

CS:1210 (22C:16) Quiz 4 Version (c)

You have 15 minutes to complete this quiz. Please put away your books, notes, and all electronic devices

1. For each of the following expressions, first determine if evaluating it would cause Python to report an error; if so, explain in a sentence what it was about the expression that caused the error. Otherwise, if you think the expression will evaluate in Python in an error-free manner, write down the *value* that the expression evaluates to and its *type*. Assume that the module `sys` has already been imported prior to the evaluation of these expressions. Further, assume that the value of `sys.maxint` is 9223372036854775807.

(a) `(int(math.sqrt(10))-3) or "ok"`

(b) `sys.maxint + 1 - 2`

(c) `not not True and bool(0.0) or not True`

(d) `3 + -2**3 % 4`

(e) `0 and "hi" or 100/0`

Turn over for Problem 2

2. The problem is to write a program that reads a sequence of positive integers and then outputs the percentage of even numbers in the sequence. The user will input 0 to indicate that she is finished inputting her sequence of positive integers. The 0 is not considered part of the sequence that your program needs to process. Here is an example interaction between the user and the program:

```
3
13
6
18
51
99
17
81
97
12
0
The percentage of even integers is: 30.0
```

Note that the numbers 6, 18, and 12 are even and so the input contains 3 out of 10 even numbers. The following partial program solves this problem. Complete the program by filling in the blanks.

```
count = 0
evenCount = 0
while True:
    n = int(raw_input())
    if n == 0:
        -----

    if n%2 == 0:
        -----

    count = count + 1

print "The percentage of even integers is: ", -----
```