

Intro to MATLAB - Exercises

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¹Adapted from QuantEcon Datascience

Exercise: Loan States

- ▶ Loans can have three potential statuses:
 1. Repaying: Payments are being made on loan.
 2. Delinquency: No payments are currently being made, but they might be made in the future.
 3. Default: No payments are currently being made and no more payments will be made in future.
- ▶ Consider a small business loans company that knows the following
 - ▶ If a loan is currently in repayment, then it has an 85% probability of continuing being repaid, a 10% probability of going into delinquency, and a 5% probability of going into default.
 - ▶ If a loan is currently in delinquency, then it has a 25% probability of returning to repayment, a 60% probability of staying delinquent, and a 15% probability of going into default.
 - ▶ If a loan is currently in default, then it remains in default with 100% probability.
- ▶ Imagine that 12 payments are made during the life of a loan, even though this means people who experience delinquency won't be required to repay their remaining balance.