Quiz 1

Name: ________________________________

Question 1. Each of the following Python expressions evaluates to some value. For each one, give the resulting value and its type (as one of int, float, str, or list).

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>5/10</td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td>5.0/10</td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td>range(3)</td>
<td></td>
</tr>
<tr>
<td>(d)</td>
<td>&quot;*&quot;*3</td>
<td></td>
</tr>
<tr>
<td>(e)</td>
<td>&quot;hello&quot; + str(42)</td>
<td></td>
</tr>
<tr>
<td>(f)</td>
<td>str(4/3)</td>
<td></td>
</tr>
<tr>
<td>(g)</td>
<td>float(&quot;2&quot;*3)</td>
<td></td>
</tr>
<tr>
<td>(h)</td>
<td>float(5/10)</td>
<td></td>
</tr>
</tbody>
</table>

Question 2. Write a program that asks the user for a string and a number (n), then prints out the string n times. Here’s an example of the running program (user input in bold):

```
string: pony!
number: 5

pony!
pony!
pony!
pony!
pony!
```
Question 3. Write a program that asks the user for a number, then prints out a simple multiplication table (1 to 12) for that number. Here’s an example of the running program (user input in **bold**):

    number? 7

    7 x  1 =  7
    7 x  2 = 14
    7 x  3 = 21
    7 x  4 = 28
    7 x  5 = 35
    7 x  6 = 42
    7 x  7 = 49
    7 x  8 = 56
    7 x  9 = 63
    7 x 10 = 70
    7 x 11 = 77
    7 x 12 = 84

Question 4. Consider the following program with the desired output when the user enters 32:

```python
1 def main():
2    # Fahrenheit to Celsius converter
3    startF = raw_input("starting Fahrenheit temp: ")
4    for F in range(startF,startF+100,10):
5        C = (F - 32)*(5/9)
6        print("%3d F = %3d C" % (F,C))
7 main()
```

When run, the current program does this:

File "f2c.py", line 9
    main()
    ^
SyntaxError: invalid syntax

In addition to the syntax error, there are two other problems with this program. Find the syntax error and the two additional problems, and describe how to correct them.