Dynamic Programming

Assignment X: Inventory Management with State-Dependent Discounting

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Ch. 6 discusses an inventory model with state-dependent discounting

Julia and Python/Numba code can be found in this directory

Your task is to rewrite this code using Python/JAX

- use the same parameters & grid sizes

Solve the model using VFI, OPI and HPI, trying to minimize execution time

1. Which algorithm is fastest?
2. What speed gain to you get over Julia and Python/Numba?

You should submit an executed notebook with outputs included