Create database :

The `CREATE DATABASE` statement is used to create a new SQL database.

Syntax:

CREATE DATABASE *databasename*;

E.g

CREATE DATABASE BankDetails;

The `DROP DATABASE` statement is used to drop an existing SQL database.

Syntax:

DROP DATABASE *databasename*;

E.g

DROP DATABASE BankDetails;

Create table:

The `CREATE TABLE` statement is used to create a new table in a database.

Syntax

CREATE TABLE *table_name* (

column1 datatype,

column2 datatype,

column3 datatype,

....

);

E.g

create table if not exists bank_details(

age int,

job varchar(30),

marital varchar(30),

education varchar(30),

`default` varchar(30),

balance int);

A copy of an existing table can also be created using `CREATE TABLE`.

Syntax

```
CREATE TABLE new_table_name AS
   SELECT column1, column2,...
   FROM existing_table_name
   WHERE ....;
```

```
CREATE TABLE AccountsInfo AS
SELECT customername, contactname
FROM customers;
```

DROP TABLE:

The `DROP TABLE` statement is used to delete an existing table

Syntax

DROP TABLE table_name;

DROP TABLE student;

ALTER TABLE:

The `ALTER TABLE` statement allows you to modify an existing table's structure, including adding, modifying, or removing columns, adding or dropping indexes, changing the table name, and more. You can use multiple clauses in a single `ALTER TABLE` statement.

ALTER TABLE users

ADD COLUMN email VARCHAR(255);

ALTER TABLE students

MODIFY COLUMN age INT UNSIGNED;

ALTER TABLE example

CHANGE COLUMN old_name new_name INT;

ALTER TABLE products

DROP COLUMN description;

ALTER TABLE orders

ADD PRIMARY KEY (order_id);

ALTER TABLE old_table

RENAME TO new_table;

Use this dataset to perform above operations

https://archive.ics.uci.edu/ml/datasets/bank+marketing

https://archive.ics.uci.edu/ml/machine-learning-databases/00222/

https://docs.google.com/spreadsheets/d/1PihBy0shGRpgWOA_KTkkWZOE0L2wuw-F0mAE1bicifI/edit?usp=sharing

show databases

create database if not exists ineuron_fsda

use ineuron_fsda

```
create table if not exists bank_details(

age int,

job varchar(30),

marital varchar(30),

education varchar(30),

`default` varchar(30),

balance int ,

housing varchar(30),

loan varchar(30) ,

contact varchar(30),

`day` int,

`month` varchar(30) ,

duration int ,

campaign int,

pdays int ,

previous int ,

poutcome varchar(30) ,

y varchar(30))


select * from bank_details


insert into bank_details
values(58,"management","married","tertiary","no",2143,"yes","no","unknown",5,"may",261,1,-
1,0,"unknown","no")


insert into bank_details values

(44,"technician","single","secondary","no",29,"yes","no","unknown",5,"may",151,1,-1,0,"unknown","no"),
```

(33,"entrepreneur","married","secondary","no",2,"yes","yes","unknown",5,"may",76,1,-1,0,"unknown","no"),

(47,"blue-collar","married","unknown","no",1506,"yes","no","unknown",5,"may",92,1,-1,0,"unknown","no"),

(33,"unknown","single","unknown","no",1,"no","no","unknown",5,"may",198,1,-1,0,"unknown","no"),

(35,"management","married","tertiary","no",231,"yes","no","unknown",5,"may",139,1,-1,0,"unknown","no"),

(28,"management","single","tertiary","no",447,"yes","yes","unknown",5,"may",217,1,-1,0,"unknown","no"),

(42,"entrepreneur","divorced","tertiary","yes",2,"yes","no","unknown",5,"may",380,1,-1,0,"unknown","no"),

(58,"retired","married","primary","no",121,"yes","no","unknown",5,"may",50,1,-1,0,"unknown","no"),

(43,"technician","single","secondary","no",593,"yes","no","unknown",5,"may",55,1,-1,0,"unknown","no"),

(41,"admin.","divorced","secondary","no",270,"yes","no","unknown",5,"may",222,1,-1,0,"unknown","no"),

(29,"admin.","single","secondary","no",390,"yes","no","unknown",5,"may",137,1,-1,0,"unknown","no"),

(53,"technician","married","secondary","no",6,"yes","no","unknown",5,"may",517,1,-1,0,"unknown","no"),

(58,"technician","married","unknown","no",71,"yes","no","unknown",5,"may",71,1,-1,0,"unknown","no"),

(57,"services","married","secondary","no",162,"yes","no","unknown",5,"may",174,1,-1,0,"unknown","no"),

(51,"retired","married","primary","no",229,"yes","no","unknown",5,"may",353,1,-1,0,"unknown","no"),

(45,"admin.","single","unknown","no",13,"yes","no","unknown",5,"may",98,1,-1,0,"unknown","no"),

(57,"blue-collar","married","primary","no",52,"yes","no","unknown",5,"may",38,1,-1,0,"unknown","no"),

(60,"retired","married","primary","no",60,"yes","no","unknown",5,"may",219,1,-1,0,"unknown","no"),

(33,"services","married","secondary","no",0,"yes","no","unknown",5,"may",54,1,-1,0,"unknown","no"),

(28,"blue-collar","married","secondary","no",723,"yes","yes","unknown",5,"may",262,1,-1,0,"unknown","no"),

(56,"management","married","tertiary","no",779,"yes","no","unknown",5,"may",164,1,-1,0,"unknown","no"),

(32,"blue-collar","single","primary","no",23,"yes","yes","unknown",5,"may",160,1,-1,0,"unknown","no"),

(25,"services","married","secondary","no",50,"yes","no","unknown",5,"may",342,1,-1,0,"unknown","no"),

(40,"retired","married","primary","no",0,"yes","yes","unknown",5,"may",181,1,-1,0,"unknown","no"),

(44,"admin.","married","secondary","no",-372,"yes","no","unknown",5,"may",172,1,-1,0,"unknown","no"),

(39,"management","single","tertiary","no",255,"yes","no","unknown",5,"may",296,1,-1,0,"unknown","no"),

(52,"entrepreneur","married","secondary","no",113,"yes","yes","unknown",5,"may",127,1,-
1,0,"unknown","no"),

(46,"management","single","secondary","no",-246,"yes","no","unknown",5,"may",255,2,-1,0,"unknown","no"),

(36,"technician","single","secondary","no",265,"yes","yes","unknown",5,"may",348,1,-1,0,"unknown","no"),

(57,"technician","married","secondary","no",839,"no","yes","unknown",5,"may",225,1,-1,0,"unknown","no"),

(49,"management","married","tertiary","no",378,"yes","no","unknown",5,"may",230,1,-1,0,"unknown","no"),

(60,"admin.","married","secondary","no",39,"yes","yes","unknown",5,"may",208,1,-1,0,"unknown","no"),

(59,"blue-collar","married","secondary","no",0,"yes","no","unknown",5,"may",226,1,-1,0,"unknown","no"),

(51,"management","married","tertiary","no",10635,"yes","no","unknown",5,"may",336,1,-1,0,"unknown","no"),

(57,"technician","divorced","secondary","no",63,"yes","no","unknown",5,"may",242,1,-1,0,"unknown","no"),

(25,"blue-collar","married","secondary","no",-7,"yes","no","unknown",5,"may",365,1,-1,0,"unknown","no"),

(53,"technician","married","secondary","no",-3,"no","no","unknown",5,"may",1666,1,-1,0,"unknown","no"),

(36,"admin.","divorced","secondary","no",506,"yes","no","unknown",5,"may",577,1,-1,0,"unknown","no"),

(37,"admin.","single","secondary","no",0,"yes","no","unknown",5,"may",137,1,-1,0,"unknown","no"),

(44,"services","divorced","secondary","no",2586,"yes","no","unknown",5,"may",160,1,-1,0,"unknown","no"),

(50,"management","married","secondary","no",49,"yes","no","unknown",5,"may",180,2,-1,0,"unknown","no"),

(60,"blue-collar","married","unknown","no",104,"yes","no","unknown",5,"may",22,1,-1,0,"unknown","no"),

(54,"retired","married","secondary","no",529,"yes","no","unknown",5,"may",1492,1,-1,0,"unknown","no"),

(58,"retired","married","unknown","no",96,"yes","no","unknown",5,"may",616,1,-1,0,"unknown","no"),

(36,"admin.","single","primary","no",-171,"yes","no","unknown",5,"may",242,1,-1,0,"unknown","no"),

(58,"self-employed","married","tertiary","no",-364,"yes","no","unknown",5,"may",355,1,-1,0,"unknown","no"),

(44,"technician","married","secondary","no",0,"yes","no","unknown",5,"may",225,2,-1,0,"unknown","no"),

(55,"technician","divorced","secondary","no",0,"no","no","unknown",5,"may",160,1,-1,0,"unknown","no"),

(29,"management","single","tertiary","no",0,"yes","no","unknown",5,"may",363,1,-1,0,"unknown","no"),

(54,"blue-collar","married","secondary","no",1291,"yes","no","unknown",5,"may",266,1,-1,0,"unknown","no"),

(48,"management","divorced","tertiary","no",-244,"yes","no","unknown",5,"may",253,1,-1,0,"unknown","no"),

(32,"management","married","tertiary","no",0,"yes","no","unknown",5,"may",179,1,-1,0,"unknown","no"),

(42,"admin.","single","secondary","no",-76,"yes","no","unknown",5,"may",787,1,-1,0,"unknown","no"),

(24,"technician","single","secondary","no",-103,"yes","yes","unknown",5,"may",145,1,-1,0,"unknown","no"),

(38,"entrepreneur","single","tertiary","no",243,"no","yes","unknown",5,"may",174,1,-1,0,"unknown","no"),

(38,"management","single","tertiary","no",424,"yes","no","unknown",5,"may",104,1,-1,0,"unknown","no"),

(47,"blue-collar","married","unknown","no",306,"yes","no","unknown",5,"may",13,1,-1,0,"unknown","no"),

(40,"blue-collar","single","unknown","no",24,"yes","no","unknown",5,"may",185,1,-1,0,"unknown","no"),

(46,"services","married","primary","no",179,"yes","no","unknown",5,"may",1778,1,-1,0,"unknown","no"),

(32,"admin.","married","tertiary","no",0,"yes","no","unknown",5,"may",138,1,-1,0,"unknown","no"),

(53,"technician","divorced","secondary","no",989,"yes","no","unknown",5,"may",812,1,-1,0,"unknown","no"),

(57,"blue-collar","married","primary","no",249,"yes","no","unknown",5,"may",164,1,-1,0,"unknown","no"),

(33,"services","married","secondary","no",790,"yes","no","unknown",5,"may",391,1,-1,0,"unknown","no"),

(49,"blue-collar","married","unknown","no",154,"yes","no","unknown",5,"may",357,1,-1,0,"unknown","no"),

(51,"management","married","tertiary","no",6530,"yes","no","unknown",5,"may",91,1,-1,0,"unknown","no"),

(60,"retired","married","tertiary","no",100,"no","no","unknown",5,"may",528,1,-1,0,"unknown","no"),

(59,"management","divorced","tertiary","no",59,"yes","no","unknown",5,"may",273,1,-1,0,"unknown","no"),

(55,"technician","married","secondary","no",1205,"yes","no","unknown",5,"may",158,2,-1,0,"unknown","no"),

(35,"blue-collar","single","secondary","no",12223,"yes","yes","unknown",5,"may",177,1,-1,0,"unknown","no"),

(57,"blue-collar","married","secondary","no",5935,"yes","yes","unknown",5,"may",258,1,-1,0,"unknown","no"),

(31,"services","married","secondary","no",25,"yes","yes","unknown",5,"may",172,1,-1,0,"unknown","no"),

(54,"management","married","secondary","no",282,"yes","yes","unknown",5,"may",154,1,-
1,0,"unknown","no"),

(55,"blue-collar","married","primary","no",23,"yes","no","unknown",5,"may",291,1,-1,0,"unknown","no"),

(43,"technician","married","secondary","no",1937,"yes","no","unknown",5,"may",181,1,-1,0,"unknown","no"),

(53,"technician","married","secondary","no",384,"yes","no","unknown",5,"may",176,1,-1,0,"unknown","no"),

(44,"blue-collar","married","secondary","no",582,"no","yes","unknown",5,"may",211,1,-1,0,"unknown","no"),

(55,"services","divorced","secondary","no",91,"no","no","unknown",5,"may",349,1,-1,0,"unknown","no"),

(49,"services","divorced","secondary","no",0,"yes","yes","unknown",5,"may",272,1,-1,0,"unknown","no"),

(55,"services","divorced","secondary","yes",1,"yes","no","unknown",5,"may",208,1,-1,0,"unknown","no"),

(45,"admin.","single","secondary","no",206,"yes","no","unknown",5,"may",193,1,-1,0,"unknown","no"),

(47,"services","divorced","secondary","no",164,"no","no","unknown",5,"may",212,1,-1,0,"unknown","no"),

(42,"technician","single","secondary","no",690,"yes","no","unknown",5,"may",20,1,-1,0,"unknown","no"),

(59,"admin.","married","secondary","no",2343,"yes","no","unknown",5,"may",1042,1,-1,0,"unknown","yes"),

(46,"self-employed","married","tertiary","no",137,"yes","yes","unknown",5,"may",246,1,-1,0,"unknown","no"),

(51,"blue-collar","married","primary","no",173,"yes","no","unknown",5,"may",529,2,-1,0,"unknown","no"),

(56,"admin.","married","secondary","no",45,"no","no","unknown",5,"may",1467,1,-1,0,"unknown","yes"),

(41,"technician","married","secondary","no",1270,"yes","no","unknown",5,"may",1389,1,-1,0,"unknown","yes"),

(46,"management","divorced","secondary","no",16,"yes","yes","unknown",5,"may",188,2,-1,0,"unknown","no"),

(57,"retired","married","secondary","no",486,"yes","no","unknown",5,"may",180,2,-1,0,"unknown","no"),

(42,"management","single","secondary","no",50,"no","no","unknown",5,"may",48,1,-1,0,"unknown","no"),

(30,"technician","married","secondary","no",152,"yes","yes","unknown",5,"may",213,2,-1,0,"unknown","no"),

(60,"admin.","married","secondary","no",290,"yes","no","unknown",5,"may",583,1,-1,0,"unknown","no")

```
select count(*) from bank_details
```

```
select * from bank_details
```

```
select age , loan , job from bank_details
```

```
select `default` from bank_details
```

```
select * from bank_details limit 10
```

```
select * from bank_details where age = 33
```

```
select * from bank_details where age = 60
```

```
select * from bank_details where age = 60 and job = 'retired'
```

```
select * from bank_details where education = 'unknown' or marital = 'single'

select * from bank_details where (education = 'unknown' or marital = 'single') and balance < 500

select distinct job from bank_details

select * from bank_details

select * from bank_details order by age

select * from bank_details order by age desc
```

1. With this data try to fine out sum of balance
2. Try to find out avarage of balance
3. Try to find out who is having a min balance
4. Try to find out who is having a mazxmim balance
5. Try to prepare a list of all the person who is having loan
6. Try to find out average balance for all the people whose job role is admin
7. Try to find out a record without job whose age is below 45
8. Try to find out a record where education is primarty and person is jobless
9. Try to find of a record whose bank account is having a negative balance
10. Try to find our a record who is not having house at all along with there balance