HW 1 (10 pts)

**Name**: YourName

Write your solution after the question. Show your work (i.e., the relevant python code). An example question has already been filled out for you. **Submit this file to Moodle.**

1. [0 pt] Compute the sum of 8, 9, and 10.

>>> 8 + 9 + 10

27

1. [1/2 pt] Compute the number of seconds in 2 years.
2. [1/2 pt] Compute the number of inches in 3 miles.
3. [1 pt] Compute the number of 3 ft square tiles to cover the floor of a 12 by 12 ft room.
4. [1 pt] Compute the number of handshakes required for each person in a class of 17 to shake hands with all other classmates.
5. [1/2 pt] Compute 1/3 of 36.
6. [1 pt] The Andromeda galaxy is 2.9 million light years away. There are $5.879 ⋅10^{12}$ miles per light year. How many miles away is the Andromeda galaxy?
7. [1 pt] How many years would it take to travel to the Andromeda galaxy at 35 miles per hour?
8. [1 pt] Compute the factorial of 9.
9. [1/2 pt] Which of the following are legal variable names? Write your answer below.

abc123\_

123abc\_

\_abcd123

\_123

1. [1 pt] After all lines are evaluated, what are the values of a, b, c, and d? Label each variable name with its value.



1. [1 pt] What are the values of a and b after Python evaluates each of the following four statements?



1. [1 pt] What is the value of idx after Python evaluates all of the following statements?



Bonus Question:

If it costs 16.75 dollars/hour to rent an exotic animal (say an African Parrot) how much is that per year in Pounds Sterling? Show the dimensional analysis work.