**Consistent data:**

Operations commit or fail in their entirety(atomic)

操作的提交或者失败都是整体的（原子性）

Transactions never observe or result in inconsistent data(consistent)

事务不会导致不一致的数据

Uncommitted transactions are isolated from each other(isolate)

未提交的事务相互之间是隔离的

Once a transaction is committed it is permanent(durable)

一个事务的提交是永久性

**Highly available:**

Every request should succeed and receive a response

所有请求都必须成功的或者回复

**Fault-tolerance:**

When some nodes crash or some communication links fail, it is important that the service still perform as expected

当一些节点宕机或者网络连接失败，服务仍然能够perform as expected

定理1

It is impossible in the asynchronous network model to implement a read/write data object that guarantees the following properties:

●Availability

●Atomic consistency

在一个异步网络模型中是不可能实现读写请求达到下面两点要求的：

●可用性

●一致性

反证法证明之。