

If Practice Problems

Problem 1

Write a function `spanish-number-in-english` that takes in a Spanish word for a number, and produces the number in English.

For example, `spanish-number-in-english("uno")` outputs `"one"`. Make it work for the first five numbers.

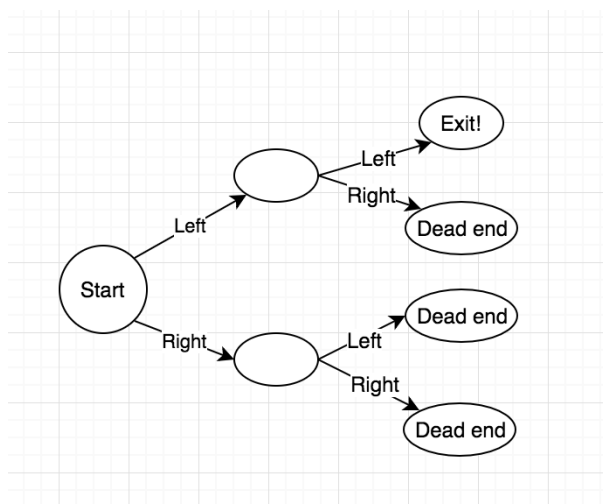
Questions:

- What are some disadvantages of your code?
- What if I wanted to input both the number in Spanish and the language I wanted to translate to? For instance, `translate-spanish-number("uno", "spanish")` returns `"uno"`, while `translate-spanish-number("uno", "portuguese")` returns `"um"`. How would you structure your code in that case?

Problem 2

I'm going through a maze. There are two turns I need to make before I come to either the exit or a dead end.

For example, in the maze below, I have to go left twice to get to the exit.



Write a function `maze-walk` that takes two directions as inputs, and returns `true` if you got to the exit and `false` if you got to a dead end. Make up your own maze if you want to.

For example, `maze-walk("left", "right")` returns `false`, and `maze-walk("left", "left")` returns `true`.

Questions:

- What are some of the disadvantages of your code?
- Try to write your code without using an `if` expression.
- (To push your thinking) How would you deal with a maze with more complex structure? For instance, more intersections, more than two turns at each intersection, or going one way leads you to the exit faster than the others?
- (To push your thinking) Is there a structure to the code that you think could be generalized somehow?