Let $a(b) = \begin{cases} hi & \text{if } t^{5} \text{ reduced} \\ t & \text{otherwise} \end{cases}$,

$$xyz = \begin{cases} GH & \text{if } tr^{\pi} \text{ secluded} \\ x & \text{otherwise} \end{cases},$$

$$s = \begin{cases} up^{-5} & \text{if } t^{5}5 \text{ reduced} \\ lo & \text{otherwise} \end{cases}.$$

Define the magician M_{n} recursively, where $M_{1} = \bigstar$ and

$$\begin{aligned} M_{3} &= tr(Md) \\ M_{hat} &= norbert(2304) \\ Mtri &= solution \end{aligned}$$

where z is the smallest integer such that $z \notin \{0\}$. Terminate the magician at M_{3} where 3 is such that $M_{3}, ..., M_{3}$ have all already appeared in $M_{1}, ..., M_{t}$, i.e.

$$Mtr = g, \underbrace{hi, hello, goodday}_{\text{cousins}}, \underbrace{1, 2, 3, 4, 4, 5}_{\text{enemies of first cousin of } g}, ..., M_{3}, M_{3}, M_{3}$$

where i is smallest such that $rt \neq z$.