COSC 2P95 – Lab Exercise 2 – Loops and Conditions

Lab Exercises are uploaded via the Sakai page.
Since there's only a single .cpp file, there's really no need to zip it before submission.

Write a single program, stored in a source file with the name of your username, followed by `.cpp`.
e.g. `ef99ab.cpp`

This program will perform multiple tasks within a single execution, and has the following requirements:

- Your **name** and **student number** must be within a *comment* at the top of the page
- The first task will consist of a loop:
  - Print a modification of the *digits* in your *student number*, according to the following:
    - Even digit values are divided by 2
    - Odd digit values are multiplied by 2 (but if it doubles to more than 10, only show the 1's digit)
    - e.g. 2135754 → 1260402
    - (You're welcome to assume student numbers are specifically seven digits long)
  - Print all digits on the same line. Follow it with two newlines (i.e. leave a single blank afterward)
- Use `cin` to receive a *count*
  - You will use this count to express how many monkeys you have, subject to the following:
    - If you have more than one million monkeys, then you will express it as an appropriate decimal value, followed by the word “million” before 'monkeys'
    - The singular of “monkeys” is “monkey”
    - You may not use a single '`if`' statement (or loop) for this *entire* portion of the exercise
      - (Do you get the hint here**?**)
- The following code is clearly incorrect. Fix it so the logic matches the provided texts

```
int choice1,choice2;
std::cout<<"Do you have room for tiramisu? (1:yes, 0:no)"; std::cin>>choice1;
std::cout<<"Do you actually like tiramisu? (1:yes, 0:no)"; std::cin>>choice2;
if (choice1)
	if (choice2)
		std::cout<<"Ready, willing, and able to enjoy tiramisu!\n";
else
	std::cout<<"It doesn't matter if I like it or not, I don't have room for dessert!\n";
```

(Note that you're changing the code to match the text; not vice versa)

For this exercise, you will be evaluated not only based on producing the output, but also the reasonableness/appropriateness of your solution.
For example, can you think of a simple means of testing whether a value is even or odd? There are a few options, but some are better than others.

As stated above, you'll be using a single submitted source file to satisfy all of the requirements.
Simply submit that source file through Sakai.

One possible sample execution (assuming student number of 2135754):

```
1260402
How many monkeys do I have? 1234567
I have 1.23457 million monkeys
Do you have room for tiramisu? (1:yes, 0:no)0
Do you actually like tiramisu? (1:yes, 0:no)1
It doesn't matter if I like it or not, I don't have room for dessert!
```