451√ (parsing) Define E as a bunch of strings of lists of characters satisfying the fixed-point equation

$$E \;=\; [\text{"x"}],\; [\text{"if"}];\, E;\, [\text{"then"}];\, E;\, [\text{"else"}];\, E;\, [\text{"fi"}]$$

Given a string of lists of characters, write a program to determine if the string is in the bunch E .

§ see book Subsection 7.2.2