



ADT Philosopher

Sort philo

Use fork

Ops

p0: → philo

p: philo → philo

lftF: philo → fork

rghtF: philo → fork

philoOf : fork → philo

Axioms

$p(p(p_0)) = p_0$

$lftF(p_0) = f_0$

$lftF(p(ph)) = f(lftF(ph))$

$rghtF(p_0) = f(f_0)$

$rghtF(p(ph)) = f(rghtF(ph))$

$philOf(f_0) = p_0$

$philOf(f(fk)) = p(philOf(fk))$

With ph : philo, fk : fork

ADT Fork

Sort fork

Ops

f0: → fork

f: fork → fork

Axioms

$f(f(f_0)) = f_0$

With fk : fork