Synchronized HashMap

* does object level locking,
* so that the whole map object is locked by one thread at a time,
* and thereby performance decreases.
* Fail fast iterator

Concurrent HashMap

* introduced in JDK5,
* does bucket level locking,
* so that other threads can access and modify other buckets of the same HashMap,
* and thereby significant increase in performance.
* And importantly, other threads can modify other buckets of the Map object while one thread is reading, and ConcurrentModificationException will not be thrown.
* And thereby it has a fail-safe iterator.