

22C:16 Quiz 1
Date: Jan 24th, 2012

1. Consider the following program

```
number = int(raw_input("Enter a number: "))
count = 0
while count < number:
    print count*count
    count = count + 2
```

- (a) What output does it produce, given input 10? Use the back of the sheet, if necessary.
- 0
 - 4
 - 16
 - 36
 - 64
- (b) Modify the program by swapping the two statements inside the body of the `while` loop. What output does it produce now, given input 10? Use the back of the sheet, if necessary.
- 4
 - 16
 - 36
 - 64
 - 100
2. For each expression below, specify its type and value. For expression (6), suppose that the user types `10 + 20` in response to the prompt. For expression (7), suppose that the `math` module has been imported.

	Expression	Type	Value
1	<code>171/5</code>	<code>34</code>	<code>int</code>
2	<code>170/(2*5.0)</code>	<code>17.0</code>	<code>float</code>
3	<code>float(17/2)</code>	<code>8.0</code>	<code>float</code>
4	<code>str(17/2.0)</code>	<code>"8.5"</code>	<code>string</code>
5	<code>"hello" + "100"</code>	<code>"hello100"</code>	<code>string</code>
6	<code>"0 + " + raw_input("number?")</code>	<code>"0 + 10 + 20"</code>	<code>string</code>
7	<code>str(math.sqrt(9))</code>	<code>"3.0"</code>	<code>string</code>
8	<code>float(1) + 1</code>	<code>2.0</code>	<code>float</code>
9	<code>int("33")</code>	<code>33</code>	<code>int</code>
10	<code>float("300." + "100")</code>	<code>300.1</code>	<code>float</code>