Your Name:	TJ Sipin
Perm #:	3430501

This homework and its due date are posted on the course website: ucsb-cs8.github.io/w20/hwk.
Submit a PDF file of this assignment following the guidelines posted on the website.

h04: Perkovic 3.1 (Python Programs),
3.2 (Execution Control Structures)

0. (5 points) Use the provided homework template (without any blank pages), filling out all requested fields, and correctly submitting a legible electronic document on Gradescope before the due date. By submitting this document you agree that this is your own work and that you have read the policies regarding Academic Integrity: https://studentconduct.sa.ucsb.edu/academic-integrity.

1.1 (3 pts) Section 3.1 discusses a feature of IDLE called "restarting the shell". Can we restart the shell interactively from the window of *the new Python file* (i.e., can you see the "Shell" menu from there)? __no_____
If yes, what menu option do you need to select to restart the shell. _____

If no, what window do you need to switch to?__IDLE_____

1.2 (3 pts) What does restarting the shell do to the already defined variables?

    It clears the variables so that they are no longer defined.

2.1 (2 pts) What does the term Python *module* mean?

    Modules are files ccontaining Python code.

2.2 (2 pts) What two Python modules have you worked with so far? __math and pytest_____

2.3 (2 pts) What command makes Python modules available to your code? __import_____

3. (2 pts) Section 3.1 also discusses the `input()` function, which is used to get input from the user. It indicates that the result of the `input()` function always comes back as a particular data type, no matter what the user types in. What is this data type?
    String

4. (5 pts) On p. 56-57, the textbook suggests using the `eval()` function to convert the result of `input()` from the user if it is going to be used as something other than a string (e.g., as a number, list, etc.). Write down your guess as to why it might potentially be dangerous to use `eval()` in your code.

5. (10 pts) Adapt the example on page 59, to ask the user "`What is your temperature?`" and respond with "`You have a fever!`" if the value is greater than `100.4`. The program should always finish by printing "`Live long and prosper.`" (a Star Trek reference :-)). **Pay attention to and be careful with your indentation!**

```
Temperature = eval(input ("What is your temperature? "))

if Temperature > 100.4:
        print("You have a fever!")
print("Live long and prosper.")
```

6.1 (5 pts) Section 3.2 discusses how to use the range function with a loop so that you can cause a variable to take on a sequence of values—the sample code illustrates this by printing those values. (Later we'll do other things with those sequences of values such as adding them, or multiplying them, or using them to index into a list or string, or to draw things.)

The function call `range(start, end, step)` can be used to iterate over the sequence of integers starting at `start`, using a step size of `step` and ending before `end`. In the space below, show the output of running the following command in IDLE.
```
>>> list(range(2, 17, 5))
```
[2, 7, 12]

6.2 (3 pts) The line above converts the result of the `range()` function into a list. Use the code below to fill in the blanks: *The range starts at* 2____, *uses a step size of* 5____, *and ends before* 17____.

6.3 (3 pts) Write two lines of Python that use a `for` loop with the `range` function to print the values `1, 4, 7, 10, 13, 16`. (Your answer must use a `for` loop with `range()` to get credit).

```
for number in range(1,19,3):
    print(number)
```