# Data Base

1. Commit and rollback

INSERT INTO dept VALUES (60,'ECOSYSTEMS','YELLOWSTONE');Une image contenant texte, table

Description générée automatiquement

ROLLBACK;

Une image contenant texte, table

Description générée automatiquement

INSERT INTO dept VALUES (60,'ECOSYSTEMS','YELLOWSTONE');

COMMIT;

ROLLBACK;

Une image contenant table

Description générée automatiquement

When the **auto commit** is disable, if you make some **modifications** in the Database, you can cancel them using ROLLBACK. If you want to save those **modifications** and not be able to cancel them using the method ROLLBACK, you have to commit your changes using the method COMMIT.

1. Client Failure

INSERT INTO dept VALUES (60,'ECOSYSTEMS','YELLOWSTONE'); Une image contenant table

Description générée automatiquement

(close connection then reopen connection)

Une image contenant texte, table

Description générée automatiquement

INSERT INTO dept VALUES (60,'ECOSYSTEMS','YELLOWSTONE');

COMMIT;

(close connection then reopen connection)

Une image contenant table

Description générée automatiquement

If the **connection is close** before the modifications have been **committed** using the function COMMIT, all modification will be lost. But if modifications have been committed before the connection is closed, they will be saved.

1. Transaction Isolation

|  |  |
| --- | --- |
| transaction\_isolation | REPEATABLE-READ |

If there is no commit the modifications are visible only by the connection where they have been done. We can see this by using two different connections at the same time.

1. Isolation Levels

Only the connection where the transaction isolation is set to read uncommitted is able to access to modifications from other connection that are not committed yet. For the other connection they don't have access to modifications which have not been committed on other connection.

1. Isolation Levels - Continued

Instructions cannot read data that has been modified but not yet committed by other transactions. No other transaction can modify data that has been read by the active transaction until the active transaction has completed. Other transactions cannot insert new rows with key values included in the group of keys read by instructions of the active transaction, until the active transaction has finished.