

```
-- | A set that supports adding elements, or removing it definitively
-- | Removed elements are kept around in a special *tombstone* set.
data TwoPhaseSet t
  = TwoPhaseSet (GSet.GSet t) (GSet.GSet t)

insert :: forall t. Hashable t => t -> TwoPhaseSet t -> TwoPhaseSet t
insert value (TwoPhaseSet a b) = TwoPhaseSet (GSet.insert value a) b

remove :: forall t. Hashable t => t -> TwoPhaseSet t -> TwoPhaseSet t
remove value (TwoPhaseSet a b) = TwoPhaseSet a $ GSet.insert value b

query :: forall t. Hashable t => TwoPhaseSet t -> Set.HashSet t
query (TwoPhaseSet a b) = Set.difference (GSet.query a) (GSet.query b)
```

Demo time!