INSTALLING MYSQL:

**sudo apt-get install mysql-server**

start/stop/restart/check status

**ubuntu 16**

**/etc/init.d/mysql start**

**ubuntu 18**

**service mysqld start**

**service mysqld status**

**service mysqld stop**

**service mysqld restart**

**sudo /etc/init.d/mysql restart**

Configuring MYSQL:

**MySQL includes a security script to change some of the less secure default options for things like remote root logins and sample users.**

**sudo mysql\_secure\_installation**

**Create Database and User Credentials:**

Sudo mysql -u root -p

System password

Root password

create database demo;

CREATE USER 'test' IDENTIFIED BY 'test@123';

GRANT ALL PRIVILEGES ON demo.\* TO 'test'@'%';

FLUSH PRIVILEGES;

Use demo;

**Create & Load Table:**

CREATE TABLE pet (name VARCHAR(20), owner VARCHAR(20), species VARCHAR(20), sex CHAR(1), birth DATE, death DATE);

INSERT INTO pet VALUES ('Puffball','Diane','hamster','f','1999-03-30',NULL);

**Keep your pet.txt in this location to load :**

LOAD DATA LOCAL INFILE '/home/skiganesh/mysqldumps/loaddata' INTO TABLE pet;

UPDATE pet SET birth = '1989-08-31' WHERE name = 'Bowser';

SELECT \* FROM pet WHERE birth >= '1998-1-1';

SELECT \* FROM pet WHERE species = 'dog' AND sex = 'f';

SELECT \* FROM pet WHERE species = 'snake' OR species = 'bird';

SELECT DISTINCT owner FROM pet;

SELECT name, birth FROM pet ORDER BY birth;

SELECT name, birth FROM pet ORDER BY birth DESC;

SELECT name, birth, CURDATE(), TIMESTAMPDIFF(YEAR,birth,CURDATE()) AS age FROM pet;

SELECT name, birth, CURDATE(), TIMESTAMPDIFF(YEAR,birth,CURDATE()) AS age FROM pet ORDER BY age;

SELECT name, birth, death, TIMESTAMPDIFF(YEAR,birth,death) AS age FROM pet WHERE death IS NOT NULL ORDER BY age;

SELECT name, birth FROM pet WHERE MONTH(birth) = 5;

SELECT name, birth FROM pet WHERE MONTH(birth) = MONTH(DATE\_ADD(CURDATE(),INTERVAL 1 MONTH));

**Pattern Matching:**

SELECT \* FROM pet WHERE name LIKE 'b%';

SELECT \* FROM pet WHERE name LIKE '\_\_\_\_\_';

SELECT \* FROM pet WHERE REGEXP\_LIKE(name, '^b');

SELECT COUNT(1) FROM pet;

SELECT owner, COUNT(1) FROM pet GROUP BY owner;

SELECT species, sex, COUNT(1) FROM pet GROUP BY species, sex;

SELECT species, sex, COUNT(\*) FROM pet WHERE species = 'dog' OR species = 'cat' GROUP BY species, sex;

**Dump Creation:**

sudo mysqldump -u test --databases demo -p > demo.sql

or

sudo mysqldump --no-tablespaces -u test --databases demo -p > demo.sql

**Dump Restore:**

sudo mysql < demo.sql

**Joins:**

Create table district ( id INT NOT NULL AUTO\_INCREMENT, name varchar(150) NOT NULL,PRIMARY KEY (id));

insert into district(name)values('Ariyalur');

insert into district(name)values('Perambalur');

insert into district(name)values('Chengalpattu');

insert into district(name)values('Chennai');

insert into district(name)values('Coimbatore');

insert into district(name)values('Cuddalore');

insert into district(name)values('Dharmapuri');

insert into district(name)values('Dindugul');

insert into district(name)values('Erode');

insert into district(name)values('Kallakurichi');

Create table product( id INT NOT NULL AUTO\_INCREMENT, name varchar(150) NOT NULL,PRIMARY KEY (id));

insert into product(name) values ('Colgate ToothPaste');

insert into product(name) values ('Pepsodent ToothPaste');

insert into product(name) values ('CloseUp ToothPaste');

insert into product(name) values ('Rin washing powder');

insert into product(name) values ('Ariel washing powder');

insert into product(name) values ('Surf washing powder');

insert into product(name) values ('Lifebuoy hand wash');

insert into product(name) values ('Detol hand wash');

insert into product(name) values ('Himalaya hand wash');

insert into product(name) values ('Savlon hand wash');

Create table sales (id int NOT NULL AUTO\_INCREMENT, storename varCHAR(150) NOT NULL,product\_id int,amount double,sales\_date timestamp ,district\_id int, PRIMARY KEY (id),foreign key(district\_id) references district(id),foreign key(product\_id) references product(id));

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Viswam Super Market',4,8000.00,'2021-04-05 05:40:00',3);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Mano Super Market',4,8000.00,'2021-04-05 08:40:00',4);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Prabu Super Market',4,3000.00,'2021-04-05 11:40:00',5);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Prabu Super Market',8,2000.00,'2021-04-05 11:40:00',3);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Mano Super Market',8,7000.00,'2021-04-05 08:40:00',4);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Viswam Super Market',8,1000.00,'2021-04-05 10:40:00',5);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Viswam Super Market',3,5000.00,'2021-03-05 10:40:00',6);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Mano Super Market',3,2000.00,'2021-03-05 08:40:00',7);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Prabu Super Market',3,8000.00,'2021-03-05 12:40:00',8);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Prabu Super Market',7,4500.00,'2021-02-05 12:40:00',9);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Mano Super Market',7,8000.00,'2021-03-05 08:40:00',10);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Mano Super Market',7,8000.00,'2021-02-05 08:40:00',10);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Viswam Super Market',7,9000.00,'2021-02-05 10:40:00',10);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Viswam Super Market',6,6800.00,'2021-02-05 10:40:00',3);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Mano Super Market',6,3500.00,'2021-02-05 08:40:00',4);

insert into sales(storename,product\_id,amount,sales\_date,district\_id)values('Prabu Super Market',6,4500.00,'2021-02-05 12:40:00',5);

**To find unique stores in different district using inner join:**

select s.storename as 'StoreName',d.name as 'DistrictName' from sales s join district d on s.district\_id=d.id order by s.storename;

select s.storename as 'StoreName',d.name as 'DistrictName' from sales s join district d on s.district\_id=d.id group by s.storename,d.name order by s.storename;

**To find districts without any sales using left join:**

select d.name as 'DistrictName', s.storename as 'StoreName' from district d left join sales s on s.district\_id=d.id group by s.storename,d.name order by s.storename;

select \* From district where id in (1,2);

select \* From sales where district\_id in (1,2);

**To find products which are not sold in any store:**

select p.name as 'ProductName',s.storename as 'StoreName' from sales s right join product p on p.id=s.product\_id group by p.name,s.storename order by p.name;

select p.name as 'ProductName',s.storename as 'StoreName' from sales s outer join product p on p.id=s.product\_id group by p.name,s.storename order by p.name;

select \* From product where id in (5,1,9,2,10);

select \* From sales where product\_id in (5,1,9,2,10);