DATA PROBLEMS

d = dict(

    foo = ['a', 'a', 'a', 'a', 'b', 'b', 'c', 'c', 'c'],

    bar = ['b', 'b', 'b', 'c', 'c', 'c', 'd', 'd', 'd'],

    baz = ['c', 'c', 'c', 'd', 'd', 'd', 'e', 'a', 'd'],

    X = [1, 2, 3, 4, 5, 6, 7, 8, 9],

    Y = [1, 2, 3, 4, 5, 6, 7, 8, 9]

)

**Problem:**

Group the data by foo, bar, and baz. For each group, get the:

- minimum value for X

- maximum value for Y

**Solution:**

Group –

Minimum value of X for different groups

{a, b, c} – 1

{c, d} – 4

{b, c, d} – 5

{c, d, a} – 8

{d}- 9

{e}-7

Maximum value of Y for different groups

{a, b, c} – 3

{c, d}-4

{b, c, d}-6

{c, d, a}- 8

{d}-9

{e}-7

**2.**

**Data:**

import numpy as np

d = dict(

    foo = np.random.random(10000),

    bar = np.random.random(10000),

    X = np.random.random(10000),

    Y = np.random.random(10000)

)

**Problem:**

If foo is greater than bar, pick X, else pick Y

**Solution:**

import random

if max(d['foo']) > max(d['bar']) :

print(random.choice(d['X']))

else:

print(random.choice(d['Y']))