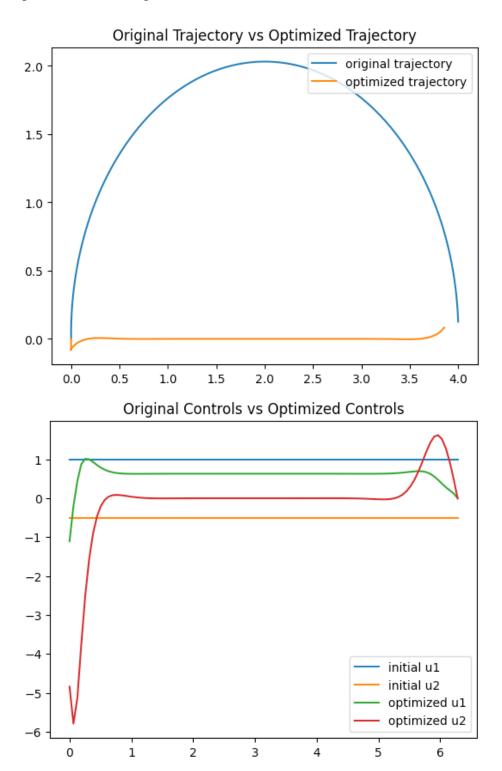
Below are plots of the initial trajectory and optimized trajectory, as well as the original and optimized control signs.



Additionally, the table below shows the printed  $DJ(\xi) \cdot \zeta$  values, illustrating how the decrease with each iteration.

1394.7021855728776 470.385062081771 78.22676934234055 39.49028513638771 2.6633407515093097 1.1644501992367169 0.6129789224268578 0.222965937358589 0.22118298615691973 0.1885252522305469 0.1844141717151828 0.17654633351344112 0.17589678318044916 0.18186557028123007 0.06019921017559801 0.10401204250215446 0.03322427006786262 0.06660110756681356 0.021718018883373585 0.04350796446174673 0.045189691764634166 0.014705180200720014 0.03158345003634036 0.010079597717197361 0.022487816347146496 0.0017771587083719623 0.003984342596287648 0.0012570140250658735 0.0027970711654899567