$$c: \underbrace{\begin{array}{c} o = \operatorname{GET}(k') \\ \text{rf, vis, ar} \end{array}}_{\text{ff, vis, ar}} \underbrace{\begin{array}{c} g = \operatorname{GET}(k) \\ \text{rf, vis, ar} \end{array}}_{\text{fg}}$$

$$j \neq c: \underbrace{\begin{array}{c} p' = \operatorname{PUT}(k, \underline{\hspace{0.5cm}}) \\ \text{hg} \end{array}}_{\text{fg}}$$

$$i: \underbrace{\begin{array}{c} p = \operatorname{PUT}(k, \underline{\hspace{0.5cm}}) \\ \text{put}(k, \underline{\hspace{0.5cm}}) \end{array}}_{\text{fg}}$$