

# CS 161 Exercise

## Identifiers and Assignment Statements

Name: \_\_\_\_\_

### Part One

State whether each of the following is a valid identifier (conforms to the rules of Python syntax). State what is wrong with any invalid identifier. Also comment if an identifier is legal but fails to follow conventions.

- 1) 1stPlaceWinner      INVALID—starts with number
- 2) grand\_TOTAL      VALID
- 3) "weeklySales"      INVALID—includes quote marks
- 4) month12Summary      VALID
- 5) employee of the month      INVALID—includes spaces
- 6) \_student#      INVALID—includes pound sign (#)
- 7) ThisWeeksSpecial      VALID—but by convention should not start with uppercase

### Part Two

Write a valid Python identifier for a variable that stores each of the following pieces of information, and state the data type that would be needed for each.

- 1) The first name of a customer.      **customerFirstName**      **string**
- 2) The number of packages in inventory.      **currentInventory**      **int**
- 3) The average score for an entire class.      **classAverage**      **float**
- 4) The letter grade for some student.      **studentGrade**      **string**
- 5) A student's social security number.      **ssn**      **string (or int)**

### Part Three

"Pencil test" this set of instructions and show the resulting output. (Try to figure this out *without* using a computer).

	<u>x</u>	<u>y</u>	<u>z</u>	<u>a</u>	<u>b</u>
x = 10	10				
y = 5		5			
z = 20			20		
a = "Hello"				"Hello"	
b = "10"					"10"
x = z / y	4				
y = y + x		9			
a = a + b + b					
print "a is ", a					
print "b is ", b					
print "x is ", x					
print "y is ", y					

**Output**  
a is Hello1010  
b is 10  
x is 4  
y is 9