To track: population (num people), food (pounds consumer yearly), water (gallons consumed yearly)

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TO-DO

1. Figure out starting values for water, etc.
2. Using existing data, find variance rates in independant values

* How much does age distribution change year-to-year?
* How much does wealth distribution change year-to-year?
* How much does employment rate change year-to-year?

1. Using existing data, find correlations to predict dependent values

* How does population size influence pounds of food consumed?
* How does age distribution affect amount of food consumed?
* How does wealth distribution affect amount of food consumed?
* How does population size influence gallons of water consumed?
* How does age distribution affect amount of water consumed?

1. Write out functions that, for every “stage” of the simulation, will generate new values for the following variables:

* Age, wealth distribution, job count (random, based on monte carlo method)
* Food (based on previous turn’s values of net pop. size, age dist., wealth dist.)
* Water (based on previous turn’s values of net pop. size, age dist.)
* Electricity (based on previous turn’s values of net pop. size, wealth distribution)

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| Dependent variables | Independent variables |
| * Net population size * Food (based on: net population size, age distribution, wealth distribution) * Water (based on: net population size, age distribution) * Electricity (megawatt-hours) (based on: net population size, wealth distribution) | * Age distribution of population * Wealth Distribution of population * Employment rate |

Notes:

* We weren’t able to find a job count for seattle, so to calculate 2018 jobs in seattle, we multiplied 1.44 million (# jobs in king county) by 0.352 (portion of king county residents who live in seattle) = 506,880‬