Answer each question to the best of your ability. The last question is a bonus.

1. True or False: the fastest way to multiply two big numbers M, N together is to add M to itself (N - 1) times. $\boxed{1}$

   False

2. You found some code on Github that implements an algorithm that you need. How do you check that the code is correct? Give two answers. $\boxed{1}$

   Various answers

3. Write a function called `mypoly` that takes in two arguments, a and b, and returns $a^2 + b + 1$. $\boxed{1}$

   def mypoly(a,b):
     return a ** 2 + b + 1

4. What's the result of running this code? Step through the function to find the answer. $\boxed{1}$

```
def the_pyramid(level):
    line = [1]
    for i in range(level):
       line.append(line[-1] * 2)
    return line

print(the_pyramid(3))
```

   [1, 2, 4, 8]

5. This code refuses to run. What is wrong with this code? $\boxed{1}$

```
def bad_code():
   for i in range(5):
      y += i
   return y
y = 0
print(bad_code())
```

   y = 0 has to be defined inside the function

6. (bonus) Write a function `tictoc` that loops over the number 1 to 100. If should print tic and toc in succession if the number if divisible by 3 or the number otherwise. The initial printout of this function should be:

`2`

```
1
2
tic
4
5
toc
7
8
tic
10
```

```python
def tictoc():
    for i in range(1, 101:
        if i%3!= 0:
            print(i)
        else:
            if i % 2 == 1:
                print("tic")
            else:
                print("toc")
```