



SPY	SPY	SPY	SPY	S
25-08-06 19:12:53.164511	2025-08-06 19:12:53.164816	2025-08-06 19:12:53.165077	2025-08-06 19:12:53.167899	2025-08-06 19
627.98	627.825	627.8	627.6305	624.
1	1	1	1	
25-08-06 19:12:53.164685	2025-08-06 19:12:53.164879	2025-08-06 19:12:53.167741	2025-08-06 19:12:53.168069	2025-08-06 19
627.941	627.78	624.2876	627.6263	62
0.03899999999998727	-0.045000000000007276	-3.512399999999957	-0.004199999999968895	3.3623999

- ['SPY', '2025-08-06 19:12:52.907439', 621.03, 1, '2025-08-06 19:12:52.909916', 622.075, 1.04500000000000728] - ['SPY', '2025-08-06 19:12:52.910085', 621.9318, 1, '2025-08-06 19:12:52.911372', 582.2624, -39.669399999999996] - ['SPY', '2025-08-06 19:12:52.911737', 621.48, 1, '2025-08-06 19:12:52.914220', 622.5, 1.01999999999999818] - ['SPY', '2025-08-06 19:12:52.924061', 626.82, 1, '2025-08-06 19:12:52.924100', 626.63, -0.190000000000005457] - ['SPY', '2025-08-06 19:12:52.924984', 626.24, 1, '2025-08-06 19:12:52.925019', 626.17, -0.070000000000005002] - ['SPY', '2025-08-06 19:12:52.926445', 626.17, 1, '2025-08-06 19:12:52.926679', 626.0, -0.16999999999995907] - ['SPY', '2025-08-06 19:12:52.926937', 626.65, 1, '2025-08-06 19:12:52.926972', 626.64, -0.009999999999990905] - ['SPY', '2025-08-06 19:12:52.927991', 626.81, 1, '2025-08-06 19:12:52.928026', 626.78, -0.029999999999972715] - ['SPY', '2025-08-06 19:12:52.928129', 626.75, 1, '2025-08-06 19:12:52.928162', 626.72, -0.029999999999972715] - ['SPY', '2025-08-06 19:12:52.928731', 625.9, 1,

'2025-08-06 19:12:52.929069', 627.18, 1.2799999999999727] - ['SPY', '2025-08-06  
19:12:52.929881', 630.87, 1, '2025-08-06 19:12:52.929913', 630.855,  
-0.014999999999986358] - ['SPY', '2025-08-06 19:12:52.930014', 630.64, 1,  
'2025-08-06 19:12:52.930368', 630.5304, -0.10960000000000036] - ['SPY',  
'2025-08-06 19:12:52.931349', 630.55, 1, '2025-08-06 19:12:52.931380', 630.4115,  
-0.13849999999990814] - ['SPY', '2025-08-06 19:12:52.931683', 631.07, 1,  
'2025-08-06 19:12:52.932556', 630.97, -0.10000000000002274] - ['SPY',  
'2025-08-06 19:12:52.933129', 631.92, 1, '2025-08-06 19:12:52.933162', 631.8987,  
-0.02129999999996544] - ['SPY', '2025-08-06 19:12:52.933698', 631.9, 1,  
'2025-08-06 19:12:52.933731', 631.9, 0.0] - ['SPY', '2025-08-06 19:12:52.934055',  
631.85, 1, '2025-08-06 19:12:52.934253', 631.79, -0.06000000000005912] - ['SPY',  
'2025-08-06 19:12:52.934540', 631.55, 1, '2025-08-06 19:12:52.934571', 631.4172,  
-0.13279999999997472] - ['SPY', '2025-08-06 19:12:52.934705', 631.12, 1,  
'2025-08-06 19:12:52.934853', 630.87, -0.25] - ['SPY', '2025-08-06  
19:12:52.935029', 631.66, 1, '2025-08-06 19:12:52.935061', 631.61,  
-0.049999999999954525] - ['SPY', '2025-08-06 19:12:52.935301', 631.75, 1,  
'2025-08-06 19:12:52.935331', 631.54, -0.21000000000003638] - ['SPY',  
'2025-08-06 19:12:52.945115', 634.46, 1, '2025-08-06 19:12:52.945159', 639.83,  
5.3700000000000045] - ['SPY', '2025-08-06 19:12:52.945738', 640.0, 1, '2025-08-06  
19:12:52.945778', 639.9, -0.10000000000002274] - ['SPY', '2025-08-06  
19:12:52.946447', 639.96, 1, '2025-08-06 19:12:52.950041', 641.04,  
1.0799999999999272] - ['SPY', '2025-08-06 19:12:52.950273', 640.94, 1,  
'2025-08-06 19:12:52.951390', 640.9, -0.04000000000007731] - ['SPY', '2025-08-06  
19:12:52.951508', 634.46, 1, '2025-08-06 19:12:52.951547', 638.88,  
4.419999999999959] - ['SPY', '2025-08-06 19:12:52.952413', 639.02, 1, '2025-08-06  
19:12:52.952696', 639.02, 0.0] - ['SPY', '2025-08-06 19:12:52.952962', 638.895, 1,  
'2025-08-06 19:12:52.952995', 638.8804, -0.014599999999973079] - ['SPY',  
'2025-08-06 19:12:52.953321', 638.73, 1, '2025-08-06 19:12:52.953487', 638.69,  
-0.03999999999996362] - ['SPY', '2025-08-06 19:12:52.953609', 634.46, 1,  
'2025-08-06 19:12:52.953693', 638.385, 3.9249999999999545] - ['SPY', '2025-08-06  
19:12:52.954308', 638.26, 1, '2025-08-06 19:12:52.954341', 638.1,  
-0.15999999999996817] - ['SPY', '2025-08-06 19:12:52.954394', 634.27, 1,  
'2025-08-06 19:12:52.954432', 637.79, 3.519999999999982] - ['SPY', '2025-08-06  
19:12:52.954713', 637.76, 1, '2025-08-06 19:12:52.954744', 637.7,  
-0.05999999999994543] - ['SPY', '2025-08-06 19:12:52.955332', 637.2, 1,  
'2025-08-06 19:12:52.955739', 637.15, -0.05000000000006821] - ['SPY',  
'2025-08-06 19:12:52.956700', 635.0602, 1, '2025-08-06 19:12:52.956739', 637.37,  
2.3097999999999956] - ['SPY', '2025-08-06 19:12:52.956777', 634.2573, 1,  
'2025-08-06 19:12:52.956874', 636.9987, 2.7413999999999987] - ['SPY',  
'2025-08-06 19:12:52.957067', 634.08, 1, '2025-08-06 19:12:52.957100', 633.96,  
-0.12000000000000455] - ['SPY', '2025-08-06 19:12:52.960084', 636.34, 1,  
'2025-08-06 19:12:52.960117', 636.3001, -0.03989999999998872] - ['SPY',  
'2025-08-06 19:12:52.965807', 635.63, 1, '2025-08-06 19:12:52.966560', 635.5,  
-0.12999999999999545] - ['SPY', '2025-08-06 19:12:52.967125', 635.51, 1,  
'2025-08-06 19:12:52.967325', 635.26, -0.25] - ['SPY', '2025-08-06

19:12:52.967482', 636.18, 1, '2025-08-06 19:12:52.967514', 636.17,  
-0.009999999999999905] - ['SPY', '2025-08-06 19:12:52.967670', 636.25, 1,  
'2025-08-06 19:12:52.967732', 636.12, -0.12999999999999545] - ['SPY',  
'2025-08-06 19:12:52.968515', 636.13, 1, '2025-08-06 19:12:52.968641', 636.12,  
-0.009999999999999905] - ['SPY', '2025-08-06 19:12:52.968980', 636.05, 1,  
'2025-08-06 19:12:52.969012', 636.05, 0.0] - ['SPY', '2025-08-06 19:12:52.969508',  
636.03, 1, '2025-08-06 19:12:52.969626', 636.02, -0.009999999999999905] - ['SPY',  
'2025-08-06 19:12:52.969824', 635.88, 1, '2025-08-06 19:12:52.970208', 635.76,  
-0.120000000000000455] - ['SPY', '2025-08-06 19:12:52.970302', 635.61, 1,  
'2025-08-06 19:12:52.970451', 635.61, 0.0] - ['SPY', '2025-08-06 19:12:52.970750',  
635.79, 1, '2025-08-06 19:12:52.970813', 635.79, 0.0] - ['SPY', '2025-08-06  
19:12:52.971512', 635.68, 1, '2025-08-06 19:12:52.971824', 635.6,  
-0.079999999999992724] - ['SPY', '2025-08-06 19:12:52.972048', 635.55, 1,  
'2025-08-06 19:12:52.972924', 635.52, -0.0299999999999972715] - ['SPY',  
'2025-08-06 19:12:52.972961', 635.26, 1, '2025-08-06 19:12:52.975190', 635.23,  
-0.0299999999999972715] - ['SPY', '2025-08-06 19:12:52.975226', 635.22, 1,  
'2025-08-06 19:12:52.975329', 635.2, -0.019999999999998181] - ['SPY', '2025-08-06  
19:12:52.975507', 635.2307, 1, '2025-08-06 19:12:52.975539', 635.1738,  
-0.0568999999999927786] - ['SPY', '2025-08-06 19:12:52.975683', 635.225, 1,  
'2025-08-06 19:12:52.975716', 635.2, -0.024999999999997263] - ['SPY',  
'2025-08-06 19:12:52.975855', 635.26, 1, '2025-08-06 19:12:52.975887', 635.17,  
-0.0900000000000003183] - ['SPY', '2025-08-06 19:12:52.976046', 635.2, 1,  
'2025-08-06 19:12:52.976276', 635.06, -0.140000000000010004] - ['SPY',  
'2025-08-06 19:12:52.976368', 635.055, 1, '2025-08-06 19:12:52.976399', 635.05,  
-0.0049999999999954525] - ['SPY', '2025-08-06 19:12:52.976718', 634.96, 1,  
'2025-08-06 19:12:52.977110', 634.95, -0.009999999999999905] - ['SPY',  
'2025-08-06 19:12:52.977458', 634.99, 1, '2025-08-06 19:12:52.977488', 634.97,  
-0.019999999999998181] - ['SPY', '2025-08-06 19:12:52.977562', 634.95, 1,  
'2025-08-06 19:12:52.977648', 634.95, 0.0] - ['SPY', '2025-08-06 19:12:52.978010',  
634.885, 1, '2025-08-06 19:12:52.979485', 634.86, -0.024999999999997263] -  
['SPY', '2025-08-06 19:12:52.989049', 638.51, 1, '2025-08-06 19:12:52.989281',  
636.94, -1.56999999999999363] - ['SPY', '2025-08-06 19:12:52.989765', 638.2, 1,  
'2025-08-06 19:12:52.995921', 637.55, -0.65000000000000091] - ['SPY', '2025-08-06  
19:12:52.995960', 636.94, 1, '2025-08-06 19:12:52.998546', 636.94, 0.0] - ['SPY',  
'2025-08-06 19:12:52.999716', 636.99, 1, '2025-08-06 19:12:52.999751', 636.96,  
-0.0299999999999972715] - ['SPY', '2025-08-06 19:12:53.000013', 636.96, 1,  
'2025-08-06 19:12:53.000161', 636.95, -0.009999999999999905] - ['SPY',  
'2025-08-06 19:12:53.000448', 636.89, 1, '2025-08-06 19:12:53.001840', 636.89,  
0.0] - ['SPY', '2025-08-06 19:12:53.001966', 636.88, 1, '2025-08-06  
19:12:53.002178', 636.8279, -0.052099999999995816] - ['SPY', '2025-08-06  
19:12:53.002253', 636.79, 1, '2025-08-06 19:12:53.002285', 636.695,  
-0.09499999999999136] - ['SPY', '2025-08-06 19:12:53.012097', 637.1, 1,  
'2025-08-06 19:12:53.012138', 638.231, 1.13099999999999718] - ['SPY', '2025-08-06  
19:12:53.014261', 638.68, 1, '2025-08-06 19:12:53.014316', 638.66,  
-0.019999999999998181] - ['SPY', '2025-08-06 19:12:53.014473', 638.73, 1,

'2025-08-06 19:12:53.014586', 638.69, -0.039999999999996362] - ['SPY',  
'2025-08-06 19:12:53.015341', 638.73, 1, '2025-08-06 19:12:53.017817', 637.1,  
-1.6299999999999955] - ['SPY', '2025-08-06 19:12:53.018311', 637.35, 1,  
'2025-08-06 19:12:53.018397', 637.31, -0.040000000000007731] - ['SPY',  
'2025-08-06 19:12:53.018652', 637.3112, 1, '2025-08-06 19:12:53.018684', 637.3,  
-0.011200000000030741] - ['SPY', '2025-08-06 19:12:53.018898', 637.32, 1,  
'2025-08-06 19:12:53.018930', 637.27, -0.050000000000006821] - ['SPY',  
'2025-08-06 19:12:53.019092', 637.27, 1, '2025-08-06 19:12:53.019384', 637.26,  
-0.009999999999990905] - ['SPY', '2025-08-06 19:12:53.019633', 637.2501, 1,  
'2025-08-06 19:12:53.019696', 637.25, -9.999999997489795e-05] - ['SPY',  
'2025-08-06 19:12:53.019864', 637.1, 1, '2025-08-06 19:12:53.020983', 637.06,  
-0.040000000000007731] - ['SPY', '2025-08-06 19:12:53.021382', 637.17, 1,  
'2025-08-06 19:12:53.021508', 637.11, -0.059999999999994543] - ['SPY',  
'2025-08-06 19:12:53.021777', 637.14, 1, '2025-08-06 19:12:53.021808', 637.08,  
-0.059999999999994543] - ['SPY', '2025-08-06 19:12:53.022076', 637.1, 1,  
'2025-08-06 19:12:53.022108', 637.1, 0.0] - ['SPY', '2025-08-06 19:12:53.022141',  
620.8003, 1, '2025-08-06 19:12:53.022176', 637.16, 16.359699999999975] - ['SPY',  
'2025-08-06 19:12:53.022208', 637.145, 1, '2025-08-06 19:12:53.022239', 637.1,  
-0.044999999999995907] - ['SPY', '2025-08-06 19:12:53.023069', 634.3101, 1,  
'2025-08-06 19:12:53.023106', 637.01, 2.6998999999999957] - ['SPY', '2025-08-06  
19:12:53.023220', 636.6, 1, '2025-08-06 19:12:53.023254', 634.3101,  
-2.28989999999999887] - ['SPY', '2025-08-06 19:12:53.023498', 634.3101, 1,  
'2025-08-06 19:12:53.023535', 636.7, 2.38990000000000115] - ['SPY', '2025-08-06  
19:12:53.027199', 636.76, 1, '2025-08-06 19:12:53.027266', 636.715,  
-0.044999999999995907] - ['SPY', '2025-08-06 19:12:53.027678', 636.65, 1,  
'2025-08-06 19:12:53.027711', 636.6, -0.0499999999999954525] - ['SPY',  
'2025-08-06 19:12:53.028940', 635.64, 1, '2025-08-06 19:12:53.030879', 635.5899,  
-0.050100000000004311] - ['SPY', '2025-08-06 19:12:53.035341', 635.4, 1,  
'2025-08-06 19:12:53.035923', 635.4, 0.0] - ['SPY', '2025-08-06 19:12:53.036311',  
635.12, 1, '2025-08-06 19:12:53.037764', 635.12, 0.0] - ['SPY', '2025-08-06  
19:12:53.038491', 635.33, 1, '2025-08-06 19:12:53.038523', 635.33, 0.0] - ['SPY',  
'2025-08-06 19:12:53.038840', 635.27, 1, '2025-08-06 19:12:53.038872', 635.2,  
-0.069999999999993634] - ['SPY', '2025-08-06 19:12:53.039101', 634.91, 1,  
'2025-08-06 19:12:53.039164', 634.78, -0.12999999999999545] - ['SPY',  
'2025-08-06 19:12:53.039566', 634.95, 1, '2025-08-06 19:12:53.039719', 634.42,  
-0.53000000000000864] - ['SPY', '2025-08-06 19:12:53.039897', 635.35, 1,  
'2025-08-06 19:12:53.040096', 635.33, -0.019999999999998181] - ['SPY',  
'2025-08-06 19:12:53.040277', 635.18, 1, '2025-08-06 19:12:53.040308', 635.14,  
-0.039999999999996362] - ['SPY', '2025-08-06 19:12:53.040423', 635.05, 1,  
'2025-08-06 19:12:53.042163', 634.42, -0.6299999999999955] - ['SPY', '2025-08-06  
19:12:53.042281', 635.4, 1, '2025-08-06 19:12:53.042313', 635.38,  
-0.019999999999998181] - ['SPY', '2025-08-06 19:12:53.042581', 635.2601, 1,  
'2025-08-06 19:12:53.042613', 635.2397, -0.02039999999999509] - ['SPY',  
'2025-08-06 19:12:53.043073', 634.92, 1, '2025-08-06 19:12:53.043105', 634.92,  
0.0] - ['SPY', '2025-08-06 19:12:53.043179', 634.92, 1, '2025-08-06

19:12:53.044186', 634.9, -0.01999999999998181] - ['SPY', '2025-08-06  
19:12:53.044345', 634.42, 1, '2025-08-06 19:12:53.044572', 627.0253,  
-7.3946999999999943] - ['SPY', '2025-08-06 19:12:53.044908', 634.86, 1,  
'2025-08-06 19:12:53.045050', 582.58, -52.279999999999997] - ['SPY', '2025-08-06  
19:12:53.045123', 634.42, 1, '2025-08-06 19:12:53.045186', 634.42, 0.0] - ['SPY',  
'2025-08-06 19:12:53.045317', 634.56, 1, '2025-08-06 19:12:53.045380', 634.4,  
-0.159999999999996817] - ['SPY', '2025-08-06 19:12:53.045472', 633.8406, 1,  
'2025-08-06 19:12:53.045902', 633.8406, 0.0] - ['SPY', '2025-08-06  
19:12:53.057431', 634.2297, 1, '2025-08-06 19:12:53.058271', 634.21,  
-0.019699999999994343] - ['SPY', '2025-08-06 19:12:53.058371', 633.8, 1,  
'2025-08-06 19:12:53.058887', 634.86, 1.06000000000000591] - ['SPY', '2025-08-06  
19:12:53.059247', 634.73, 1, '2025-08-06 19:12:53.059313', 634.71,  
-0.019999999999998181] - ['SPY', '2025-08-06 19:12:53.060386', 634.38, 1,  
'2025-08-06 19:12:53.060534', 634.34, -0.039999999999996362] - ['SPY',  
'2025-08-06 19:12:53.060765', 634.29, 1, '2025-08-06 19:12:53.060838', 634.28,  
-0.0099999999999990905] - ['SPY', '2025-08-06 19:12:53.061094', 634.24, 1,  
'2025-08-06 19:12:53.061166', 634.24, 0.0] - ['SPY', '2025-08-06 19:12:53.062359',  
634.0, 1, '2025-08-06 19:12:53.062440', 633.98, -0.019999999999998181] - ['SPY',  
'2025-08-06 19:12:53.063269', 634.45, 1, '2025-08-06 19:12:53.066264', 634.44,  
-0.0099999999999990905] - ['SPY', '2025-08-06 19:12:53.066583', 634.45, 1,  
'2025-08-06 19:12:53.066714', 634.43, -0.0200000000000095497] - ['SPY',  
'2025-08-06 19:12:53.067218', 634.38, 1, '2025-08-06 19:12:53.068132', 634.33,  
-0.0499999999999954525] - ['SPY', '2025-08-06 19:12:53.069083', 633.91, 1,  
'2025-08-06 19:12:53.075489', 633.9, -0.0099999999999990905] - ['SPY',  
'2025-08-06 19:12:53.075950', 633.827, 1, '2025-08-06 19:12:53.076071', 628.9275,  
-4.8994999999999989] - ['SPY', '2025-08-06 19:12:53.076330', 628.9275, 1,  
'2025-08-06 19:12:53.076371', 633.48, 4.5525000000000009] - ['SPY', '2025-08-06  
19:12:53.079773', 631.7401, 1, '2025-08-06 19:12:53.079809', 631.725,  
-0.0150999999999961256] - ['SPY', '2025-08-06 19:12:53.085435', 631.0799, 1,  
'2025-08-06 19:12:53.085479', 631.0615, -0.0183999999999928696] - ['SPY',  
'2025-08-06 19:12:53.086607', 628.86, 1, '2025-08-06 19:12:53.086672', 631.31,  
2.4499999999999932] - ['SPY', '2025-08-06 19:12:53.087580', 630.88, 1, '2025-08-06  
19:12:53.087651', 630.8, -0.080000000000004093] - ['SPY', '2025-08-06  
19:12:53.088073', 631.4, 1, '2025-08-06 19:12:53.088109', 631.34,  
-0.059999999999994543] - ['SPY', '2025-08-06 19:12:53.088211', 631.44, 1,  
'2025-08-06 19:12:53.089010', 631.43, -0.010000000000104592] - ['SPY',  
'2025-08-06 19:12:53.089167', 631.38, 1, '2025-08-06 19:12:53.089199', 631.38,  
0.0] - ['SPY', '2025-08-06 19:12:53.089702', 631.44, 1, '2025-08-06  
19:12:53.089735', 631.38, -0.060000000000005912] - ['SPY', '2025-08-06  
19:12:53.089879', 631.34, 1, '2025-08-06 19:12:53.089913', 631.32,  
-0.019999999999998181] - ['SPY', '2025-08-06 19:12:53.090387', 631.39, 1,  
'2025-08-06 19:12:53.090420', 631.39, 0.0] - ['SPY', '2025-08-06 19:12:53.091378',  
631.07, 1, '2025-08-06 19:12:53.091492', 631.06, -0.010000000000104592] - ['SPY',  
'2025-08-06 19:12:53.092187', 628.86, 1, '2025-08-06 19:12:53.092226', 630.5,  
1.63999999999999864] - ['SPY', '2025-08-06 19:12:53.093206', 629.52, 1,

'2025-08-06 19:12:53.093239', 628.91, -0.6100000000000136] - ['SPY', '2025-08-06  
19:12:53.093506', 628.7307, 1, '2025-08-06 19:12:53.093559', 628.68,  
-0.0507000000000006185] - ['SPY', '2025-08-06 19:12:53.093670', 628.63, 1,  
'2025-08-06 19:12:53.093702', 628.62, -0.009999999999990905] - ['SPY',  
'2025-08-06 19:12:53.093802', 628.57, 1, '2025-08-06 19:12:53.097824', 627.69,  
-0.8799999999999955] - ['SPY', '2025-08-06 19:12:53.097918', 628.88, 1,  
'2025-08-06 19:12:53.097955', 628.88, 0.0] - ['SPY', '2025-08-06 19:12:53.098395',  
628.56, 1, '2025-08-06 19:12:53.101441', 628.53, -0.029999999999972715] - ['SPY',  
'2025-08-06 19:12:53.109856', 628.92, 1, '2025-08-06 19:12:53.110026', 628.89,  
-0.029999999999972715] - ['SPY', '2025-08-06 19:12:53.110868', 628.5, 1,  
'2025-08-06 19:12:53.110902', 628.48, -0.01999999999998181] - ['SPY',  
'2025-08-06 19:12:53.111866', 628.13, 1, '2025-08-06 19:12:53.112069', 628.01,  
-0.120000000000000455] - ['SPY', '2025-08-06 19:12:53.112167', 628.07, 1,  
'2025-08-06 19:12:53.112539', 628.0, -0.070000000000005002] - ['SPY', '2025-08-06  
19:12:53.112665', 628.11, 1, '2025-08-06 19:12:53.112854', 628.09,  
-0.01999999999998181] - ['SPY', '2025-08-06 19:12:53.113376', 628.16, 1,  
'2025-08-06 19:12:53.113410', 628.09, -0.06999999999993634] - ['SPY',  
'2025-08-06 19:12:53.113640', 628.03, 1, '2025-08-06 19:12:53.113704', 627.99,  
-0.03999999999996362] - ['SPY', '2025-08-06 19:12:53.113801', 627.92, 1,  
'2025-08-06 19:12:53.113865', 627.86, -0.05999999999994543] - ['SPY',  
'2025-08-06 19:12:53.115411', 628.21, 1, '2025-08-06 19:12:53.115451', 628.19,  
-0.01999999999998181] - ['SPY', '2025-08-06 19:12:53.116307', 628.84, 1,  
'2025-08-06 19:12:53.116437', 628.8297, -0.0103000000000029286] - ['SPY',  
'2025-08-06 19:12:53.117321', 628.9, 1, '2025-08-06 19:12:53.117354', 628.9, 0.0] -  
['SPY', '2025-08-06 19:12:53.117492', 628.92, 1, '2025-08-06 19:12:53.117636',  
628.89, -0.029999999999972715] - ['SPY', '2025-08-06 19:12:53.118134', 628.77, 1,  
'2025-08-06 19:12:53.118705', 628.77, 0.0] - ['SPY', '2025-08-06 19:12:53.118952',  
628.88, 1, '2025-08-06 19:12:53.119899', 549.0702, -79.8098] - ['SPY', '2025-08-06  
19:12:53.120267', 628.93, 1, '2025-08-06 19:12:53.120416', 554.65,  
-74.27999999999997] - ['SPY', '2025-08-06 19:12:53.120631', 628.95, 1,  
'2025-08-06 19:12:53.120660', 627.15, -1.80000000000000682] - ['SPY', '2025-08-06  
19:12:53.120908', 628.77, 1, '2025-08-06 19:12:53.121123', 628.77, 0.0] - ['SPY',  
'2025-08-06 19:12:53.121553', 628.4692, 1, '2025-08-06 19:12:53.121912',  
627.6317, -0.8374999999999773] - ['SPY', '2025-08-06 19:12:53.130850', 628.33, 1,  
'2025-08-06 19:12:53.131243', 627.58, -0.75] - ['SPY', '2025-08-06  
19:12:53.131824', 628.95, 1, '2025-08-06 19:12:53.131858', 628.94,  
-0.009999999999990905] - ['SPY', '2025-08-06 19:12:53.132185', 627.58, 1,  
'2025-08-06 19:12:53.132250', 627.58, 0.0] - ['SPY', '2025-08-06 19:12:53.132407',  
629.01, 1, '2025-08-06 19:12:53.133329', 629.0, -0.009999999999990905] - ['SPY',  
'2025-08-06 19:12:53.133488', 628.98, 1, '2025-08-06 19:12:53.138759', 628.64,  
-0.3400000000000003183] - ['SPY', '2025-08-06 19:12:53.138802', 627.58, 1,  
'2025-08-06 19:12:53.141242', 627.58, 0.0] - ['SPY', '2025-08-06 19:12:53.141297',  
627.725, 1, '2025-08-06 19:12:53.141372', 627.69, -0.03499999999996817] - ['SPY',  
'2025-08-06 19:12:53.141462', 627.58, 1, '2025-08-06 19:12:53.141789', 627.58,  
0.0] - ['SPY', '2025-08-06 19:12:53.142110', 627.59, 1, '2025-08-06

19:12:53.142143', 627.59, 0.0] - ['SPY', '2025-08-06 19:12:53.142420', 627.58, 1,  
'2025-08-06 19:12:53.142866', 564.5945, -62.9855] - ['SPY', '2025-08-06  
19:12:53.142987', 594.4177, 1, '2025-08-06 19:12:53.143026', 627.68,  
33.262299999999998] - ['SPY', '2025-08-06 19:12:53.143119', 627.64, 1, '2025-08-06  
19:12:53.143233', 588.3531, -39.2868999999999946] - ['SPY', '2025-08-06  
19:12:53.143579', 627.54, 1, '2025-08-06 19:12:53.143610', 627.47,  
-0.069999999999993634] - ['SPY', '2025-08-06 19:12:53.143722', 627.495, 1,  
'2025-08-06 19:12:53.143753', 627.46, -0.034999999999996817] - ['SPY',  
'2025-08-06 19:12:53.144059', 627.5, 1, '2025-08-06 19:12:53.144393', 627.47,  
-0.0299999999999972715] - ['SPY', '2025-08-06 19:12:53.144532', 627.45, 1,  
'2025-08-06 19:12:53.144603', 627.44, -0.0099999999999990905] - ['SPY',  
'2025-08-06 19:12:53.144795', 627.5, 1, '2025-08-06 19:12:53.144836', 627.45,  
-0.0499999999999954525] - ['SPY', '2025-08-06 19:12:53.144926', 627.46, 1,  
'2025-08-06 19:12:53.145307', 627.43, -0.03000000000000086402] - ['SPY',  
'2025-08-06 19:12:53.151820', 627.35, 1, '2025-08-06 19:12:53.151860', 627.28,  
-0.0700000000000005002] - ['SPY', '2025-08-06 19:12:53.155043', 628.7497, 1,  
'2025-08-06 19:12:53.155155', 628.64, -0.109699999999997526] - ['SPY',  
'2025-08-06 19:12:53.156782', 628.37, 1, '2025-08-06 19:12:53.156849', 628.36,  
-0.0099999999999990905] - ['SPY', '2025-08-06 19:12:53.157412', 628.38, 1,  
'2025-08-06 19:12:53.158185', 628.33, -0.0499999999999954525] - ['SPY',  
'2025-08-06 19:12:53.158979', 628.93, 1, '2025-08-06 19:12:53.160685', 628.93,  
0.0] - ['SPY', '2025-08-06 19:12:53.160960', 628.9, 1, '2025-08-06 19:12:53.161444',  
628.88, -0.019999999999998181] - ['SPY', '2025-08-06 19:12:53.161827', 628.04, 1,  
'2025-08-06 19:12:53.163520', 627.99, -0.0499999999999954525] - ['SPY',  
'2025-08-06 19:12:53.163638', 627.99, 1, '2025-08-06 19:12:53.163671', 627.985,  
-0.00499999999999954525] - ['SPY', '2025-08-06 19:12:53.163979', 627.965, 1,  
'2025-08-06 19:12:53.164158', 627.96, -0.00499999999999954525] - ['SPY',  
'2025-08-06 19:12:53.164329', 628.04, 1, '2025-08-06 19:12:53.164360', 628.03,  
-0.0099999999999990905] - ['SPY', '2025-08-06 19:12:53.164511', 627.98, 1,  
'2025-08-06 19:12:53.164685', 627.941, -0.038999999999998727] - ['SPY',  
'2025-08-06 19:12:53.164816', 627.825, 1, '2025-08-06 19:12:53.164879', 627.78,  
-0.0450000000000007276] - ['SPY', '2025-08-06 19:12:53.165077', 627.8, 1,  
'2025-08-06 19:12:53.167741', 624.2876, -3.5123999999999957] - ['SPY',  
'2025-08-06 19:12:53.167899', 627.6305, 1, '2025-08-06 19:12:53.168069',  
627.6263, -0.0041999999999968895] - ['SPY', '2025-08-06 19:12:53.168204',  
624.2876, 1, '2025-08-06 19:12:53.168241', 627.65, 3.36239999999999796] - ['SPY',  
'2025-08-06 19:12:53.177662', 623.76, 1, '2025-08-06 19:12:53.177700', 623.76,  
0.0] - ['SPY', '2025-08-06 19:12:53.178314', 623.06, 1, '2025-08-06  
19:12:53.178911', 624.06, 1.0] - ['SPY', '2025-08-06 19:12:53.178994', 624.02, 1,  
'2025-08-06 19:12:53.179030', 623.98, -0.039999999999996362] - ['SPY',  
'2025-08-06 19:12:53.179320', 624.11, 1, '2025-08-06 19:12:53.179351', 624.1,  
-0.0099999999999990905] - ['SPY', '2025-08-06 19:12:53.179645', 624.12, 1,  
'2025-08-06 19:12:53.179675', 624.01, -0.1100000000000001364] - ['SPY',  
'2025-08-06 19:12:53.180413', 624.58, 1, '2025-08-06 19:12:53.180444', 624.51,  
-0.0700000000000005002] - ['SPY', '2025-08-06 19:12:53.180691', 624.59, 1,

'2025-08-06 19:12:53.180722', 624.59, 0.0] - ['SPY', '2025-08-06 19:12:53.180935',  
624.64, 1, '2025-08-06 19:12:53.181030', 624.64, 0.0] - ['SPY', '2025-08-06  
19:12:53.181547', 624.94, 1, '2025-08-06 19:12:53.181609', 624.93,  
-0.010000000000104592] - ['SPY', '2025-08-06 19:12:53.182216', 624.74, 1,  
'2025-08-06 19:12:53.182256', 624.66, -0.080000000000004093] - ['SPY',  
'2025-08-06 19:12:53.182592', 624.57, 1, '2025-08-06 19:12:53.182624', 624.44,  
-0.12999999999999545] - ['SPY', '2025-08-06 19:12:53.182724', 624.35, 1,  
'2025-08-06 19:12:53.182755', 624.29, -0.060000000000005912] - ['SPY',  
'2025-08-06 19:12:53.183708', 624.22, 1, '2025-08-06 19:12:53.183739', 623.1601,  
-1.0598999999999705] - ['SPY', '2025-08-06 19:12:53.183815', 623.15, 1,  
'2025-08-06 19:12:53.184310', 623.11, -0.039999999999996362] - ['SPY',  
'2025-08-06 19:12:53.184426', 623.08, 1, '2025-08-06 19:12:53.184488', 623.0695,  
-0.0105000000000092768] - ['SPY', '2025-08-06 19:12:53.184682', 623.0892, 1,  
'2025-08-06 19:12:53.185422', 623.08, -0.0091999999999964348] - ['SPY',  
'2025-08-06 19:12:53.185958', 623.32, 1, '2025-08-06 19:12:53.185989', 623.27,  
-0.050000000000006821] - ['SPY', '2025-08-06 19:12:53.186752', 623.86, 1,  
'2025-08-06 19:12:53.186868', 623.85, -0.0099999999999990905] - ['SPY',  
'2025-08-06 19:12:53.187203', 623.86, 1, '2025-08-06 19:12:53.187233', 623.86,  
0.0] - ['SPY', '2025-08-06 19:12:53.187970', 623.76, 1, '2025-08-06  
19:12:53.188001', 623.73, -0.0299999999999972715] - ['SPY', '2025-08-06  
19:12:53.188096', 583.351, 1, '2025-08-06 19:12:53.188133', 623.82,  
40.469000000000005] - ['SPY', '2025-08-06 19:12:53.188391', 623.68, 1, '2025-08-06  
19:12:53.188421', 623.66, -0.019999999999998181] - ['SPY', '2025-08-06  
19:12:53.188744', 623.78, 1, '2025-08-06 19:12:53.188836', 622.2971,  
-1.4828999999999724] - ['SPY', '2025-08-06 19:12:53.188916', 623.7597, 1,  
'2025-08-06 19:12:53.191121', 623.755, -0.0046999999999957072] - ['SPY',  
'2025-08-06 19:12:53.194763', 620.6501, 1, '2025-08-06 19:12:53.194797', 620.17,  
-0.4800999999999931] - ['SPY', '2025-08-06 19:12:53.199209', 622.34, 1,  
'2025-08-06 19:12:53.199762', 622.33, -0.0099999999999990905] - ['SPY',  
'2025-08-06 19:12:53.199971', 619.96, 1, '2025-08-06 19:12:53.200013', 619.78,  
-0.180000000000006366] - ['SPY', '2025-08-06 19:12:53.200348', 621.72, 1,  
'2025-08-06 19:12:53.200451', 621.6, -0.120000000000000455] - ['SPY', '2025-08-06  
19:12:53.200602', 621.7, 1, '2025-08-06 19:12:53.202940', 621.64,  
-0.060000000000005912] - ['SPY', '2025-08-06 19:12:53.203941', 621.72, 1,  
'2025-08-06 19:12:53.204117', 621.72, 0.0] - ['SPY', '2025-08-06 19:12:53.204277',  
621.7, 1, '2025-08-06 19:12:53.204328', 621.67, -0.0300000000000086402] - ['SPY',  
'2025-08-06 19:12:53.204926', 621.62, 1, '2025-08-06 19:12:53.205041', 621.42,  
-0.200000000000004547] - ['SPY', '2025-08-06 19:12:53.205451', 621.5, 1,  
'2025-08-06 19:12:53.205507', 621.41, -0.090000000000003183] - ['SPY',  
'2025-08-06 19:12:53.205670', 621.36, 1, '2025-08-06 19:12:53.207868', 621.36,  
0.0] - ['SPY', '2025-08-06 19:12:53.209273', 621.105, 1, '2025-08-06  
19:12:53.209319', 621.0587, -0.04629999999997381] - ['SPY', '2025-08-06  
19:12:53.209584', 620.94, 1, '2025-08-06 19:12:53.209625', 620.9001,  
-0.039900000000010241] - ['SPY', '2025-08-06 19:12:53.209799', 620.62, 1,  
'2025-08-06 19:12:53.209997', 620.56, -0.060000000000005912] - ['SPY',



'2025-08-06 19:12:53.210082', 620.4, 1, '2025-08-06 19:12:53.211588', 620.33,  
-0.069999999999993634] - ['SPY', '2025-08-06 19:12:53.211756', 621.02, 1,  
'2025-08-06 19:12:53.211852', 620.97, -0.0499999999999954525] - ['SPY',  
'2025-08-06 19:12:53.212856', 621.21, 1, '2025-08-06 19:12:53.213840', 621.2,  
-0.0099999999999990905] - ['SPY', '2025-08-06 19:12:53.214541', 621.23, 1,  
'2025-08-06 19:12:53.214576', 621.1997, -0.030300000000011096] - ['SPY',  
'2025-08-06 19:12:53.215330', 622.06, 1, '2025-08-06 19:12:53.215571', 623.1,  
1.04000000000000773] - ['SPY', '2025-08-06 19:12:53.225698', 624.81, 1,  
'2025-08-06 19:12:53.225746', 627.06, 2.25] - ['SPY', '2025-08-06 19:12:53.225829',  
626.89, 1, '2025-08-06 19:12:53.225952', 626.81, -0.08000000000004093] - ['SPY',  
'2025-08-06 19:12:53.227014', 627.15, 1, '2025-08-06 19:12:53.227100', 627.08,  
-0.069999999999993634] - ['SPY', '2025-08-06 19:12:53.227263', 626.98, 1,  
'2025-08-06 19:12:53.227296', 626.97, -0.0099999999999990905] - ['SPY',  
'2025-08-06 19:12:53.227907', 627.34, 1, '2025-08-06 19:12:53.227976', 627.28,  
-0.060000000000005912] - ['SPY', '2025-08-06 19:12:53.228295', 627.1, 1,  
'2025-08-06 19:12:53.228624', 627.02, -0.08000000000004093] - ['SPY',  
'2025-08-06 19:12:53.228858', 627.18, 1, '2025-08-06 19:12:53.228891', 627.03,  
-0.14999999999997726] - ['SPY', '2025-08-06 19:12:53.229104', 626.94, 1,  
'2025-08-06 19:12:53.229425', 626.84, -0.10000000000002274] - ['SPY',  
'2025-08-06 19:12:53.229732', 626.66, 1, '2025-08-06 19:12:53.229764', 626.65,  
-0.0099999999999990905] - ['SPY', '2025-08-06 19:12:53.230171', 626.72, 1,  
'2025-08-06 19:12:53.230430', 626.57, -0.14999999999997726] - ['SPY',  
'2025-08-06 19:12:53.230651', 626.7, 1, '2025-08-06 19:12:53.230683', 626.63,  
-0.070000000000005002] - ['SPY', '2025-08-06 19:12:53.231001', 626.47, 1,  
'2025-08-06 19:12:53.231224', 626.22, -0.25] - ['SPY', '2025-08-06  
19:12:53.231257', 624.81, 1, '2025-08-06 19:12:53.231310', 624.07,  
-0.73999999999998954] - ['SPY', '2025-08-06 19:12:53.231447', 624.0097, 1,  
'2025-08-06 19:12:53.231480', 623.95, -0.05969999999990705] - ['SPY',  
'2025-08-06 19:12:53.231683', 623.94, 1, '2025-08-06 19:12:53.231746', 623.94,  
0.0] - ['SPY', '2025-08-06 19:12:53.232262', 623.84, 1, '2025-08-06  
19:12:53.232385', 623.8004, -0.039600000000006403] - ['SPY', '2025-08-06  
19:12:53.232645', 623.88, 1, '2025-08-06 19:12:53.232707', 623.88, 0.0] - ['SPY',  
'2025-08-06 19:12:53.232920', 623.98, 1, '2025-08-06 19:12:53.232950', 623.955,  
-0.024999999999977263] - ['SPY', '2025-08-06 19:12:53.233091', 623.92, 1,  
'2025-08-06 19:12:53.233121', 623.9, -0.01999999999998181] - ['SPY', '2025-08-06  
19:12:53.234153', 624.645, 1, '2025-08-06 19:12:53.234183', 624.55,  
-0.095000000000002728] - ['SPY', '2025-08-06 19:12:53.234642', 624.52, 1,  
'2025-08-06 19:12:53.234673', 624.51, -0.0099999999999990905] - ['SPY',  
'2025-08-06 19:12:53.235409', 624.4897, 1, '2025-08-06 19:12:53.235624', 624.48,  
-0.009699999999952524] - ['SPY', '2025-08-06 19:12:53.236248', 624.5, 1,  
'2025-08-06 19:12:53.236427', 624.49, -0.0099999999999990905] - ['SPY',  
'2025-08-06 19:12:53.245699', 622.0997, 1, '2025-08-06 19:12:53.245853', 621.93,  
-0.169700000000003438] - ['SPY', '2025-08-06 19:12:53.246661', 621.9, 1,  
'2025-08-06 19:12:53.246695', 621.88, -0.01999999999998181] - ['SPY',  
'2025-08-06 19:12:53.246885', 621.95, 1, '2025-08-06 19:12:53.247112', 621.74,

-0.21000000000003638] - ['SPY', '2025-08-06 19:12:53.247270', 621.6, 1, '2025-08-06 19:12:53.247323', 621.55, -0.05000000000006821] - ['SPY', '2025-08-06 19:12:53.247456', 621.48, 1, '2025-08-06 19:12:53.247487', 621.46, -0.01999999999998181] - ['SPY', '2025-08-06 19:12:53.248663', 621.78, 1, '2025-08-06 19:12:53.248727', 621.78, 0.0] - ['SPY', '2025-08-06 19:12:53.248987', 621.79, 1, '2025-08-06 19:12:53.250507', 621.67, -0.12000000000000455] - ['SPY', '2025-08-06 19:12:53.250778', 621.59, 1, '2025-08-06 19:12:53.250810', 621.59, 0.0] - ['SPY', '2025-08-06 19:12:53.250908', 621.6, 1, '2025-08-06 19:12:53.250973', 621.6, 0.0] - ['SPY', '2025-08-06 19:12:53.252513', 623.01, 1, '2025-08-06 19:12:53.252545', 623.0, -0.009999999999990905] - ['SPY', '2025-08-06 19:12:53.253402', 623.16, 1, '2025-08-06 19:12:53.253557', 623.15, -0.009999999999990905] - ['SPY', '2025-08-06 19:12:53.253714', 623.1143, 1, '2025-08-06 19:12:53.253745', 623.1, -0.014299999999934698] - ['SPY', '2025-08-06 19:12:53.253924', 623.1, 1, '2025-08-06 19:12:53.253958', 623.1, 0.0] - ['SPY', '2025-08-06 19:12:53.254031', 623.14, 1, '2025-08-06 19:12:53.254083', 623.1058, -0.03419999999994161] - ['SPY', '2025-08-06 19:12:53.254160', 623.1, 1, '2025-08-06 19:12:53.254245', 623.08, -0.01999999999998181] - ['SPY', '2025-08-06 19:12:53.254487', 623.14, 1, '2025-08-06 19:12:53.254602', 623.1, -0.03999999999996362] - ['SPY', '2025-08-06 19:12:53.254740', 623.1, 1, '2025-08-06 19:12:53.254867', 623.1, 0.0] - ['SPY', '2025-08-06 19:12:53.255161', 623.1, 1, '2025-08-06 19:12:53.255540', 623.1, 0.0] - ['SPY', '2025-08-06 19:12:53.255680', 623.09, 1, '2025-08-06 19:12:53.255713', 623.08, -0.009999999999990905] - ['SPY', '2025-08-06 19:12:53.255879', 623.02, 1, '2025-08-06 19:12:53.256037', 623.0, -0.01999999999998181] - ['SPY', '2025-08-06 19:12:53.256248', 623.05, 1, '2025-08-06 19:12:53.256332', 623.02, -0.029999999999972715] - ['SPY', '2025-08-06 19:12:53.256483', 623.01, 1, '2025-08-06 19:12:53.256573', 620.8003, -2.209699999999998] - ['SPY', '2025-08-06 19:12:53.256900', 623.08, 1, '2025-08-06 19:12:53.256931', 623.04, -0.040000000000007731] - ['SPY', '2025-08-06 19:12:53.257014', 623.12, 1, '2025-08-06 19:12:53.257246', 623.11, -0.009999999999990905] - ['SPY', '2025-08-06 19:12:53.257694', 623.435, 1, '2025-08-06 19:12:53.257898', 623.31, -0.125] - ['SPY', '2025-08-06 19:12:53.262579', 623.21, 1, '2025-08-06 19:12:53.262636', 623.2, -0.009999999999990905] - ['SPY', '2025-08-06 19:12:53.267843', 621.419, 1, '2025-08-06 19:12:53.267881', 622.76, 1.34100000000000082] - ['SPY', '2025-08-06 19:12:53.268124', 622.68, 1, '2025-08-06 19:12:53.268210', 622.61, -0.06999999999993634] - ['SPY', '2025-08-06 19:12:53.268670', 622.36, 1, '2025-08-06 19:12:53.268700', 622.31, -0.050000000000006821] - ['SPY', '2025-08-06 19:12:53.269258', 621.49, 1, '2025-08-06 19:12:53.270786', 621.39, -0.100000000000002274] - ['SPY', '2025-08-06 19:12:53.271339', 622.47, 1, '2025-08-06 19:12:53.271371', 622.46, -0.009999999999990905] - ['SPY', '2025-08-06 19:12:53.271552', 622.44, 1, '2025-08-06 19:12:53.271719', 622.38, -0.060000000000005912] - ['SPY', '2025-08-06 19:12:53.271831', 622.8, 1, '2025-08-06 19:12:53.271861', 622.8, 0.0] - ['SPY', '2025-08-06 19:12:53.271960', 622.57, 1, '2025-08-06 19:12:53.272612', 622.56, -0.0100000000000104592] - ['SPY', '2025-08-06 19:12:53.272740', 622.48, 1,

'2025-08-06 19:12:53.272905', 622.47, -0.009999999999999999] - ['SPY',  
'2025-08-06 19:12:53.273985', 626.0905, 1, '2025-08-06 19:12:53.274019', 626.055,  
-0.035500000000000000] - ['SPY', '2025-08-06 19:12:53.274483', 626.02, 1,  
'2025-08-06 19:12:53.274545', 626.01, -0.009999999999999999] - ['SPY',  
'2025-08-06 19:12:53.274597', 626.0501, 1, '2025-08-06 19:12:53.275298', 626.05,  
-0.000100000000000000] - ['SPY', '2025-08-06 19:12:53.275746', 625.78, 1,  
'2025-08-06 19:12:53.276444', 625.77, -0.009999999999999999] - ['SPY',  
'2025-08-06 19:12:53.276776', 625.5, 1, '2025-08-06 19:12:53.276808', 625.48,  
-0.019999999999999999] - ['SPY', '2025-08-06 19:12:53.276840', 625.4697, 1,  
'2025-08-06 19:12:53.276961', 625.46, -0.009699999999999999] - ['SPY',  
'2025-08-06 19:12:53.277112', 625.52, 1, '2025-08-06 19:12:53.277142', 625.49,  
-0.029999999999999999] - ['SPY', '2025-08-06 19:12:53.277582', 625.59, 1,  
'2025-08-06 19:12:53.277611', 625.59, 0.0] - ['SPY', '2025-08-06 19:12:53.277704',  
625.56, 1, '2025-08-06 19:12:53.277734', 625.56, 0.0] - ['SPY', '2025-08-06  
19:12:53.277947', 625.48, 1, '2025-08-06 19:12:53.277981', 625.46,  
-0.019999999999999999] - ['SPY', '2025-08-06 19:12:53.278054', 580.397, 1,  
'2025-08-06 19:12:53.278089', 625.48, 45.08299999999999] - ['SPY', '2025-08-06  
19:12:53.278471', 625.69, 1, '2025-08-06 19:12:53.278575', 625.59,  
-0.100000000000000000] - ['SPY', '2025-08-06 19:12:53.278695', 625.39, 1,  
'2025-08-06 19:12:53.278759', 625.37, -0.019999999999999999] - ['SPY',  
'2025-08-06 19:12:53.278871', 624.1905, 1, '2025-08-06 19:12:53.278908', 625.4,  
1.2094999999999999] - ['SPY', '2025-08-06 19:12:53.279321', 625.66, 1,  
'2025-08-06 19:12:53.279352', 625.62, -0.039999999999999999] - ['SPY',  
'2025-08-06 19:12:53.288081', 623.4401, 1, '2025-08-06 19:12:53.288959', 617.829,  
-5.6111000000000000] - ['SPY', '2025-08-06 19:12:53.289296', 622.3, 1, '2025-08-06  
19:12:53.289335', 624.28, 1.9800000000000000] - ['SPY', '2025-08-06  
19:12:53.289768', 624.16, 1, '2025-08-06 19:12:53.289934', 623.96,  
-0.199999999999999999] - ['SPY', '2025-08-06 19:12:53.290193', 623.8, 1,  
'2025-08-06 19:12:53.290224', 623.74, -0.059999999999999999] - ['SPY',  
'2025-08-06 19:12:53.290359', 623.77, 1, '2025-08-06 19:12:53.290389', 623.68,  
-0.090000000000000000] - ['SPY', '2025-08-06 19:12:53.291048', 623.43, 1,  
'2025-08-06 19:12:53.291257', 623.37, -0.059999999999999999] - ['SPY',  
'2025-08-06 19:12:53.291912', 623.31, 1, '2025-08-06 19:12:53.291941', 623.04,  
-0.269999999999999999] - ['SPY', '2025-08-06 19:12:53.292771', 623.41, 1,  
'2025-08-06 19:12:53.292921', 623.38, -0.029999999999999999] - ['SPY',  
'2025-08-06 19:12:53.292953', 623.36, 1, '2025-08-06 19:12:53.293352', 623.34,  
-0.019999999999999999] - ['SPY', '2025-08-06 19:12:53.293426', 623.28, 1,  
'2025-08-06 19:12:53.293454', 623.26, -0.019999999999999999] - ['SPY',  
'2025-08-06 19:12:53.293803', 623.32, 1, '2025-08-06 19:12:53.293834', 623.28,  
-0.040000000000000000] - ['SPY', '2025-08-06 19:12:53.293926', 623.29, 1,  
'2025-08-06 19:12:53.293960', 623.28, -0.009999999999999999] - ['SPY',  
'2025-08-06 19:12:53.294481', 622.9, 1, '2025-08-06 19:12:53.294512', 622.71,  
-0.189999999999999999] - ['SPY', '2025-08-06 19:12:53.295038', 623.5987, 1,  
'2025-08-06 19:12:53.299495', 584.0412, -39.5575000000000000] - ['SPY',  
'2025-08-06 19:12:53.299708', 623.8497, 1, '2025-08-06 19:12:53.299739', 623.8,

-0.04970000000002983] - ['SPY', '2025-08-06 19:12:53.300327', 623.6995, 1,  
'2025-08-06 19:12:53.301116', 623.575, -0.12449999999989814] - ['SPY',  
'2025-08-06 19:12:53.310595', 621.8, 1, '2025-08-06 19:12:53.310798', 621.67,  
-0.1299999999999545] - ['SPY', '2025-08-06 19:12:53.310962', 619.48, 1,  
'2025-08-06 19:12:53.310999', 621.72, 2.2400000000000009] - ['SPY', '2025-08-06  
19:12:53.311054', 621.63, 1, '2025-08-06 19:12:53.311376', 621.58,  
-0.049999999999954525] - ['SPY', '2025-08-06 19:12:53.311517', 621.58, 1,  
'2025-08-06 19:12:53.312048', 621.48, -0.10000000000002274] - ['SPY',  
'2025-08-06 19:12:53.312478', 621.34, 1, '2025-08-06 19:12:53.312508', 621.29,  
-0.050000000000006821] - ['SPY', '2025-08-06 19:12:53.312681', 621.3, 1,  
'2025-08-06 19:12:53.313345', 621.29, -0.009999999999990905] - ['SPY',  
'2025-08-06 19:12:53.314105', 621.38, 1, '2025-08-06 19:12:53.314137', 621.37,  
-0.009999999999990905] - ['SPY', '2025-08-06 19:12:53.314913', 620.63, 1,  
'2025-08-06 19:12:53.314945', 620.58, -0.049999999999954525] - ['SPY',  
'2025-08-06 19:12:53.315185', 620.42, 1, '2025-08-06 19:12:53.315216', 620.41,  
-0.009999999999990905] - ['SPY', '2025-08-06 19:12:53.315269', 620.46, 1,  
'2025-08-06 19:12:53.315364', 620.45, -0.009999999999990905] - ['SPY',  
'2025-08-06 19:12:53.315498', 620.56, 1, '2025-08-06 19:12:53.315746', 620.55,  
-0.009999999999990905] - ['SPY', '2025-08-06 19:12:53.316442', 619.9, 1,  
'2025-08-06 19:12:53.321514', 612.94, -6.959999999999923] - ['SPY', '2025-08-06  
19:12:53.322196', 620.3697, 1, '2025-08-06 19:12:53.322674', 620.36,  
-0.009699999999952524] - ['SPY', '2025-08-06 19:12:53.322820', 620.3379, 1,  
'2025-08-06 19:12:53.323013', 620.33, -0.007899999999949614] - ['SPY',  
'2025-08-06 19:12:53.323137', 620.14, 1, '2025-08-06 19:12:53.323317', 619.99,  
-0.14999999999997726] - ['SPY', '2025-08-06 19:12:53.332935', 621.3, 1,  
'2025-08-06 19:12:53.332976', 621.235, -0.06499999999994088] - ['SPY',  
'2025-08-06 19:12:53.333357', 621.6, 1, '2025-08-06 19:12:53.334298', 621.52,  
-0.080000000000004093] - ['SPY', '2025-08-06 19:12:53.334676', 621.47, 1,  
'2025-08-06 19:12:53.335260', 621.28, -0.190000000000005457] - ['SPY',  
'2025-08-06 19:12:53.335358', 621.13, 1, '2025-08-06 19:12:53.335411', 620.96,  
-0.16999999999995907] - ['SPY', '2025-08-06 19:12:53.335511', 620.93, 1,  
'2025-08-06 19:12:53.335780', 620.88, -0.049999999999954525] - ['SPY',  
'2025-08-06 19:12:53.335944', 620.9, 1, '2025-08-06 19:12:53.335981', 620.9, 0.0] -  
['SPY', '2025-08-06 19:12:53.336081', 620.62, 1, '2025-08-06 19:12:53.337419',  
621.63, 1.009999999999991] - ['SPY', '2025-08-06 19:12:53.338436', 621.59, 1,  
'2025-08-06 19:12:53.338468', 621.58, -0.009999999999990905] - ['SPY',  
'2025-08-06 19:12:53.338789', 621.4, 1, '2025-08-06 19:12:53.339174', 621.22,  
-0.17999999999994998] - ['SPY', '2025-08-06 19:12:53.339207', 620.68, 1,  
'2025-08-06 19:12:53.339260', 619.9092, -0.7707999999998947] - ['SPY',  
'2025-08-06 19:12:53.339421', 619.79, 1, '2025-08-06 19:12:53.339643', 619.75,  
-0.03999999999996362] - ['SPY', '2025-08-06 19:12:53.340237', 619.68, 1,  
'2025-08-06 19:12:53.340457', 619.605, -0.07499999999993179] - ['SPY',  
'2025-08-06 19:12:53.340622', 619.325, 1, '2025-08-06 19:12:53.340710', 619.3,  
-0.025000000000009095] - ['SPY', '2025-08-06 19:12:53.341049', 619.44, 1,  
'2025-08-06 19:12:53.341081', 619.355, -0.085000000000003638] - ['SPY',

'2025-08-06 19:12:53.341277', 618.9887, 1, '2025-08-06 19:12:53.341309', 618.87,  
-0.11869999999998981] - ['SPY', '2025-08-06 19:12:53.341695', 619.3, 1,  
'2025-08-06 19:12:53.342313', 618.818, -0.4819999999999709] - ['SPY',  
'2025-08-06 19:12:53.342766', 619.4, 1, '2025-08-06 19:12:53.342797', 619.4, 0.0] -  
['SPY', '2025-08-06 19:12:53.342890', 619.42, 1, '2025-08-06 19:12:53.343071',  
594.4177, -25.002299999999999] - ['SPY', '2025-08-06 19:12:53.344334', 620.08, 1,  
'2025-08-06 19:12:53.344367', 620.05, -0.0300000000000086402] - ['SPY',  
'2025-08-06 19:12:53.354452', 622.4385, 1, '2025-08-06 19:12:53.354492', 624.12,  
1.68150000000000282] - ['SPY', '2025-08-06 19:12:53.354603', 624.02, 1,  
'2025-08-06 19:12:53.354635', 623.99, -0.029999999999972715] - ['SPY',  
'2025-08-06 19:12:53.354897', 623.68, 1, '2025-08-06 19:12:53.354965', 623.68,  
0.0] - ['SPY', '2025-08-06 19:12:53.355041', 623.8, 1, '2025-08-06 19:12:53.355350',  
623.74, -0.05999999999994543] - ['SPY', '2025-08-06 19:12:53.355648', 623.61, 1,  
'2025-08-06 19:12:53.355900', 623.61, 0.0] - ['SPY', '2025-08-06 19:12:53.356518',  
623.84, 1, '2025-08-06 19:12:53.356845', 623.83, -0.009999999999990905] - ['SPY',  
'2025-08-06 19:12:53.356923', 623.73, 1, '2025-08-06 19:12:53.357278', 623.69,  
-0.039999999999996362] - ['SPY', '2025-08-06 19:12:53.357646', 622.98, 1,  
'2025-08-06 19:12:53.357888', 622.94, -0.039999999999996362] - ['SPY',  
'2025-08-06 19:12:53.357940', 622.77, 1, '2025-08-06 19:12:53.357974', 622.73,  
-0.039999999999996362] - ['SPY', '2025-08-06 19:12:53.358303', 622.67, 1,  
'2025-08-06 19:12:53.358391', 622.67, 0.0] - ['SPY', '2025-08-06 19:12:53.358519',  
622.63, 1, '2025-08-06 19:12:53.358550', 622.62, -0.009999999999990905] - ['SPY',  
'2025-08-06 19:12:53.358765', 622.49, 1, '2025-08-06 19:12:53.359924', 622.45,  
-0.039999999999996362] - ['SPY', '2025-08-06 19:12:53.360295', 622.75, 1,  
'2025-08-06 19:12:53.360327', 622.67, -0.080000000000004093] - ['SPY',  
'2025-08-06 19:12:53.360663', 624.85, 1, '2025-08-06 19:12:53.360800', 624.83,  
-0.019999999999998181] - ['SPY', '2025-08-06 19:12:53.361024', 624.8201, 1,  
'2025-08-06 19:12:53.363433', 624.79, -0.03010000000000613] - ['SPY', '2025-08-06  
19:12:53.364770', 582.5224, 1, '2025-08-06 19:12:53.364809', 581.8076,  
-0.71479999999999683] - ['SPY', '2025-08-06 19:12:53.365514', 624.82, 1,  
'2025-08-06 19:12:53.365546', 624.8, -0.0200000000000095497] - ['SPY',  
'2025-08-06 19:12:53.366013', 625.24, 1, '2025-08-06 19:12:53.366152', 625.23,  
-0.009999999999990905] - ['SPY', '2025-08-06 19:12:53.368012', 625.28, 1,  
'2025-08-06 19:12:53.368861', 625.22, -0.05999999999994543] - ['SPY',  
'2025-08-06 19:12:53.374175', 620.82, 1, '2025-08-06 19:12:53.374239', 620.73,  
-0.090000000000003183] \* Account : |Funds : 4098.392599999993 |Limit :  
819.6785199999986 : 4098.392599999993 : -281.1373999999988