

## CS21 PRACTICE QUIZ 1, Swarthmore College Spring 2008

1. Define the term *algorithm*.
2. For each of the following expressions, show the value that will be returned by the Python interpreter.
  - (a)  $10 \% 4$
  - (b)  $6 / 4$
  - (c)  $\text{abs}(4 - 6) ** 3$
  - (d)  $(5.0 / 2.0) + 3.5$
  - (e)  $10 - 3 * 3$
3. Write a **for loop** that will print the word 'hello' five times (once per line).
4. Trace through the following program by creating a table that shows how the values of **answer** and **i** change. Also show what the final output will be.

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

5. Write a **function** that will create a table showing inches to centimeter conversions. Your table should go from 1 to 12 inches. One inch is equivalent to 2.54 centimeters. You do NOT need to format the data into columns.