

Frequency Pattern

***** THIS SHOULD BE SOLVED USING DICTIONARIES! YOU MAY NOT CHECK IF THE ARRAYS ARE EQUAL. THIS METHOD DOES WORK IN PYTHON, BUT NOT IN JAVASCRIPT. THE EXERCISE IS TO PRACTICE USING DICTIONARIES AND FREQUENCY PATTERNS *****

Exercise #1

Problem: Given two lists of numbers, write a function to find out if two lists have the same frequency of digits.

Examples

```
a = [1,2,3,4]
b = [1,4,5,6]
c = [1,4,4,2]
d = [1,4,3,2]
e = [1,2,3,4,5]

some_function(a, a)  **prints True**
some_function(a, b)  **prints False**
some_function(a, c)  **prints False**
some_function(a, d)  **prints True**
some_function(e, a)  **prints False**
```

Exercise #2

Problem: Given two Lists write a function to determine if each value in our first List contains a corresponding value to the second power in the second List.

Examples

```
a = [1,2,3,4]
b = [1,4,9,16]
c = [1,4,5,6]
d = [1,4,4,2]
e = [1,16,9,4]
f = [1,2,3,4,5]

some_function(a, b)  ** prints True  **
some_function(a, c)  ** prints False **
some_function(a, d)  ** prints False **
some_function(a, e)  ** prints True  **
some_function(f, a)  ** prints False **
```

Exercise #3

Problem: Create a function that accepts two strings and checks if they are valid anagrams.

Examples

```
a = "pie"
b = "eip"
c = "pies"
d = "pwe"

some_function(a,a) ** prints True **
some_function(a,b) ** prints True **
some_function(a,c) ** prints False **
some_function(a,d) ** prints false **
```

Exercise #4

Problem: Given a string return the letter that is used the most in the string.

Examples

```
a = "hello"
b = "sprinkle slurps"
c = "car cat cuts crinckles"

some_function(a) ** prints l **
some_function(b) ** prints s **
some_function(c) ** prints c **
```