1 - FizzBuzzPop

Count from 1 to 100.

However, for multiples of 3, replace the number with Fizz. Replace multiples of 5 with Buzz, and replace multiples of 7 with Pop.

If the number is a multiple of more than one of these numbers, then output both words.

For example if it was from 1 to 10: 1 2 Fizz 4 Buzz Fizz Pop 8 FizzBuzz

Output the result as a string with spaces in between each element of the sequence

2 - Morse decode

Given a sequence of "." and "-". Print the secret code as output. There will be one space in-between characters and 3 spaces between words.

The input is on a single line, with the morse code as a string.

Output the secret code on a single line. All characters should be in uppercase. Spaces between words should be represented by a single space.

For example:

Input:

>... --- --- ...

Output:

>SOS SOS

| 7 | Letter | Morse |
|---|--------|-------|
| | A | *. |
| | В | *** |
| | С | .*.* |
| | D | .** |
| - | E | * |
| | F | **_* |
| | G | * |
| | Н | **** |
| | I | ** |
| • | J | * |
| | K | .*. |
| | L | *.** |
| | M | = |
| | N | .* |
| | 0 | |
| | P | ** |
| | Q | *. |
| | R | *_* |
| | S | *** |
| | T | ÷: |
| | U | **. |
| | V | ***- |
| | W | * |
| | X | .**. |
| | Y | .* |
| | Z | _** |

3 - Square coordinates

Given 4 cartesian coordinates that represent a square on a cartesian plane, output the number of points with integer coordinates that lie within, or on the sides of the square.

The input is given in a 2x4 2D array denoting the x y coordinates of each point that makes up the square in a clockwise direction.

Output a single integer denoting the number of points.

For example:

Input:

>[[1,1],[1,-1],[-1,-1],[-1,1]]

Output:

>9 (4 vertices, 4 on the edges, 1 within)

