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.

   ```python
   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.