CS 202 Final Exam

**Lists**

1) What does this code print?
l = [[1,2],[3,4,5],6]
print(l[3][1])

2) What does this code print?
l = [‘a’, ‘b’, ‘c’, ‘d’, ‘e’, ‘f’]
print(l[3:-1])

3) Write me a small bit of code. It should print YES on time if the word ‘fred’ is in the list ‘names’, and print nothing otherwise. If the word ‘fred’ appears more than once, only print YES once.

4) What does this code print?
a = [1,2,3]
b = [4,5]
c = []
for x in a:
 c.append(x)
c.append(b)
print( c )

**Methods**

1) Write me a method that returns True if both arguments are positive, and False otherwise.
 print(thing(3,4)) → prints a True
 print(thing(-2,4)) → prints a False
 print(thing(0,0)) → prints a False
 x = thing(19,-19)
 print(x) -> prints a False

**Regular Expressions**

1) Which of these bits of text would match with the regex “[ab]c” (Pick zero or more)
 abc abba abracadabra cab back

2) Which regex would match words that are all lower case vowels and nothing else? (pick zero or more)
 aeiou? [a-z] [a-u] [a-u]+ [aeiou] [aeiuo]+ [aeiou]? a?e?i?o?u?

**Control Structures (Loops and If Statements)**

1) What does this code print? Be careful
 temp = 62
 if temp > 60:
 print(“Warm enough”)
 else
 print(“Too cold”)
 if temp == 62
 print(“Just right!”)

2) How many times does this code print?
 for a in range(5):
 for b in range(6):
 print(“Snow in May!”)

**Files**

1) (Yes/No) Assume the file does NOT exist. Would this line of Python throw an error?

 F = open(“missing-file.txt”, “w”)

2) Assume the file does exist. What does the code below count?
 It counts the number of characters in the file
 It counts the number of words in the file
 It counts the number of lines in the file

count = 0
f = open(“file-name.txt”, “r”)
for x in f:
 count += len(x)
print(count)

**DO THESE ON THE COMPUTER. SHOW ME ON THE COMPUTER. FOUR POINTS EACH.**

1) Write me a program that prints the first letter of the second and fifth lines of a file. You make the file.

2) Print the sum of 1+2+3+4+5+6...+999+1000. You must use a loop and math.

3) Consider the file <https://euclid.nmu.edu/~rappleto/Classes/CS202/Examples/ncaa.txt>

You can download it by hand. Write a Python script that tells me how many games did Akron host? Akron hosted a game if “Akron” is the first field of the line.