## Day 21 -- Concept Questions

Name: $\qquad$ CM: $\qquad$

1. One of your colleagues is having trouble with the following piece of code. It is supposed to print integers and their squares to a file, but it doesn't. It seems to just sit there not doing anything.
```
outputfile = fopen('Day21_conceptquiz.txt','w')
n \(=1\)
while ( n < 100)
    fprint(outputfile,' \%3.0f \%3.0f \(\left.\backslash n^{\prime}, n, n * n\right)\)
    \(\mathrm{n}=\mathrm{n}\) * n ;
end
fclose(outputfile)
```

What is the problem with this code? You don't have to fix it; just state the problem.
2. Consider the following program:

```
clc
clear variables
x = 13;
dx = 13;
count = 1;
while x < 100
    count = count + 1;
    x = x + dx;
    fprintf('Multiple #%3.0f is: %3.0f \n',count,x)
end
```

This code is supposed to print all the multiples of 13 that are less than 100, but it prints 104 as shown below. It is not supposed to print anything over 100. Modify the code to fix this problem.

```
Command Window
    Multiple # 2 is: 26
    Multiple # 3 is: 39
    Multiple # 4 is: 52
    Multiple # 5 is: 65
    Multiple # 6 is: 78
    Multiple # 7 is: 91
    Multiple # 8 is: 104
fx >>>
```

