Learning Objectives:
- Students will be introduced to variables in Python
- Students will learn how to create variables in Python.
- Students will learn how to declare variables in Python.

Standards:
9-12.CT.5 Modify a function or procedure in a program to perform its computation in a different way over the same inputs, while preserving the result of the overall program.

9-12.CT.9 Systematically test and refine programs using a range of test cases, based on anticipating common errors and user behavior

Resources: Slides

Assessment: Student Discussions, Student Code

Aim: How do we declare variables in Python?

Do Now: Students will complete a turn-and-talk:
- Think back to Javascript:
  - What do you remember about variables?
  - How do they work?
  - What do we use them for?

Mini-lesson: Variables
- Students will be introduced to variables in Python.
- Students will take notes on variable syntax and creation.
  - We will discuss the rules of creating and naming variables.
- Students will also complete a code-along to practice creating variables.
  - num_students = 30
  - num_instructors = 5
  - print "There will be " + str(num_students+num_instructors) + " people in the room."
  - print "There will be " + str(num_students/num_instructors) + " students per instructor."

Task 1: Variable Program
- Students will create a program to practice creating variables.
- They will use their knowledge of naming conventions and data types to complete the task.
- We will then come together to briefly discuss with the whole-class; clarify misconceptions.
- Teacher should circulate during this time!

Summary: Students will be asked to reflect on today's activities with the following question:

- What's wrong with the following line of code?
    - ```
      "grapes" = myFavorite fruitToEat
      ```