

## DAY – 3 Running Notes

=====

- list all the databases
- how to create a database
- how to connect to a database
- how to create a table (DDL)
  - Data definition language
  - table creation
  - table dropping
  - table structure update (Alter)
- how to insert records to this table (DML)
  - Data Manipulation language
  - inserting data
  - deleting data
  - updating data (update)
- how to view the records in a table (DQL)
  - Data query Language
- list all the tables in a database
- how to drop a table
- how to drop a database
- how to know to which db you are connect to
  - select database();

DDL- data definition language

DML- data manipulation language

DQL- data query language

DCL- data control language

TCL- transaction control language

Insert Statements

```
CREATE TABLE orders (  
order_id int,  
order_date datetime,  
order_customer_id int,  
order_status varchar(45)  
);
```

```
CREATE TABLE orders (  
order_id int,  
order_date datetime,  
order_customer_id int,
```

```

order_status varchar(45) );
-- worked
INSERT INTO orders VALUES (1,'2013-07-25 00:00:00','11599','CLOSED');

-- failed
INSERT INTO orders VALUES (2,'2013-07-25 00:00:00','1159-A12','CLOSED');

-- worked
INSERT INTO orders VALUES (3,'2013-07-25',11599,'CLOSED');

-- worked
INSERT INTO orders VALUES (4,'2013-07-25 00:00:00',11599, 8);

select * from orders;

CREATE TABLE orders (
order_id int,
order_date datetime,
order_customer_id int,
order_status varchar(5)
);

-- has not worked (data too long for column order_status)
INSERT INTO orders VALUES (5,'2013-07-25',256,'PENDING_PAYMENT');

CREATE TABLE order_items (
order_item_id int,
order_item_order_id int,
order_item_product_id int,
order_item_quantity int,
order_item_subtotal float,
order_item_product_price float
);

/* 701, 101, macbook, 1, 130000, 130000
   890, 101, airpods, 2, 36000, 18000
*/

INSERT INTO order_items VALUES (1,1,957,1,299.98,299.98);
INSERT INTO order_items VALUES (1,1,957,1,299.9878,299.9856);

select * from order_items;

INSERT INTO order_items VALUES (1,1,957,1,299.98,299.98);
INSERT INTO order_items VALUES (1,1,957,1,299.9878976,299.9856789);

select * from order_items;

```

```
INSERT INTO orders VALUES (7,'2013-07-25 00:00:00','11599','CLO\SED');
```

```
INSERT INTO orders VALUES (1,'2013-07-25',11599,'CLOSED');
```

```
INSERT INTO orders VALUES (2,'12th july 2025',11599,'CLOSED');
```

```
INSERT INTO orders VALUES (2,2013-07-25,11599,'CLOSED');
```

```
select * from orders;
```

```
-- describe the table structure
```

```
Describe <tablename>
```

```
desc <tablename>
```

```
select * from retail_db.orders;
```

```
use retail_db;
```

```
CREATE TABLE retail_db.customers (  
customer_id int,  
customer_fname varchar(45) ,  
customer_lname varchar(45),  
customer_email varchar(45) ,  
customer_phone varchar(45) ,  
customer_street varchar(255) ,  
customer_city varchar(45) ,  
customer_state varchar(45) ,  
customer_zipcode varchar(45)  
);
```

```
INSERT INTO customers VALUES
```

```
(1,'Richard','Hernandez','richardhernandez@gmail.com','9191919191','6303 Heather  
Plaza','Brownsville','TX','78521');
```

```
INSERT INTO customers VALUES
```

```
(2,'Mary','Barrett','marybarrett@yahoo.com','8181818181','Littleton','CO','8012 6');
```

```
INSERT INTO customers
```

```
(customer_id,customer_fname,customer_lname,customer_email,customer_ph  
one,customer_city,customer_state,customer_zipcode) VALUES  
(2,'Mary','Barrett','marybarrett@yahoo.com','8181818181','Littleton','CO','8012 6');
```

```
select * from customers;
```

```
INSERT INTO customers (customer_fname,
```

```
customer_id,customer_lname,customer_email,customer_phone,customer_city  
,customer_state,customer_zipcode) VALUES
```

```
('Mary',2,'Barrett','marybarrett@yahoo.com','8181818181','Littleton','CO','8012 6');
```

```
select customer_fname as  
firstname,customer_id,customer_city,customer_state from customers;
```

--selecting a few columns / renaming columns

Lets say you are a startup company

excel

customers

```
select * from customers limit 5;
```

```
select * from customers order by customer_fname desc;
```

```
select * from employees order by salary desc limit 10;
```

```
use retail_db;
```

```
delete from employees;
```

```
select * from employees;
```

=====

what have we learnt in this session

more on insert

describe

select

delete

order by

limit

=====

## Reference Scripts for Day 3

```
CREATE TABLE orders (  
  order_id int,  
  order_date datetime,  
  order_customer_id int,  
  order_status varchar(45)  
);
```

```
INSERT INTO orders VALUES (1,'2013-07-25 00:00:00','11599','CLOSED');  
INSERT INTO orders VALUES (1,'2013-07-25','11599','CLOSED');  
INSERT INTO orders VALUES (1,'2013-07-25 00:00:00','sumit','CLOSED');  
INSERT INTO orders VALUES (1,'2013-07-25 00:00:00',11599,104);
```

```
CREATE TABLE orders (  
  order_id int,  
  order_date datetime,  
  order_customer_id int,  
  order_status varchar(5)  
);
```

```
INSERT INTO orders VALUES (2,'2013-07-25',256,'PENDING_PAYMENT');
```

```
CREATE TABLE order_items (  
  order_item_id int,  
  order_item_order_id int,  
  order_item_product_id int,  
  order_item_quantity int,  
  order_item_subtotal float,  
  order_item_product_price float  
);
```

```
INSERT INTO order_items VALUES (1,1,957,1,299.98,299.98);  
INSERT INTO order_items VALUES (1,1,957,1,299.9878,299.9856);
```

```
CREATE TABLE order_items (  
  order_item_id int,  
  order_item_order_id int,  
  order_item_product_id int,  
  order_item_quantity int,  
  order_item_subtotal decimal(20,5),  
  order_item_product_price decimal(20,8)  
);
```

```
INSERT INTO order_items VALUES (1,1,957,1,299.98,299.98);  
INSERT INTO order_items VALUES (1,1,957,1,299.9878976,299.9856789);
```

```
CREATE TABLE orders (  
order_id int,  
order_date date,  
order_customer_id int,  
order_status varchar(45)  
);
```

```
INSERT INTO orders VALUES (1,'2013-07-25 00:00:00',11599,'CLOSED');
```

```
INSERT INTO orders VALUES (1,'2013-07-25',11599,'CLOSED');
```

```
INSERT INTO orders VALUES (2,'12th july 2025',11599,'CLOSED');
```

```
INSERT INTO orders VALUES (2,2013-07-25,11599,'CLOSED');
```

```
CREATE TABLE customers (  
customer_id int,  
customer_fname varchar(45) ,  
customer_lname varchar(45),  
customer_email varchar(45) ,  
customer_phone varchar(45) ,  
customer_street varchar(255) ,  
customer_city varchar(45) ,  
customer_state varchar(45) ,  
customer_zipcode varchar(45)  
);
```

```
INSERT INTO customers VALUES  
(1,'Richard','Hernandez','richardhernandez@gmail.com','9191919191','6303 Heather  
Plaza','Brownsville','TX','78521');
```

```
INSERT INTO customers VALUES  
(2,'Mary','Barrett','marybarrett@yahoo.com','8181818181','Littleton','CO','8012 6');
```

```
INSERT INTO customers  
(customer_id,customer_fname,customer_lname,customer_email,customer_ph  
one,customer_city,customer_state,customer_zipcode) VALUES  
(2,'Mary','Barrett','marybarrett@yahoo.com','8181818181','Littleton','CO','8012 6');
```

```
INSERT INTO customers (customer_fname,  
customer_id,customer_lname,customer_email,customer_phone,customer_city  
,customer_state,customer_zipcode) VALUES  
( 'Mary',2,'Barrett','marybarrett@yahoo.com','8181818181','Littleton','CO','8012 6');
```

```
CREATE TABLE employees (  
employee_id INT,  
employee_name VARCHAR(100),  
employee_email VARCHAR(100),  
employee_phone VARCHAR(15),
```

```
city VARCHAR(50),
salary DECIMAL(10,2)
);
```

```
INSERT INTO employees (employee_id, employee_name, employee_email, employee_phone, city,
salary) VALUES
```

```
(1, 'John Smith', 'john.smith1@gmail.com', '123-555-0001', 'New York', 50000.00),
(2, 'Jane Doe', 'jane.doe2@gmail.com', '123-555-0002', 'Los Angeles', 51000.00),
(3, 'Alice Johnson', 'alice.johnson3@gmail.com', '123-555-0003', 'Chicago', 52000.00),
(4, 'Bob Brown', 'bob.brown4@gmail.com', '123-555-0004', 'Houston', 53000.00),
(5, 'Carol White', 'carol.white5@gmail.com', '123-555-0005', 'Phoenix', 54000.00),
(6, 'Dave Black', 'dave.black6@gmail.com', '123-555-0006', 'Philadelphia', 55000.00),
(7, 'Eva Green', 'eva.green7@gmail.com', '123-555-0007', 'San Antonio', 56000.00),
(8, 'Frank Blue', 'frank.blue8@gmail.com', '123-555-0008', 'San Diego', 57000.00),
(9, 'Grace Yellow', 'grace.yellow9@gmail.com', '123-555-0009', 'Dallas', 58000.00),
(10, 'Hank Pink', 'hank.pink10@gmail.com', '123-555-0010', 'San Jose', 59000.00),
(11, 'Ivy Purple', 'ivy.purple11@gmail.com', '123-555-0011', 'Austin', 60000.00),
(12, 'Jack Orange', 'jack.orange12@gmail.com', '123-555-0012', 'Jacksonville', 61000.00),
(13, 'Kara Red', 'kara.red13@gmail.com', '123-555-0013', 'Fort Worth', 62000.00),
(14, 'Leo Gold', 'leo.gold14@gmail.com', '123-555-0014', 'Columbus', 63000.00),
(15, 'Mia Silver', 'mia.silver15@gmail.com', '123-555-0015', 'Charlotte', 64000.00),
(16, 'Nina Bronze', 'nina.bronze16@gmail.com', '123-555-0016', 'San Francisco', 65000.00),
(17, 'Owen Copper', 'owen.copper17@gmail.com', '123-555-0017', 'Indianapolis', 66000.00),
(18, 'Pia Violet', 'pia.violet18@gmail.com', '123-555-0018', 'Seattle', 67000.00),
(19, 'Quinn Amber', 'quinn.amber19@gmail.com', '123-555-0019', 'Denver', 68000.00),
(20, 'Ray Lime', 'ray.lime20@gmail.com', '123-555-0020', 'Washington', 69000.00),
(21, 'Sue Teal', 'sue.teal21@gmail.com', '123-555-0021', 'Boston', 70000.00),
(22, 'Tom Olive', 'tom.olive22@gmail.com', '123-555-0022', 'El Paso', 71000.00),
(23, 'Uma Cyan', 'uma.cyan23@gmail.com', '123-555-0023', 'Detroit', 72000.00),
(24, 'Vic Magenta', 'vic.magenta24@gmail.com', '123-555-0024', 'Nashville', 73000.00),
(25, 'Wes Chartreuse', 'wes.chartreuse25@gmail.com', '123-555-0025', 'Portland', 74000.00),
(26, 'Xena Maroon', 'xena.maroon26@gmail.com', '123-555-0026', 'Memphis', 75000.00),
(27, 'Yale Indigo', 'yale.indigo27@gmail.com', '123-555-0027', 'Oklahoma City', 76000.00),
(28, 'Zara Turquoise', 'zara.turquoise28@gmail.com', '123-555-0028', 'Las Vegas', 77000.00),
(29, 'Aaron Silver', 'aaron.silver29@gmail.com', '123-555-0029', 'Louisville', 78000.00),
(30, 'Bella Gold', 'bella.gold30@gmail.com', '123-555-0030', 'Baltimore', 79000.00),
(31, 'Cameron Copper', 'cameron.copper31@gmail.com', '123-555-0031', 'Milwaukee', 80000.00),
(32, 'Dana Bronze', 'dana.bronze32@gmail.com', '123-555-0032', 'Albuquerque', 81000.00),
(33, 'Eli Violet', 'eli.violet33@gmail.com', '123-555-0033', 'Tucson', 82000.00),
(34, 'Faith Amber', 'faith.amber34@gmail.com', '123-555-0034', 'Fresno', 83000.00),
(35, 'George Lime', 'george.lime35@gmail.com', '123-555-0035', 'Sacramento', 84000.00),
(36, 'Hannah Teal', 'hannah.teal36@gmail.com', '123-555-0036', 'Kansas City', 85000.00),
(37, 'Ian Olive', 'ian.olive37@gmail.com', '123-555-0037', 'Long Beach', 86000.00),
(38, 'Julia Cyan', 'julia.cyan38@gmail.com', '123-555-0038', 'Mesa', 87000.00),
(39, 'Kyle Magenta', 'kyle.magenta39@gmail.com', '123-555-0039', 'Atlanta', 88000.00),
(40, 'Lily Chartreuse', 'lily.chartreuse40@gmail.com', '123-555-0040', 'Colorado Springs', 89000.00),
(41, 'Max Maroon', 'max.maroon41@gmail.com', '123-555-0041', 'Virginia Beach', 90000.00),
(42, 'Nina Indigo', 'nina.indigo42@gmail.com', '123-555-0042', 'Raleigh', 91000.00),
```

(43, 'Oscar Turquoise', 'oscar.turquoise43@gmail.com', '123-555-0043', 'Omaha', 92000.00),  
(44, 'Paula Silver', 'paula.silver44@gmail.com', '123-555-0044', 'Miami', 93000.00),  
(45, 'Quinn Gold', 'quinn.gold45@gmail.com', '123-555-0045', 'Oakland', 94000.00),  
(46, 'Rose Copper', 'rose.copper46@gmail.com', '123-555-0046', 'Minneapolis', 95000.00),  
(47, 'Sam Bronze', 'sam.bronze47@gmail.com', '123-555-0047', 'Tulsa', 96000.00),  
(48, 'Tina Violet', 'tina.violet48@gmail.com', '123-555-0048', 'Arlington', 97000.00),  
(49, 'Uma Amber', 'uma.amber49@gmail.com', '123-555-0049', 'New Orleans', 98000.00),  
(50, 'Victor Lime', 'victor.lime50@gmail.com', '123-555-0050', 'Wichita', 99000.00),  
(51, 'Wendy Teal', 'wendy.teal51@gmail.com', '123-555-0051', 'Cleveland', 50000.00),  
(52, 'Xander Olive', 'xander.olive52@gmail.com', '123-555-0052', 'Tampa', 51000.00),  
(53, 'Yasmin Cyan', 'yasmin.cyan53@gmail.com', '123-555-0053', 'Bakersfield', 52000.00),  
(54, 'Zach Magenta', 'zach.magenta54@gmail.com', '123-555-0054', 'Aurora', 53000.00),  
(55, 'Ava Chartreuse', 'ava.chartreuse55@gmail.com', '123-555-0055', 'Anaheim', 54000.00),  
(56, 'Blake Maroon', 'blake.maroon56@gmail.com', '123-555-0056', 'Santa Ana', 55000.00),  
(57, 'Cora Indigo', 'cora.indigo57@gmail.com', '123-555-0057', 'Corpus Christi', 56000.00),  
(58, 'Dylan Turquoise', 'dylan.turquoise58@gmail.com', '123-555-0058', 'Riverside', 57000.00),  
(59, 'Ella Silver', 'ella.silver59@gmail.com', '123-555-0059', 'Lexington', 58000.00),  
(60, 'Finn Gold', 'finn.gold60@gmail.com', '123-555-0060', 'St. Louis', 59000.00),  
(61, 'Grace Copper', 'grace.copper61@gmail.com', '123-555-0061', 'Stockton', 60000.00),  
(62, 'Harry Bronze', 'harry.bronze62@gmail.com', '123-555-0062', 'Cincinnati', 61000.00),  
(63, 'Ivy Violet', 'ivy.violet63@gmail.com', '123-555-0063', 'Pittsburgh', 62000.00),  
(64, 'Jake Amber', 'jake.amber64@gmail.com', '123-555-0064', 'Anchorage', 63000.00),  
(65, 'Kay Lime', 'kay.lime65@gmail.com', '123-555-0065', 'Henderson', 64000.00),  
(66, 'Leo Teal', 'leo.teal66@gmail.com', '123-555-0066', 'Greensboro', 65000.00),  
(67, 'Mila Olive', 'mila.olive67@gmail.com', '123-555-0067', 'Plano', 66000.00),  
(68, 'Nate Cyan', 'nate.cyan68@gmail.com', '123-555-0068', 'Newark', 67000.00),  
(69, 'Olivia Magenta', 'olivia.magenta69@gmail.com', '123-555-0069', 'Lincoln', 68000.00),  
(70, 'Paul Chartreuse', 'paul.chartreuse70@gmail.com', '123-555-0070', 'Orlando', 69000.00),  
(71, 'Quincy Maroon', 'quincy.maroon71@gmail.com', '123-555-0071', 'Irvine', 70000.00),  
(72, 'Rita Indigo', 'rita.indigo72@gmail.com', '123-555-0072', 'Toledo', 71000.00),  
(73, 'Sam Turquoise', 'sam.turquoise73@gmail.com', '123-555-0073', 'Durham', 72000.00),  
(74, 'Tara Silver', 'tara.silver74@gmail.com', '123-555-0074', 'Chula Vista', 73000.00),  
(75, 'Umar Gold', 'umar.gold75@gmail.com', '123-555-0075', 'Fort Wayne', 74000.00),  
(76, 'Vera Copper', 'vera.copper76@gmail.com', '123-555-0076', 'Jersey City', 75000.00),  
(77, 'Will Bronze', 'will.bronze77@gmail.com', '123-555-0077', 'St. Petersburg', 76000.00),  
(78, 'Xena Violet', 'xena.violet78@gmail.com', '123-555-0078', 'Laredo', 77000.00),  
(79, 'Yosef Amber', 'yosef.amber79@gmail.com', '123-555-0079', 'Madison', 78000.00),  
(80, 'Zara Lime', 'zara.lime80@gmail.com', '123-555-0080', 'Chandler', 79000.00),  
(81, 'Adam Teal', 'adam.teal81@gmail.com', '123-555-0081', 'Buffalo', 80000.00),  
(82, 'Bella Olive', 'bella.olive82@gmail.com', '123-555-0082', 'Lubbock', 81000.00),  
(83, 'Charlie Cyan', 'charlie.cyan83@gmail.com', '123-555-0083', 'Scottsdale', 82000.00),  
(84, 'Dina Magenta', 'dina.magenta84@gmail.com', '123-555-0084', 'Reno', 83000.00),  
(85, 'Eli Chartreuse', 'eli.chartreuse85@gmail.com', '123-555-0085', 'Glendale', 84000.00),  
(86, 'Fay Maroon', 'fay.maroon86@gmail.com', '123-555-0086', 'Norfolk', 85000.00),  
(87, 'Gina Indigo', 'gina.indigo87@gmail.com', '123-555-0087', 'Winston-Salem', 86000.00),  
(88, 'Hank Turquoise', 'hank.turquoise88@gmail.com', '123-555-0088', 'North Las Vegas', 87000.00),  
(89, 'Ivy Silver', 'ivy.silver89@gmail.com', '123-555-0089', 'Irving', 88000.00),  
(90, 'Jack Gold', 'jack.gold90@gmail.com', '123-555-0090', 'Chesapeake', 89000.00),



(91, 'Kate Copper', 'kate.copper91@gmail.com', '123-555-0091', 'Gilbert', 90000.00),  
(92, 'Leo Bronze', 'leo.bronze92@gmail.com', '123-555-0092', 'Hialeah', 91000.00),  
(93, 'Mia Violet', 'mia.violet93@gmail.com', '123-555-0093', 'Garland', 92000.00),  
(94, 'Nina Amber', 'nina.amber94@gmail.com', '123-555-0094', 'Frisco', 93000.00),  
(95, 'Owen Lime', 'owen.lime95@gmail.com', '123-555-0095', 'Baton Rouge', 94000.00),  
(96, 'Paul Teal', 'paul.teal96@gmail.com', '123-555-0096', 'Fremont', 95000.00),  
(97, 'Quinn Olive', 'quinn.olive97@gmail.com', '123-555-0097', 'Richmond', 96000.00),  
(98, 'Rose Cyan', 'rose.cyan98@gmail.com', '123-555-0098', 'Boise', 97000.00),  
(99, 'Sam Magenta', 'sam.magenta99@gmail.com', '123-555-0099', 'San Bernardino', 98000.00),  
(100, 'Tina Chartreuse', 'tina.chartreuse100@gmail.com', '123-555-0100', 'Spokane', 99000.00);