**Python Challenge 1**

1. Write a function which returns array of numbers in a sequence. For each number in the sequence: if it is divisible by 3 return "Glasgow", if it is divisible by 5 return "JPMorgan", if it is divisible by 15 return "JPMorgan Glasgow"

Example:

getSequence(16)

"1 2 Glasgow 4 JPMorgan Glasgow 7 8 Glasgow JPMorgan 11 Glasgow 13 14 JPMorgan Glasgow 16 "

2. Write a function which checks if a number is prime

Example:

isPrime(4)

False

isPrime(5)

True

3. Write a function which checks if a number is perfect. A perfect number is one which is equal to the sum of its divisors excluding the number itself.

Example:

isPerfect(5)

False

isPerfect(6)

True

4. Write a function which returns all files with a given extension from a folder and its subfolders recursively.

Example:

FolderA:

                test.txt

                test.xml

                SubFolder:

                                test.txt

                                test.xml

                                SubSubFolder:

                                                test.txt

                                                test.xml

getFiles('FolderA', '.txt')

FolderA/test.txt

FolderA/SubFolder/test.txt

FolderA/SubFolder/SubSubFolder/test.txt