

22C:16 (CS:1210) Quiz 3

You have 20 minutes to complete this quiz.

1. Suppose that variable x has value 18 and variable y has value 13. Evaluate each of the following boolean expressions.
 - (a) $(x \neq y)$ and $(x < y)$
 - (b) $((x < 15)$ and $(15 > y))$
 - (c) $\text{not}(\text{not}((x \% y) \neq 4))$
 - (d) $((x \neq 18)$ or $(y \neq 13))$
 - (e) $(x == 10)$ or $((x < 10)$ or $(\text{not } (x > 20)))$

2. Write down the output produced by the following program:

```
n = 2
while n <= 6:
    m = 1
    while m <= 10:
        print m * n
        m = m + n
    print "----"
    n = n + 2
```

3. Rewrite the following program so that it does exactly the same thing, but does not use a `break`. The program you write should contain a `while`-loop, have the same variables, have roughly the same length, etc., but it should not have a `break` statement. It should be similar to the one you see below, although you may need to recast things a bit and move some things around.

```
sum = 0
while True:
    n = int(raw_input("Enter a positive integer: "))
    if (n < 0) or (n > 100):
        print "The sum is:", sum
        break

    sum = sum + n
```