

CS21 PRACTICE QUIZ 1, Swarthmore College Fall 2007

1. Define the term *algorithm*.
2. For each of the following expressions, show the value that will be returned by the Python interpreter.
 - (a) $(10 \% 4) + (6 / 4)$
 - (b) $\text{abs}(4 - (20 / 3)) ** 3$
 - (c) $(5.0 / 2.0) + 3.5$
 - (d) `'me' * 3 + 'you' * 2`
3. Write a **for loop** that will print the word 'hello' five times (once per line).
4. Show the output that will be produced when the following function is executed in the Python interpreter.

```
def mystery():  
    answer = 1  
    for i in range(5,2,-1):  
        answer = answer * i  
        print "current answer is", answer  
    print "final answer is", answer
```

5. Write a **function** that will convert a measurement in inches into a measurement in centimeters. One inch is equivalent to 2.54 centimeters. Your function should prompt the user for a value in inches and print the equivalent value in centimeters.

6. For each of the following binary numbers, give its decimal equivalent.

(a) 1001

(b) 1111

(c) 10110