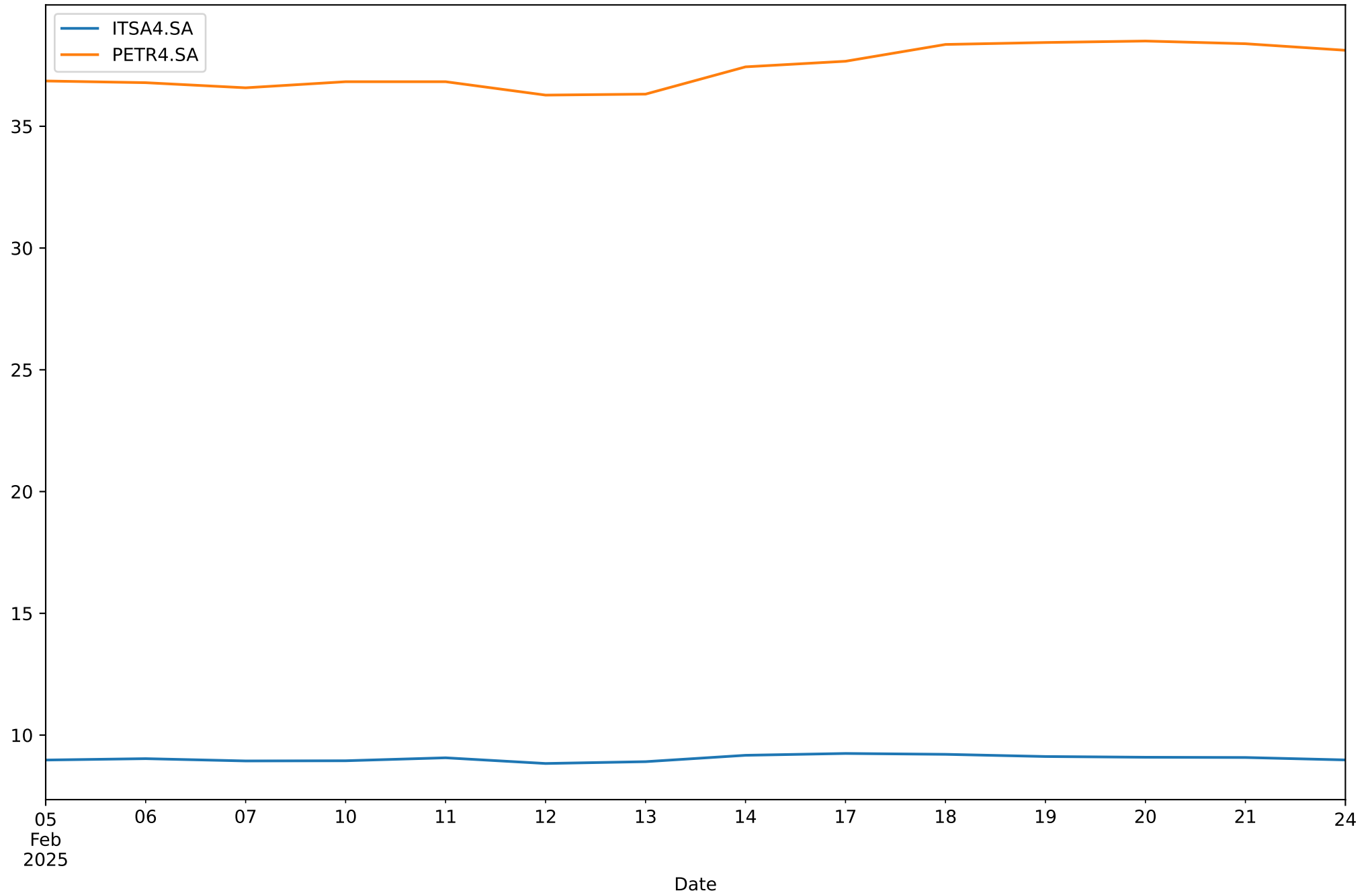


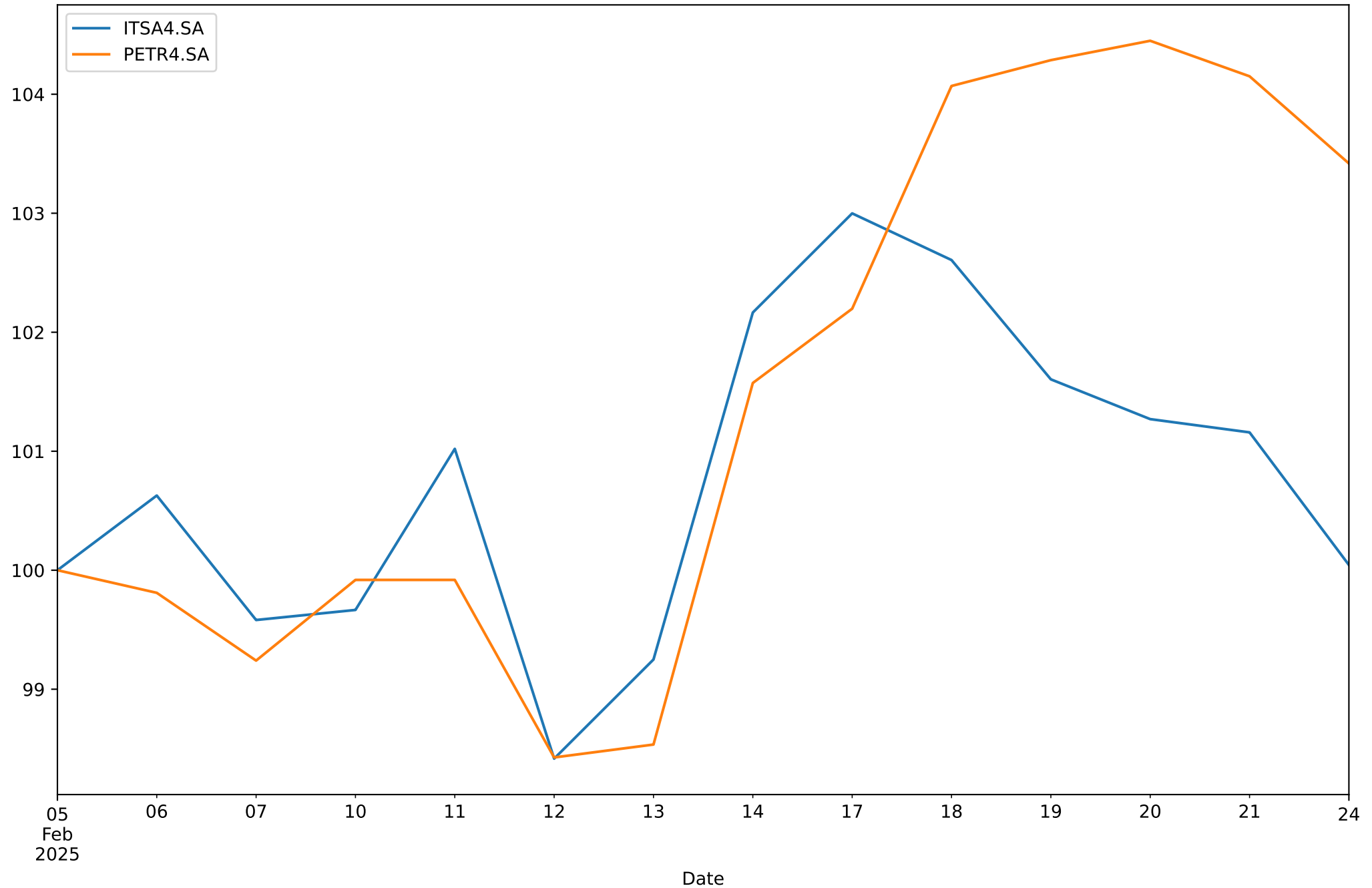
Valor de fechamento dos tikers

ITSA4.SA	PETR4.SA
8.976021766662598	36.86000061035156
9.032356262207031	36.790000915527344
8.93846607208252	36.58000183105469
8.946053504943848	36.83000183105469
9.067577362060547	36.83000183105469
8.833876609802246	36.279998779296875
8.908661842346191	36.31999969482422
9.170406341552734	37.439998626708984
9.245189666748047	37.66999816894531
9.210000038146973	38.36000061035156
9.119999885559082	38.439998626708984
9.09000015258789	38.5
9.079999923706055	38.38999938964844
8.979999542236328	38.119998931884766

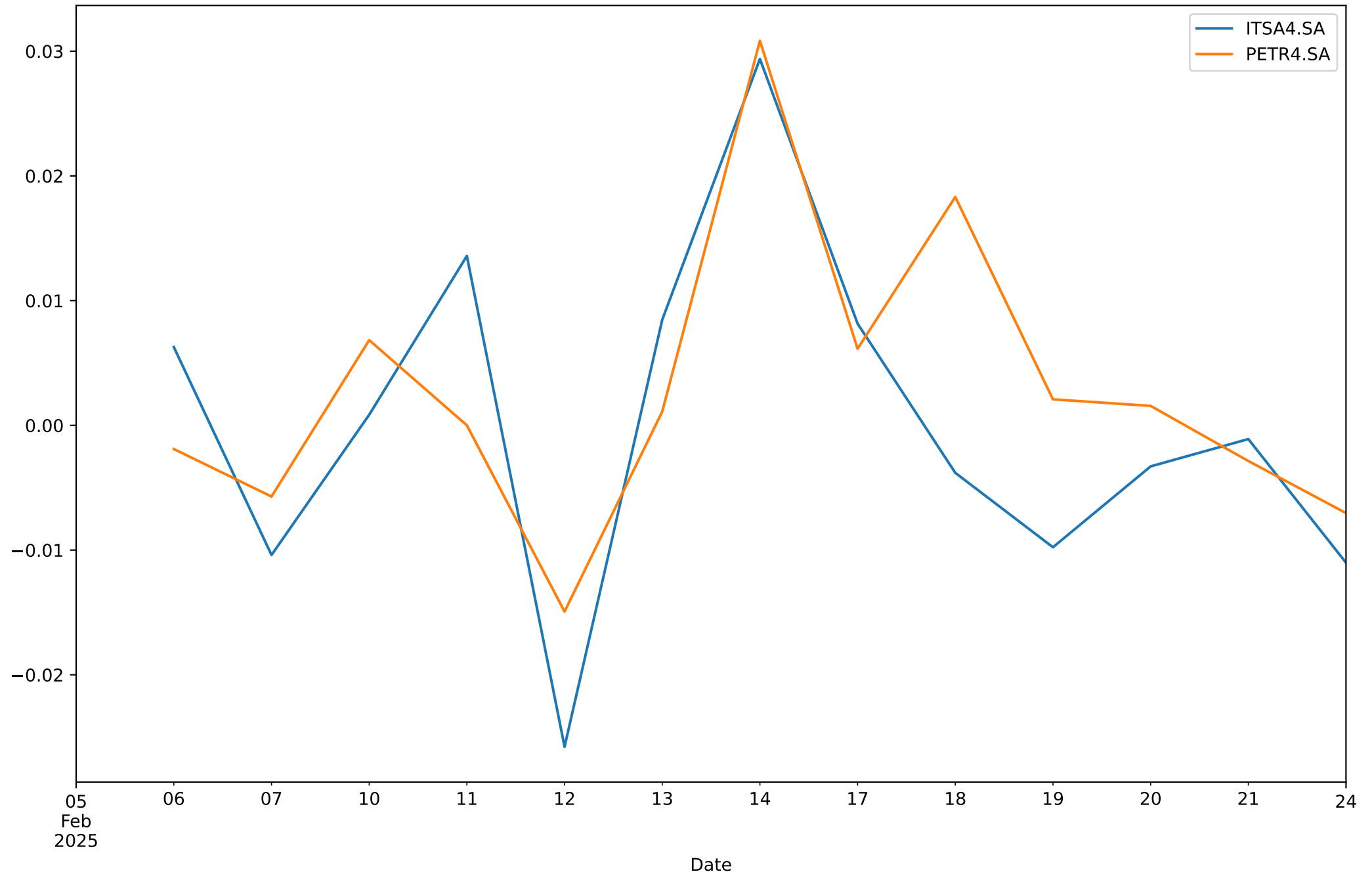
Valor de fechamento dos tikers



Percentual de valorização das ações



Variação dos tikers em relação a média (volatividade)



%% de distribuição dos tikers (melhor caso)

Return	Volatility	ITSA4.SA	PETR4.SA
0.3366896653965188	0.18421405402835603	0.4855198385099261	0.5144801614900739
0.34648749560455483	0.1836842871280773	0.4701595081959873	0.5298404918040127
0.34999108214824026	0.18350144065829077	0.46466683834441763	0.5353331616555824
0.35272071237140584	0.18336140342987778	0.46038752129436855	0.5396124787056314
0.36116739105026	0.182941535896004	0.4471454287281501	0.5528545712718499
0.3656421466745779	0.1827273895466127	0.4401302301582359	0.5598697698417642
0.36959311020043734	0.18254310125993656	0.43393619499668035	0.5660638050033197
0.3763602707547456	0.18223793403042937	0.4233271296021426	0.5766728703978574
0.41027072613187865	0.18091013936910288	0.3701647676680043	0.6298352323319957
0.41967256629025995	0.1806021023655484	0.3554252419439165	0.6445747580560834
0.423685602465013	0.18047863956631324	0.34913389376813014	0.6508661062318698
0.43546632568376686	0.1801440316041797	0.3306649270545889	0.6693350729454112
0.4422245799406433	0.17997088410128473	0.32006982430969116	0.6799301756903089
0.4891935469938987	0.1791495150744732	0.24643527123785064	0.7535647287621493
0.5190746404445906	0.1789771251238987	0.19958985181347164	0.8004101481865283
0.5278216711319232	0.17897839670728383	0.18587688906857844	0.8141231109314215
0.5341813610395759	0.17899403780024115	0.17590662671440457	0.8240933732855954
0.5688005220726948	0.17929622136274087	0.1216332072562881	0.8783667927437119
0.5691459483809235	0.17930108077104936	0.12109167284705087	0.8789083271529491
0.5736850882735116	0.17936831357452726	0.11397553727305967	0.8860244627269404
0.6073436896252661	0.18006194434799846	0.06120801388363698	0.938791986116363
0.6175348258740249	0.18033938715375875	0.04523108677513313	0.9547689132248669
0.6329227037531799	0.18081719071129562	0.021107083599357243	0.9788929164006428
0.6367606028076718	0.18094734383198477	0.015090302747184812	0.9849096972528152
0.639139491431156	0.18103021096321975	0.011360853036286533	0.9886391469637135

%% de distribuição dos tikers (melhor caso)

Return	Volatility	ITSA4.SA	PETR4.SA
0.040112526964319876	0.21169985611019365	0.9504720486579389	0.04952795134206108
0.0431799294438403	0.21131708884065073	0.9456631966681806	0.05433680333181943
0.07310767509835528	0.2076759064057019	0.8987446392892361	0.10125536071076403
0.0832167557614555	0.2064852143170624	0.8828963529994701	0.11710364700052985
0.11440257581094229	0.20294201629029324	0.8340054774790633	0.16599452252093666
0.1326900384538821	0.20095867323354036	0.8053357148035498	0.19466428519645027
0.15422311088722088	0.19871628100279995	0.7715777195916331	0.22842228040836687
0.15820907392495528	0.19831247611887634	0.7653288147240498	0.2346711852759502
0.1674246640314928	0.19739261067234581	0.7508812783748098	0.2491187216251902
0.17357879054132705	0.1967891129210751	0.7412332834639274	0.2587667165360726
0.18612392853166387	0.19558600632545015	0.7215659224999186	0.2784340775000815
0.1940307396624228	0.1948466642943412	0.7091701952705599	0.29082980472944014
0.19766064983635612	0.19451220392864602	0.7034794843582794	0.29652051564172066
0.1985985402800888	0.19442629717814935	0.7020091274825085	0.2979908725174915
0.2006291982327506	0.19424101828334278	0.698825608657909	0.30117439134209095
0.2193542997208297	0.1925794616849901	0.6694697474200794	0.3305302525799206
0.21961651674795798	0.1925568011821869	0.6690586625099402	0.3309413374900598
0.2828836632918566	0.18759742655912853	0.5698730011644729	0.43012699883552713
0.28922464973801765	0.18715779270345465	0.5599320607459141	0.44006793925408594
0.2910544479567112	0.1870329284934465	0.5570634353002579	0.44293656469974213
0.3063517145549907	0.18602439168307666	0.5330814859440387	0.46691851405596135
0.3071413271743425	0.18597405734816225	0.5318435883283655	0.4681564116716344
0.30800897693865703	0.18591894482196186	0.5304833497149477	0.46951665028505235
0.3100014412725308	0.18579316390087386	0.5273597080864225	0.4726402919135775
0.3360271387592374	0.1842508529881841	0.48655849990478045	0.5134415000952196

Indicador de retorno e volatilidade segundo Markowitz

