Pop Quiz 1  
*September 2018*

1. What is the best definition of computation?

   (a) a calculation via statistical deduction, posterior inference, or sampling.
   
   (b) a calculation via executing a specific operation or set of operations, 
   performed by a well-defined model or function
   
   (c) an arithmetic operation represented by binary via machine language.
   
   (d) a Boolean Logic calculation.

2. Describe in your own words the relation between computation and programming languages:

   Programming languages, like Python, allow us to write expressions so as to perform computations; this is their main purpose. However, computations can be conducted without programming languages, for example, adding numbers with pen and paper.

3. Describe what functions are (e.g., their common properties and how we use them):

   Functions house computations, and they’re defined by their inputs, the exact computations they perform, and their resulting outputs. We use them by providing inputs to them.

4. Circle the item below which is not one of the main, primitive data types in Python:

   (a) Bool
   
   (b) Int
   
   (c) Loop
   
   (d) Float
   
   (e) String

5. What does it mean to **cast** a variable (circle your answer)?

   (a) To convert it from one data type to another one.
   
   (b) To throw a run-time error during the execution of a program.
   
   (c) To create a shadow reference, while leaving the original bits unchanged.
   
   (d) To repair a broken reference to a variable, usually with supportive material of plaster.

6. Using the **input()** function, write code that asks the user for her favorite number and prints to the screen “Dang, your favorite number is ___!” (where ___ is whatever the user had input). If you’re unsure of something, feel free to write a comment in your code with a #.

   ```python
   fav_num = input("What's your favorite number? ")
   print("Dang, your favorite number is " + fav_num + "!")
   ```
7. Other than the content that we will cover in this course, is there anything in particular that you want from this course, and are there any particular mediums that you prefer for learning? For example, I have various in-class activities planned for later lectures, but how do you feel you learn best and do you have any preferences, e.g., you don’t like working in groups, or you’d like me to give more real-time coding examples from my laptop, more/fewer visuals, etc.

I read all of the comments and tallied responses. The vast majority favored more in-class real-time coding examples, so Lecture #5 onwards will include such. The other common theme was being against the idea of group activities.