* **Desiderable properties of Transactions**
* Transactions should posses several properties, often called the ACID properties; the should be enforced by the concurrency control and recovery methods of the DBMS. The following are the ACID properties:
* **Atomicity**. A transaction is an atomic unit of processing; it should either be performed in its entirety or not performed at all.
* **Consistency Preservation**. A transaction should be consistency preserving, meaning that if it is completely executed from beginning to end without interference from other transactions, it should take the database from one consistent state to another.
* **Isolation**. A transaction should appear as though it is being executed in isolation from other transactions, even though many transactions are executing concurrently. That is, the execution of a transaction should not be interfered with by any other transaction executing concurrently.
* **Durability or permanency**. The changes applied to the database by a committed transaction must persist in the database. These changes must not be lost because of any failure.