

1. `log (n)`
2. `C`
3. `C`
4. True. If you return more than one item but only assign it to one variable, a tuple will automatically be created.
5.
 - a. `{ 4 , 5 }`
 - b. `{ 1 , 2 , 3 , 4 , 5 , 6 , 7 }`
6. `print(myString[9:17])`
7. False. A stack is Last In First Out, and a queue is First In First Out (just like a stack of dishes and a line at a checkout counter)
8. `A`
9. True. A dictionary can't have duplicate keys, but can have duplicate values
10. Orange. Remember, any number besides 0 evaluates to True!
11. Your final list should look like: `[3 , 1 , 1 , 1 , 0 , 0 , 0 , 2]`
12.
 - a. Read: This will allow you to view/read the contents of the file, but if you try to make a change you'll get an error.
 - b. Write: This will allow you to write/add to a file, but will overwrite any information that was already in the file
 - c. Append: this allows you to write/add to a file, but won't overwrite any information already in it.
13.
 - 1
 - 3
 - 5
14. `[1 , 2 , "Cheese" , "Sour Cream" , "Cheese" , "Sour Cream" , "Cheese"]`
15. False. Certain data types (like lists) are passed by reference and so the changes will persist whether you return it or not.
16.
 - 1) `()`
 - 2) `**`
 - 3) `*` , `/` , `%`
 - 4) `+` , `-`
17. The list must be sorted
18.


```
set1 = set([1, 2, 4, 5, 6, 8])
set1.remove(1)
set1.remove(5)
```

19. Here's how I did it, but if you did it differently just type up your code and see if it works!

```
def search(num , list1):
    if len(list1)==0:
        return False
    elif list1[0] == num:
        return True
    return search(num, list1[1:])
```

20. Here's how I did it, but if you did it differently just type up your code and see if it works!

```
def printR(num):
    if num == 0:
        return
    else:
        print(num)
        printR(num-1)
```

21. `print(101 - i)`

22. Here's how I did it, but if you did it differently just type up your code and see if it works!

```
matrix = []
for i in range(5):
    temp = []
    for j in range(5):
        temp.append("X")
    matrix.append(temp)
```

23. Here's how I did it, but if you did it differently just type up your code and see if it works!

```
def duplicate(myList):
    for i in myList:
        count = 0
        for j in myList:
            if j == i:
                count += 1
        if count > 1:
            return True
    return False
```

24.



Just study hard and don't stress. I believe in you!!

