CS1 - Exercise 1

1. Write down what each of the following pieces of code prints out. If there is an error in the code, describe the error.

(a)
```
a = 4
if a = 4:
   a + 1
print(a)
```

(b)
```
count = 0
x = 3
while count < 5:
   count = count - 1
   x + 2
print(x)
```

(c)
```
def get_2():
   return 2

def get_3():
   return 3

print(get2 + get3)
```

(d)
```
x = 10
if x % 2 == 0:
   x + 5
elif x % 5 == 0:
   x - 1
else:
   x - 12
print(x)
```

(e)
```
a = 5
x = a
a = a + 3
print(x, a)
```

2. Write two different examples of a while loop that never terminates.

3. (a) Write a function called select_emotion() that takes an integer, x, as its input, and returns:

       "ok" when x is 0
       "happy" when x is positive
       "sad" when x is negative

(b) Use your newly created function within the parameters of a print() function. Print out the following sentence "I am feeling happy today."