Source task and conventions

Answer the source's three-star question for a sports page in S.

Conventional solution and proof

Use deterministic links $0 \to 0$, $1 \to 0$, $2 \to 1$, seed set $S = \{0, 1\}$ and $\alpha = 1/5$. Under uniform teleportation on all three pages, the balance equations give $\pi_2 = 1/15$, $\pi_1 = 1/15 + (4/5)(1/15) = 3/25$, and $\pi_0 = 61/75$. Under uniform teleportation on S, there is no stationary mass at page 2, so $\pi_{s,2} = 0$, $\pi_{s,1} = 1/10$, and $\pi_{s,0} = 9/10$. Thus

$$\boxed{\pi_s(1) = 1/10 < 3/25 = \pi(1), \qquad 1 \in S.}$$

All values are nonnegative, sum to one and satisfy the respective equations. Removing teleportation to page 2 removes inflow that had supported sports page 1. The assertion is therefore false even when the sports teleport distribution is uniform.