Name: _____

Section:_____

1. (1 pt) What was the point of showing the Excel chart demonstration in class?

2. (2 pts) Write a **while** loop that prints the numbers starting at 500 **down to** 100**. Count down by 10's.** Make sure to print both the numbers 500 and 100.

3. (2 pts) Write a function that prints the name of your favorite liquid beverage.

4. (1 pt) Write code that calls the function in the prior problem.

5. (3 pts) Write a function that will take in three numbers, and return how many are the same. For example, passing in 5, 5, and 5 should return a three. Passing in 5, 4, 4 should return 2. And passing in 3, 4, 5 would return 0.

6. (2 pts) Write code that will call the function in the prior problem and print the result. Make up the numbers that are passed in.

7. (3 pts) What does this code print?

```
def b():
    print ("b start")
    c()
    print ("b end")

def a():
    print ("a start")
    c()
    b()
    print ("a end")

def c():
    print ("c")

a()
```

8. (2 pts) What does this code print?

```
def a(x):
    print("A1",x)
    x=x+5
    print("A2",x)
    return x

def b(x):
    print("B1",x)
    a(x)
    print("B2",x)

x=5
print("G1",x)
b(x)
print("G2",x)
```

9. (1 pt) What is the value of x?

```
def sum(a,b):

    print (a+b)

x = sum(11,22)
```

10. (3 pts) Write a function that will take in an array, and print each element individually:

11. (5 pts) Write a function that will take in an array, and return the sum.

12. (3 pts) Take a look at the two blocks of code below. Explain or write out how their output will be different:

```
# Block 1
for i in range(3):
    for j in range(3):
        print ("*",end="")
        print ()

# Block 2
for i in range(3):
    for j in range(3):
        print ("*",end="")
     print ()
```

13. (1 pt) What does this code print?

```
x=[[3,[4,5]],6,7,8,[9,10]]

print (len(x))
```

14. (4 pts) This code should count the number of times a number appears in an array, in this case 2. There are 5 things wrong with this code. Find at least 4:

```
def countNumbers(list,key):

    count=0

    for i in range( list ):

        if list  ==  key:

            count += 1

            return count


myList=[3,4,32,4,23,4,5,3,2,2,43,56,7,54,43,2,4]

c=countNumbers(list,2)

print(count)
```

15. (2 pts) What two things are wrong with this code? Explain.

```
def printCircleAreaChart(start,end):
    for r in range(start, end):

        def circleArea(radius):
            area=3.14159*radius**2
            print (area)

        area = circleArea(r)
        print (r, area)

printCircleAreaChart(10,30)
```

16. What would this code snippet print to the screen?

```
print("A\\\\B\nC\"D")
```

17. What would the following code print?

```
print ("00"+"11")

print (00+11)
```