Coding Club Problem Set

Sorted in order of difficulty

**Coffee Beans**

How it works?

* Given an input string of any length if the word Coffee or Beans occurs return the word Coffee Beans
* If above statement is not true return 'sleepy'
* Must work for capital or lowercase letters
* Words will be separated with a space (' ')

Example input "I like coffee", "Beans on toast", "coffee beans", "I only drink tea"

Example output 'Coffee Beans', 'Coffee Beans', 'Coffee Beans', 'sleepy'

**Palindrome**

- How it works?

* Given a word (containing higher or lower case letters) if you reversed the word would it stay the same (the word is a palindrome)

Example input 'Bob' 'Sally' 'Anna' 'wow'

Example output True False True True

You could improve this example by allowing the input of phrases and sentences! (e.g "Taco Cat" -> True)

**Pythagoras**

- How it works?

* a^2 + b^2 = c^2
* Given a tuple of 2 values (a, b)
* Find c and return (a, b, c)

Example input (3, 4)

Example output (3, 4, 5)

**FizzBuzz**

How it works?

* If it is divisable by 3 say Fizz
* If it is divisable by 5 say Buzz
* If both of the above statements are true say FizzBuzz

Example output 1, 2, Fizz, 4, Buzz, Fizz, 7, 8, Fizz, Buzz, 11, Fizz, 13, 14, FizzBuzz

**Spongebob**

How it works?

* Get the last digit of any number
* If it is even say sponge
* If it is divisible by 3 say bob
* If both of the above statements are true say spongebob
* If the number is equal to 9 ignore all the statements above and say patrick

Example output 10, 11, Sponge, Bob, Sponge, 15, SpongeBob, 17, Sponge, Patrick, 20

**Prime Three**

How it works?

* Given an input of a list of numbers find all the numbers that meet the following criteria
* A prime number
* Contains the number 3
* All numbers found that meet this criteria must be then sorted by how many times the number three occurs (numbers with the same number of threes should be sorted according to there numerical value)

Example input [2, 3, 10, 55, 37, 323, 533, 333, 22, 103, 57]

Example output [3, 37, 103]

*Sample Answers can be found after try outs at https://github.com/zacreid/CodingClubProblemSet*