] - 2s 38ms/step - loss: 0.4590 - val_loss: 0.5359
Epoch 80/100
50/50 [=====] - 2s 38ms/step - loss: 0.4554 - val_loss: 0.5288
Epoch 81/100
50/50 [=====] - 2s 38ms/step - loss: 0.4541 - val_loss: 0.5266
Epoch 82/100
50/50 [=====] - 2s 38ms/step - loss: 0.4531 - val_loss: 0.5159
Epoch 83/100
50/50 [=====] - 2s 38ms/step - loss: 0.4531 - val_loss: 0.5122
Epoch 84/100
50/50 [=====] - 2s 40ms/step - loss: 0.4487 - val_loss: 0.5086
Epoch 85/100
50/50 [=====] - 2s 39ms/step - loss: 0.4487 - val_loss: 0.5031
Epoch 86/100
50/50 [=====] - 2s 38ms/step - loss: 0.4462 - val_loss: 0.4957
Epoch 87/100
50/50 [=====] - 2s 37ms/step - loss: 0.4457 - val_loss: 0.4911
Epoch 88/100
50/50 [=====] - 2s 38ms/step - loss: 0.4422 - val_loss: 0.4932
Epoch 89/100
50/50 [=====] - 2s 38ms/step - loss: 0.4387 - val_loss: 0.4887
Epoch 90/100
50/50 [=====] - 2s 39ms/step - loss: 0.4391 - val_loss: 0.4866
Epoch 91/100
50/50 [=====] - 2s 37ms/step - loss: 0.4368 - val_loss: 0.4744
Epoch 92/100
50/50 [=====] - 2s 38ms/step - loss: 0.4354 - val_loss: 0.4827
Epoch 93/100
50/50 [=====] - 2s 38ms/step - loss: 0.4349 - val_loss: 0.4642
Epoch 94/100
50/50 [=====] - 2s 38ms/step - loss: 0.4318 - val_loss: 0.4582
Epoch 95/100
50/50 [=====] - 2s 40ms/step - loss: 0.4297 - val_loss: 0.4665
Epoch 96/100
50/50 [=====] - 2s 38ms/step - loss: 0.4278 - val_loss: 0.4525
Epoch 97/100
50/50 [=====] - 2s 38ms/step - loss: 0.4243 - val_loss: 0.4510
Epoch 98/100
50/50 [=====] - 2s 39ms/step - loss: 0.4236 - val_loss: 0.4400
Epoch 99/100

50/50 [=====] - 2s 38ms/step - loss: 0.4203 - val_loss: 0.4316
Epoch 100/100
50/50 [=====] - 2s 39ms/step - loss: 0.4224 - val_loss: 0.4247



WI_3 - True Future: 3998
WI_3 - Model Prediction: 4124
WI_3 - Model Percentage Error: 3.15%

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