

# HW 4

## Reminders/Notes

- The module names are very specific.
- Continue using variables
- Code for readability – when you open this file in a year, you want to understand what you did
- Test – make sure that your testing exercises each and every code block – this is known as “code coverage”

## Docstrings

For this assignment, you need to begin documenting your code using Docstrings. [See pep 257](#)

At a minimum, your docstrings (for each file) should include:

- NAME
  - The module name
- DESCRIPTION
  - A brief Description of what the module does
- Each code block should also have a Docstring describing how the code block is entered and what happens in it

## Functional Requirements

You will be writing 2 Python programs to do the following:

### Tell a Knock-knock joke (knock\_knock.py)

#### Requirements

1. Ask the user “Would you like to hear a knock-knock joke?”
2. If the answer is no,
  - a. respond with “Sorry to hear that. Goodbye.”
3. If the answer is yes, then
  - a. Tell the user “Knock, knock.”
  - b. If the user answers “Who’s there?” then
    - i. respond “Boo”
    - ii. Then, If the user answers “Boo, who” then
      1. respond “Don’t need to cry about it.”

4. If the answer to 3.a isn't "Who's there?" or the answer to 3.b.ii isn't "Boo, who" then (Note: you might want to store a boolean variable for this)
  - a. Reply "Are you sure you know how knock-knock jokes work? Try again."
5. Exit the program
  - a. Once the knock-knock joke is done, say "Thank you for playing. Goodbye."

## Guess the number (guess.py)

### NOTES:

- Integers will be fine for this exercise
- 

### Requirements

- Tell the user "I'm going to pick a number. You have to try and guess the same number that I pick. Guess right and win a prize. What is the highest number I can pick?"
- The user should respond with an integer
  - o Store this in a variable called max\_value
- The python program will now choose a random integer between 1 and the number
  - o Store this in a variable called computer\_choice
- Now, ask the user "What number between 1 and *<the number they gave you>* do you choose?"
  - o Store this in a variable named user\_choice
- Now, if the user guessed the same number as the random number (in other words, computer\_choice is the same as random\_choice) , respond with
  - o "Nice job. You win! You're prize is – the satisfaction of knowing you are an awesome guesser."
- If the answer is different than what is guessed, respond with "Better luck next time." • At the end, say "Thank you for playing."

### Summary

You will also write up a summary (**HW4summary.txt**) of the assignment and answer the following question(s).

1. What were the methods you used to test the code to make sure all of your scenarios worked?
2. What gave you trouble in this assignment?
3. What do you wish you could do differently?

## Turn in

- KnockKnock.py
- Guess.py
- HW4summary.txt