**QUERY BASICS**

*SELECT*

* SELECT column1, column2, ...

FROM tablename;

* SELECT \* FROM tablename;

INSERT

* INSERT INTO tablename (column1, column2, column3, ...)

VALUES (value1, value2, value3, ...);

* INSERT INTO tablename

VALUES (value1, value2, value3, ...);

DELETE

* DELETE FROM tablename WHERE condition;

UPDATE

* UPDATE tablename

SET column1 = value1, column2 = value2, ...

WHERE condition;

WHERE

* SELECT column1, column2, ...

FROM tablename

WHERE condition;

**QUERY FILTERING**

OPERATORS

AND

SELECT column1, column2, ...

FROM table\_name

WHERE condition1 AND condition2 AND condition3 ...;

OR

SELECT column1, column2, ...

FROM table\_name

WHERE condition1 OR condition2 OR condition3 ...;

NOT

SELECT column1, column2, ...

FROM table\_name

WHERE NOT condition;

ORDER BY

SELECT column1, column2, ...

FROM table\_name

ORDER BY column1, column2, ... ASC|DESC;

LIKE

SELECT column1, column2, ...

FROM table\_name

WHERE column LIKE pattern;

IN

SELECT column\_name(s)

FROM table\_name

WHERE column\_name IN (value1, value2, ...);

BETWEEN

SELECT column\_name(s) FROM table\_name

WHERE column\_name BETWEEN value1 AND value2;

JOIN

SELECT column\_name(s)

FROM table1 JOIN table2

ON table1.column\_name = table2.column\_name;

UNION

SELECT column\_name(s) FROM table1

UNION

SELECT column\_name(s) FROM table2;

GROUP BY

SELECT column\_name(s)

FROM table\_name

WHERE condition

GROUP BY column\_name(s)

HAVING

SELECT column\_name(s)

FROM table\_name

WHERE condition

GROUP BY column\_name(s)

HAVING condition

ORDER BY column\_name(s);

CASE

CASE

WHEN condition1 THEN result1

WHEN condition2 THEN result2

WHEN conditionN THEN resultN

ELSE result

END;

DISTINCT

SELECT DISTINCT column1, column2, ...

FROM table\_name;

EXISTS

SELECT column\_name(s)

FROM table\_name

WHERE EXISTS

(SELECT column\_name FROM table\_name WHERE condition);

ANY

SELECT column\_name(s)

FROM table\_name

WHERE column\_name operator ANY

(SELECT column\_name

FROM table\_name

WHERE condition);

ALL

SELECT ALL column\_name(s)

FROM table\_name

WHERE condition / (query);

IF-NULL

SELECT first\_name, IFNULL(allergies,'none') as allergies

FROM patients

NULL

SELECT column\_names

FROM table\_name

WHERE column\_name IS NULL;

NOT NULL

SELECT column\_names

FROM table\_name

WHERE column\_name IS NOT NULL;

ALIAS

SELECT column\_name AS alias\_name

FROM table\_name; {for column}

SELECT column\_name(s)

FROM table\_name AS alias\_name; {for table}

**FUNCTIONS**

AGGREGATE

COUNT

SELECT COUNT(column\_name)

FROM table\_name

WHERE condition;

AVERAGE

SELECT AVG(column\_name)

FROM table\_name

WHERE condition;

SUM

SELECT SUM(column\_name)

FROM table\_name

WHERE condition

MAX

SELECT MAX(column\_name)

FROM table\_name

WHERE condition;

MIN

SELECT MIN(column\_name)

FROM table\_name

WHERE condition;

STRING

CONCAT

CONCAT(expression1, expression2, expression3,...)

LEN

SELECT column\_name, LEN() AS length\_of\_col\_name

FROM table\_name;

UPPER

SELECT column\_name, UPPER(column\_name) AS uppercase\_column

FROM table\_name;

LOWER

SELECT column\_name, LOWER(column\_name) AS lowercase\_column

FROM table\_name;

DATE

CURRENT TIMESTAMP

SELECT CURRENT\_TIMESTAMP;

YEAR

SELECT YEAR(date);

MONTH

SELECT MONTH(date);

DAY

SELECT DAY(date);

**TABLES**

CREATE TABLE

CREATE TABLE table\_name (

column1 datatype,

column2 datatype,

column3 datatype,

.... );

Copy Of table :

CREATE TABLE new\_table\_name AS

SELECT column1, column2,...

FROM existing\_table\_name ;

DROP TABLE

DROP TABLE table\_name;

ALTER TABLE

ALTER TABLE table\_name

ADD column\_name datatype;

CONSTRAINS

CREATE TABLE table\_name (

column1 datatype constraint,

column2 datatype constraint,

column3 datatype constraint,

.... );

NOT NULL , UNIQUE , PRIMARY KEY , FOREIGN KEY , CHECK , DEFAULT