EdgeTech Programming Screen

We ask candidates to program as part of the hiring process. Our engineers will review submissions to decide whether to continue to the next step. We expect candidates to spend a few hours total on this.

Instructions

Solutions can be in any language.

Please submit only files necessary to compile (if using a compiled language), no executables please.

Provide a short readme per solution describing design tradeoffs, assumptions, and how to compile and run.

Good luck!

Problem 1

Design and implement a family tree data structure to help answer questions like:

- Does Jim have any uncles?
- Is Sally's grandfather alive?
- Who are Kristen's children?

Problem 2

Given a number N, print a "special" NxN multiplication table where any number that contains a 5 is replaced with the letter 'k'.

```
Example input N = 2
Example output
1 2
2 4
Example input N = 5
Example output
   2
      3
         4
            k
2
   4
      6
         8
            10
3
   6
      9
         12 k
     12 16 20
   8
k 10 k 20 k
```