My brother, who wants me to invite him for a visit, is a bit idiosyncratic. I normally make him omelets for breakfast. I have a fixed number of ingredients in my refrigerator, and he has six rules about what an omelet may contain. He also has a metarule. It goes like this:

> The recipes on two successive days must differ by precisely one ingredient. Moreover, no recipe may be repeated.

My brother is a screenwriter in Hollywood. As a joke, he says: "Pretend this is a reality show, and that you will win $1 million dollars for each day of my stay".

The full algorithm to compute the maximal run is somewhat complicated. But I have two heuristic ideas that _might_ generate long runs. One is to exploit Gray codes. The other is to guess the starting seed of a long run.

I have started a Haskell program in order to play along with my brother's joke, and it is your job to finish it.