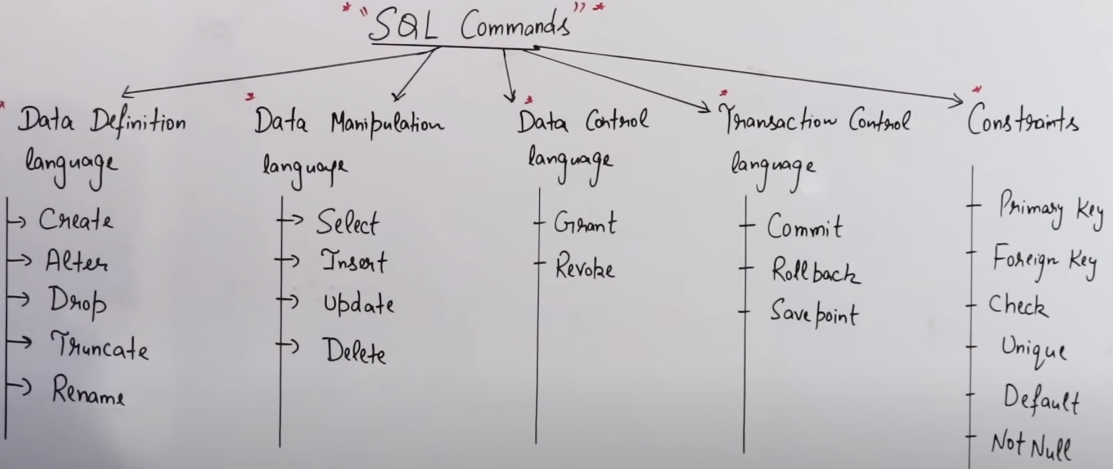
**MYSQL COMPLETE PRACTICLE**

****

**A screen shot of a computer

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create nit db – use nit db –

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create student table with column ( name, id is not null and also ID will be the primary key, address, marks) – for describe the table use desc

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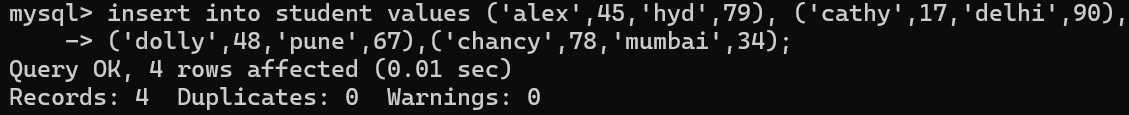
Once table created then we need insert the value to the table 2 way – secure way & insecure way

1st query is secure way & 2nd query is insecure way 🡪 **(INSERT QUERY)**

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User can also insert multiple value in direct way 🡪



Data stored inside the table & you wanted to see the table then we will use **(SELECT QUERY)**

A screenshot of a computer program

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User need to see the record **WHERE** id =12 & 3 type of select statement

Select the entire table || select the column || select the raw by condition or WHERE clause

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Description automatically generated

Once you make ID as primary key you can’t insert any value & it will be always unique. ID column never duplicate because we make id as primary key

A computer screen shot of a number

Description automatically generated

User want to update wherever you find address as Mumbai want to modify Chennai then (**UPDATE)**

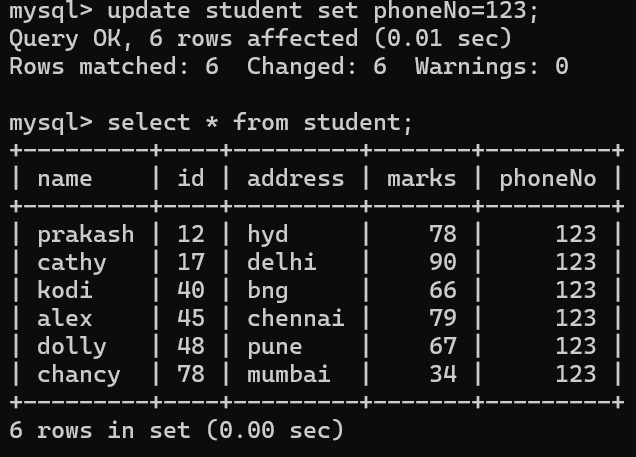
A computer screen shot of a black screen

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If user want to add any column in existing table 🡪 **(ALTER)** but everything is added with null

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User want to change specific phoneNo then you need to write the condition

A screen shot of a computer

Description automatically generated

Want to change the column type –

A screenshot of a computer program

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User can drop the column name from the table as wellA screen shot of a computer

Description automatically generated

DELATE ANY DATA – DML command & Changes any structure – DDL COMMAND

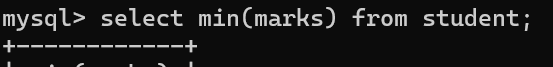
A screenshot of a computer

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Lets introduce to sql functions 🡪

A screen shot of a computer program

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A screenshot of a computer

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Wild card character 🡪

Student name which start with a then you need to use wild card character

Pull out the records of student name which start with a (‘a%’) & names which end with y then’%y)

A screenshot of a computer

Description automatically generated

Pull out the records where second alphabet is ‘a’ then use 2nd wildcard

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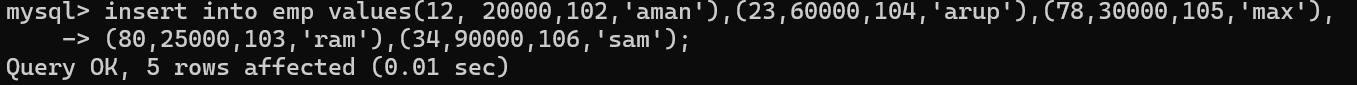
Pull out the records where second last alphabet is ‘s’ then use below query

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Description automatically generated

Lets create another table to make joins –





A screen shot of a black and white screen

Description automatically generated

Now user has 2 table under nit database || **Innerjoin** – it will display the common records

A screenshot of a computer

Description automatically generated

LEFT JOIN (LEFT OUTER JOIN)🡪

A screenshot of a computer

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RIGHT JOIN (RIGHT OUTER JOIN)🡪

A screen shot of a computer screen

Description automatically generated

CROSS JOIN 🡪

A diagram of a cross-join

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A screenshot of a computer

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A black and white screen with white text

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A diagram of a comparison between two circles

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A black screen with white text

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**SQL TRANSACTION(COMMIT, ROLLBACK, SAVEPOINT) 🡪**

Always use START query for sql transaction

Create another student1 table & use below query for this.





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Below query user delat hari

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Due to some mistake you enter wrong query and delated the records that’s why we will do ROLLBACK. If you delated any records from table once use rollback it will give original table.

ROLLBACK will act link undo (ctrl+z)

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A screen shot of a computer program

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Once user define COMMIT & then ROLLBACK will never work

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Description automatically generated

Lets run below query without commit and records are removed but ROLLBACK is not working

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ROLLBACK IS NOT WORKING WHY . THAT’S WHY WE NEED TO WRITE 1ST IS start TRANSACTION

Once user mention START TRANSACTION THEN ROLLBACK WILL WORK

When user mention ROLLBACK will work.

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Let’s introduce to savepoint 🡪 for that again we will start the transaction

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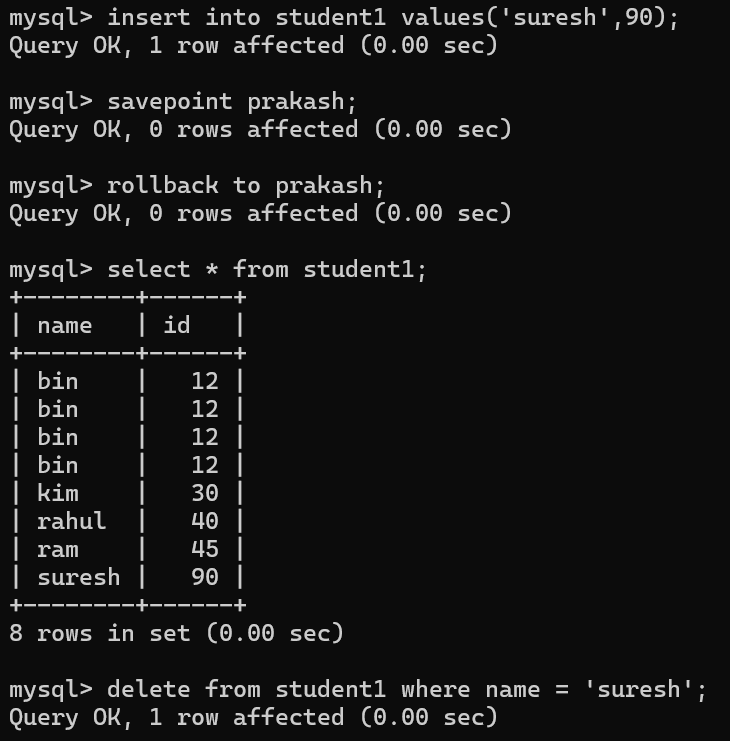
Above query start the transaction and insert value ram and then savepoint to kamal.

After savepoint kamal then add ravi value & save point to prakash. Once you roll back to kamal then you cannot able to see the ravi value

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Lets take another example of rollback & savepoint



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**LETS UNDERSTAND DDL COMMAND 🡪**

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Create command will create the table

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Alter command will modify the data, delate the data

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Using alter command user can change the primary key as well.

Refer to below query.

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Alter command also help to rename the table name

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Description automatically generated

TRUNCATE command will act like clear the value from table but table will be display

A screenshot of a computer program

Description automatically generated

DROP command will delate the entire table with value

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**PRIMARY KEY 🡪**

Primary keys serve as unique identifiers for each row in a database table. Foreign keys link data in one table to the data in another table.

This is 1way to create as primary key

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2nd way to create primary key as🡪

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Description automatically generated

How to create primary key to multiple column let see below query

A screen shot of a computer

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User already created table but forget to assign primary key then use alter command

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A screenshot of a computer program

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Remove primary key

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**FOREIGN KEY**

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Let’s create another table for reference

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LETS CREATE FOREIGN KEY FROM EXISTING TABLE;

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**SQL JOINS – LEFT JOIN , RIGHT JOIN & CROSS JOIN**

SQL join is used to combine rows from two or more table

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INNER JOIN 🡪

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LEFT JOIN 🡪

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RIGHT JOIN🡪

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CROSS JOIN 🡪

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**GRANT & REVOKE 🡪 ( DO NOT WORK THIS)**

In SQL, GRANT and REVOKE are commands used to manage **permissions** (or **privileges**) on database objects like tables, views, procedures, and more. These commands are used to give (grant) or remove (revoke) access to users or roles for performing certain actions (such as SELECT, INSERT, UPDATE, DELETE) on the database.

* **GRANT**: Used to give permissions to users or roles on specific database objects.
* **REVOKE**: Used to remove permissions that were previously granted.

These commands are essential for **managing access control** and **security** in a database system, ensuring that only authorized users can perform certain actions.

A diagram of a database object

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