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 + 2
```

  (a) What output does it produce, given input 10? Use the back of the sheet, if necessary.

```
0
2
4
6
8
```

  (b) What happens if the input is 9? Explain in 1-2 sentences. Use the back of the sheet, if necessary.

```
If the input is 9, this program will run in an infinite loop because count
will never equal number.  Count is incremented by two each iteration from
the starting point of 0 so it will never equal nine and continue adding
two forever.
```

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	10/10.0	1.0	float
2	170/(2*5)	17	int
3	float(17/2)	8.0	float
4	str(17/2.0)	"8.5"	string
5	"hello" + "100"	"hello100"	string
6	"0 + " + raw_input("number?")	"0 + 10 + 20"	string
7	str(math.sqrt(4))	"2.0"	string
8	float(1) + 1	2.0	float
9	int("33")	33	int
10	float("300." + "100")	300.1	float