**Lab: Discrete time Markov chains**

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MOOC: Understanding queues

Python simulations

Week 3: Discrete-time Markov chains

In this lab, we consider the Markov chain of the weather forecast example of the course. We check convergence of the probability π(t) of the chain at time t to a steady state distribution π\*, independently from the initial distribution π(0) of the chain. We solve the load balance equations to get π\*.

The notebook containing the lab of Week 3 is available here: [notebook](https://prod-edxapp.edx-cdn.org/assets/courseware/v1/2da3986fac696fa1d1beeea108aa436f/asset-v1:IMTx+CS101+1T2018+type@asset+block/Week3_Lab_Discrete_Time_Markov_Chains.ipynb)

The pdf version of the lab of Week 3 is available here: [pdf version of the notebook](https://prod-edxapp.edx-cdn.org/assets/courseware/v1/2b4cf3531ffadfbff41440766ea35413/asset-v1:IMTx+CS101+1T2018+type@asset+block/Week3_Lab_Discrete_Time_Markov_Chains.pdf)