

The G-Counter

From a programmer's perspective

```
newtype GCounter
    = GCounter (Map.HashMap ReplicaId Int)

instance gCounterStateBasedCRDT :: StateBasedCRDT GCounter where
    merge (GCounter a) (GCounter b) = GCounter $ Map.unionWith max a b

query :: GCounter → Int
query (GCounter map) = sum map

increment :: ReplicaId → GCounter → GCounter
increment replica (GCounter map) = GCounter $ Map.insertWith add replica 1 map
```



Use case: hits / like buttons like the clap button on Medium
Page views counters