**Hibernate**

Diff btwn get and load

1. get() loads the data as soon as it’s called whereas load() returns a proxy object and loads data only when it’s actually required, so load() is better because it support lazy loading.
2. Since load() throws exception when data is not found, we should use it only when we know data exists.
3. We should use get() when we want to make sure data exists in the database.

**First level Cache**

Hibernate first level cache is associated with the Session object. Hibernate first level cache is enabled by default and there is no way to disable it. However hibernate provides methods through which we can delete selected objects from the cache or clear the cache completely.  
Any object cached in a session will not be visible to other sessions and when the session is closed, all the cached objects will also be lost.

**Different states of bean**

1. **Transient**: When an object is never persisted or associated with any session, it’s in transient state. Transient instances may be made persistent by calling save(), persist() or saveOrUpdate(). Persistent instances may be made transient by calling delete().
2. **Persistent**: When an object is associated with a unique session, it’s in persistent state. Any instance returned by a get() or load() method is persistent.
3. **Detached**: When an object is previously persistent but not associated with any session, it’s in detached state. Detached instances may be made persistent by calling update(), saveOrUpdate(), lock() or replicate(). The state of a transient or detached instance may also be made persistent as a new persistent instance by calling merge().

**saveOrUpdate() does the following:**

* if the object is already persistent in this session, do nothing
* if another object associated with the session has the same identifier, throw an exception
* if the object has no identifier property, save() it
* if the object's identifier has the value assigned to a newly instantiated object, save() it
* if the object is versioned (by a <version> or <timestamp>), and the version property value is the same value assigned to a newly instantiated object, save() it
* otherwise update() the object

**and merge() is very different:**

* if there is a persistent instance with the same identifier currently associated with the session, copy the state of the given object onto the persistent instance
* if there is no persistent instance currently associated with the session, try to load it from the database, or create a new persistent instance
* the persistent instance is returned
* the given instance does not become associated with the session, it remains detached