**Exam 1**

**Instructions**

1. Wait until all students have an exam on their desk.
2. Put your name and Identi-key on each page.
3. Count and make sure you have 5 different pages (double-sided)!
4. If there is a box next to the question, put only the output of the program inside the box.
5. All code-related questions are based on Python version 2.7.x
6. Show *only* the output of the code inside the boxes provided when provided.
7. Follow CU-Boulder’s Honor Code.

**DO NOT start**  
until the instructor tells you to!

IMPORTANT: these are just sample questions. You are responsible for all material in lectures 1 – 9 and the three homework assignments. You will not be tested on material specifically from *Think Python*.

**Questions**

1. [9 points] Circle True or False for each of the following:
   1. True or False: If you multiply an integer by a float in Python, the answer will be an integer.
   2. True or False: All values read in from the user are read in as strings.
   3. True or False: An *infinite loop* is when a loop continues to execute the statements inside the loop until the user types “quit” which causes the loop the stop.
2. [8 points] Convert each of the following (non-Python) expressions into Python expressions:
3. a + 3b
4. a ≠ 2 and a ≥ b
5. [9 points] What do the following expressions evaluate to?
   1. 26 % 7 evaluates to:
   2. 7 / 26 evaluates to:
   3. 2 + 3 \* 4 evaluates to:
6. [10 points] What does the following code print?

score = 10

**if** score < 10:

**print** ("NOW")

**if** score > 2:

**print** ("RIGHT")

**elif** score == 10:

**print** ("CHEER")

**else**:

**print** ("TIME")

**print** ("GREAT")

1. [6 points] Write the code to prompt the user for their name, and store the result in a variable named ‘name’.
2. [5 points] Convert the following **for** loop into a **while** loop:

for i in range(10):

print (i)

1. [6 points] Write a loop that prints out the final sum of the numbers   
   between 1 and 30 including the 1 and 30. *If you are not sure how to code it, then write the algorithm for it for partial credit.*
2. [15 points] What does the following code print? Use the underscore \_\_ to designate spaces.

result = 5

print(result)

print("Result is %d: " % result)

sport = "kayaking"

print(sport + sport)

print ("one" + 2)

print ("three", "four")

1. [9 points] What is the output from the following code?

number = 3

while number < 30:

number = number \* 4

print (number)

print (number)

1. [5 points] Write out the code to print whether a number stored in a variable named ‘number’ is even or odd (divisible by 2). Assume that the variable named ‘number’ has already been assigned a numerical value.

1. [10 points] Write the code to find the maximum value between three variables. The three variables are named ‘x’, ‘y’, and ‘z’. Assume these three variables have already been assigned a number. Print out the highest value. You must make use of an if statement.  
   *If you are not sure how to code it, then write the algorithm for it for partial credit.*