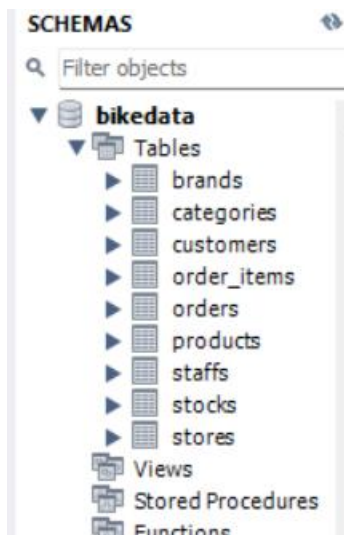**- this query is used for select the database.**

use bikedata;

-this query is used to select table under database.

select * from brands;

brand_id	brand_name
1	Electra
2	Haro
3	Heller
4	Pure Cycles
5	Ritchey
6	Strider
7	Sun Bicycles
8	Surly
9	Trek

select * from products;
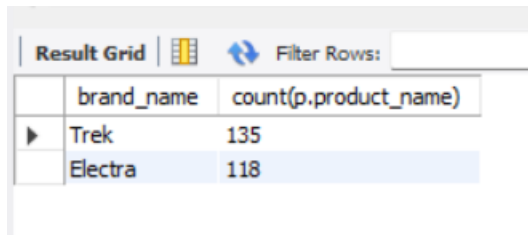
product_id	product_name	brand_id	category_id	model_year	list_price
1	Trek 820 - 2016	9	6	2016	379.99
2	Ritchey Timberwolf Frameset - 2016	5	6	2016	749.99
3	Surly Wednesday Frameset - 2016	8	6	2016	999.99
4	Trek Fuel EX 8 29 - 2016	9	6	2016	2899.99
5	Heller Shagamaw Frame - 2016	3	6	2016	1320.99
6	Surly Ice Cream Truck Frameset - 2016	8	6	2016	469.99
7	Trek Slash 8 27.5 - 2016	9	6	2016	3999.99
8	Trek Remedy 29 Carbon Frameset - 2016	9	6	2016	1799.99
9	Trek Conduit+ - 2016	9	5	2016	2999.99
10	Surly Straggler - 2016	8	4	2016	1549

-this query is used to get count the no. of product in brand (trek, electra).

select b.brand_name,count(p.product_name) from brands b right join products p on b.brand_id= p.brand_id

group by brand_name

having brand_name in ("trek","electra");

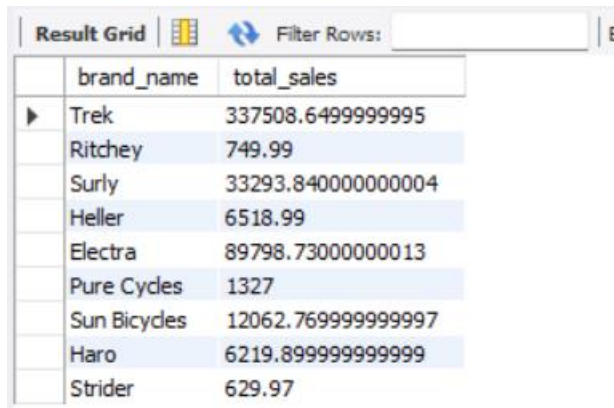| brand_name	count(p.product_name)
Trek	135
Electra	118

-this query is used to calculate the total sales of each brand.

select b.brand_name,sum(p.list_price)"total_sales" from brands b right join products p on b.brand_id = p.brand_id

group by brand_name;

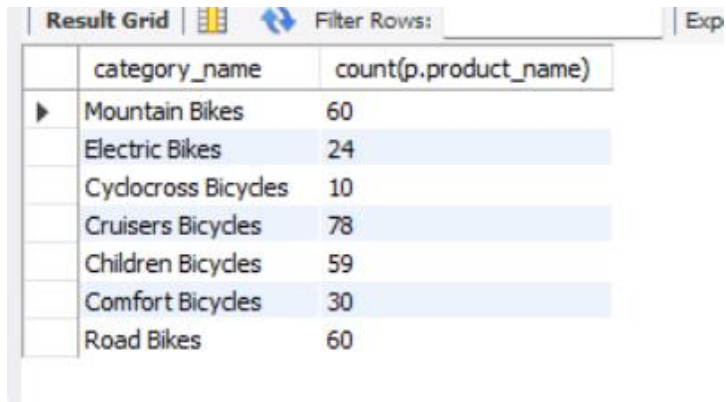| brand_name	total_sales
Trek	337508.6499999995
Ritchey	749.99
Surly	33293.840000000004
Heller	6518.99
Electra	89798.73000000013
Pure Cycles	1327
Sun Bicycles	12062.769999999997
Haro	6219.899999999999
Strider	629.97

-this query is used to count the no. of product in each category.

select c.category_name,count(p.product_name) from categories c right join products p on c.category_id = p.category_id

group by category_name;

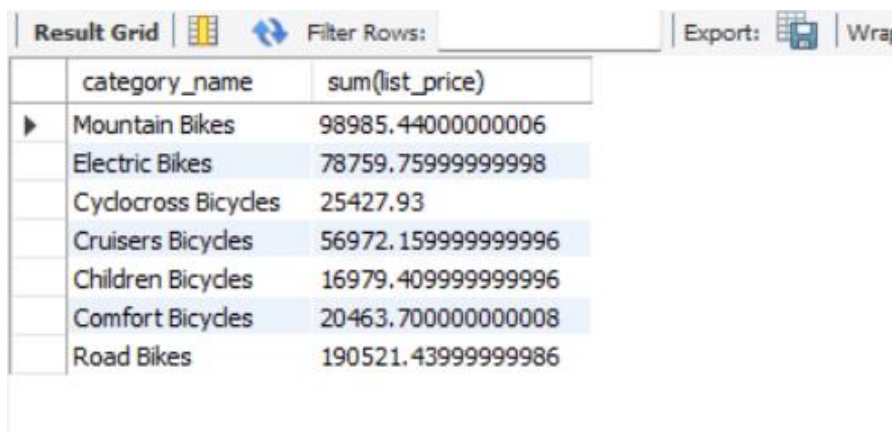| category_name	count(p.product_name)
Mountain Bikes	60
Electric Bikes	24
Cyclocross Bicycles	10
Cruisers Bicycles	78
Children Bicycles	59
Comfort Bicycles	30
Road Bikes	60

-this query give output sum of total list price category wise.

select c.category_name,sum(list_price) from categories c right join products p on c.category_id = p.category_id

group by category_name;

category_name	sum(list_price)
Mountain Bikes	98985.44000000006
Electric Bikes	78759.75999999998
Cyclocross Bicycles	25427.93
Cruisers Bicycles	56972.159999999996
Children Bicycles	16979.409999999996
Comfort Bicycles	20463.700000000008
Road Bikes	190521.43999999986

-this query give output all customer who is from state (CY, NY) and whose phone no. is not null. (both the condition will be fulfilled)

select * from customers where state in ("cy","ny") and phone is not null;

customer_id	first_name	last_name	phone	email	street	city	state	zip_code
7	Latasha	Hays	(716) 986-3359	latasha.hays@hotmail.com	7014 Manor Station Rd.	Buffalo	NY	14215
12	Robby	Sykes	(516) 583-7761	robby.sykes@hotmail.com	486 Rock Maple Street	Hempstead	NY	11550
16	Emmitt	Sanchez	(212) 945-8823	emmitt.sanchez@hotmail.com	461 Squaw Creek Road	New York	NY	10002
26	Theo	Reese	(562) 215-2907	theo.reese@gmail.com	8755 W. Wild Horse St.	Long Beach	NY	11561
39	Janetta	Aguirre	(717) 670-2634	janetta.aguirre@aol.com	214 Second Court	Lancaster	NY	14086
80	Sarai	Mckee	(716) 912-8110	sarai.mckee@msn.com	641 Glenwood Avenue	Buffalo	NY	14215
93	Corrina	Sawyer	(248) 370-1364	corrina.sawyer@yahoo.com	95 Briarwood Lane	Troy	NY	12180
130	Wes	Stanton	(248) 247-5074	wes.stanton@msn.com	8662 Tunnel Street	Troy	NY	12180
134	Brianna	Moss	(516) 156-8031	brianna.moss@msn.com	4 Longfellow St.	Hempstead	NY	11550
178	Genoveva	Tyler	(212) 152-6381	genoveva.tyler@gmail.com	8121 Windfall Ave.	New York	NY	10002

-this query is used to get no. of customer from CA.

select state,count(state)"no_of_customer" from customers where state="CA" group by state order by no_of_customer;

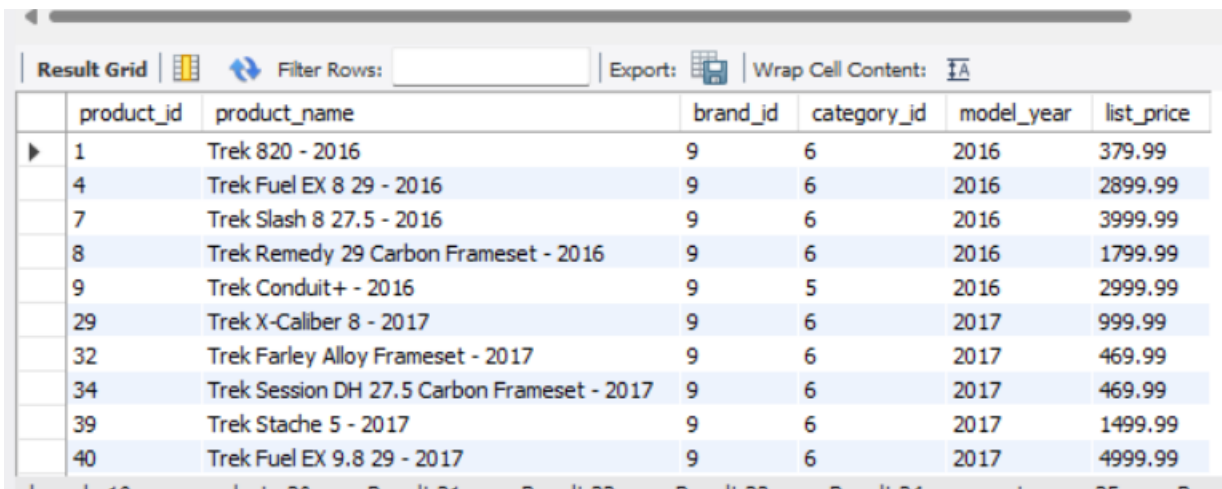| state	no_of_customer
CA	284

-this query gives output no. of customer from state (CY, NY).

select state,count(state)"no_of_customer" from customers group by state having state in ("CA","NY") order by no_of_customer desc;

state	no_of_customer
NY	1019
CA	284

-this query gives all the product name start with T letter.

select * from products where product_name like"T%";

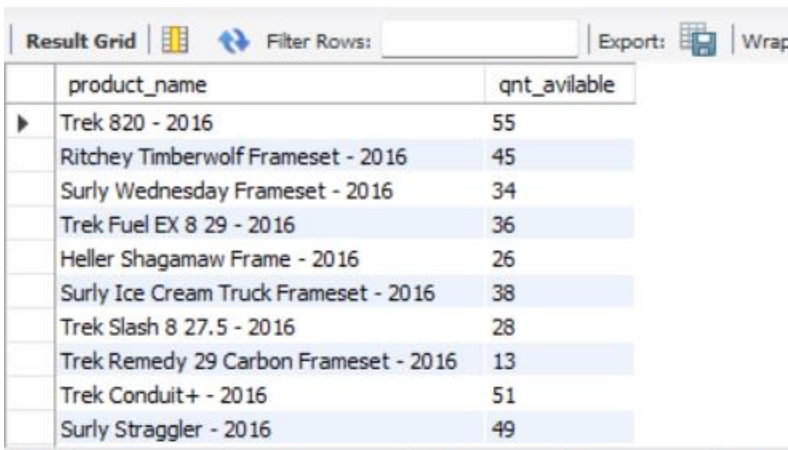| product_id	product_name	brand_id	category_id	model_year	list_price
1	Trek 820 - 2016	9	6	2016	379.99
4	Trek Fuel EX 8 29 - 2016	9	6	2016	2899.99
7	Trek Slash 8 27.5 - 2016	9	6	2016	3999.99
8	Trek Remedy 29 Carbon Frameset - 2016	9	6	2016	1799.99
9	Trek Conduit+ - 2016	9	5	2016	2999.99
29	Trek X-Caliber 8 - 2017	9	6	2017	999.99
32	Trek Farley Alloy Frameset - 2017	9	6	2017	469.99
34	Trek Session DH 27.5 Carbon Frameset - 2017	9	6	2017	469.99
39	Trek Stache 5 - 2017	9	6	2017	1499.99
40	Trek Fuel EX 9.8 29 - 2017	9	6	2017	4999.99

-this query gives sum of total quantity available of product.

select p.product_name,sum(quantity)"qnt_avilable"from products p right join stocks s on p.product_id=s.product_id group by product_name;

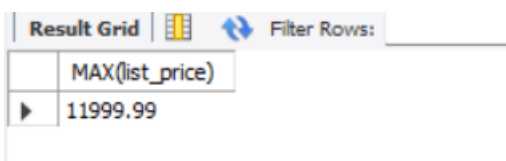| product_name	qnt_avilable
Trek 820 - 2016	55
Ritchey Timberwolf Frameset - 2016	45
Surly Wednesday Frameset - 2016	34
Trek Fuel EX 8 29 - 2016	36
Heller Shagamaw Frame - 2016	26
Surly Ice Cream Truck Frameset - 2016	38
Trek Slash 8 27.5 - 2016	28
Trek Remedy 29 Carbon Frameset - 2016	13
Trek Conduit+ - 2016	51
Surly Straggler - 2016	49

-this gives maximum list price from order items

SELECT MAX(list_price)FROM order_items;

MAX(list_price)
11999.99

-this query give average discount applies to each product.

select p.product_name,avg(o.discount)"avg_dis" from products p right join order_items o on p.product_id=o.product_id group by product_name;

product_name	avg_dis
Electra Townie Original 7D EQ - Women's - 2016	0.11357142857142863
Trek Remedy 29 Carbon Frameset - 2016	0.09847058823529405
Surly Straggler - 2016	0.10752577319587629
Electra Townie Original 7D EQ - 2016	0.10491891891891898
Trek Fuel EX 8 29 - 2016	0.11257731958762893
Surly Wednesday Frameset - 2016	0.10558139534883723
Ritchey Timberwolf Frameset - 2016	0.10779220779220777
Pure Cycles Vine 8-Speed - 2016	0.09604395604395606
Pure Cycles Western 3-Speed - Women's - 2015...	0.10112359550561793
Electra Townie Original 21D - 2016	0.09880829015544051

-this query gives sum of total discount given to each product.

select p.product_name,sum(o.discount)"total_dis" from products p right join order_items o on p.product_id=o.product_id group by product_name;

product_name	total_dis
Electra Townie Original 7D EQ - Women's - 2016	9.540000000000004
Trek Remedy 29 Carbon Frameset - 2016	8.369999999999994
Surly Straggler - 2016	10.43
Electra Townie Original 7D EQ - 2016	19.41000000000001
Trek Fuel EX 8 29 - 2016	10.920000000000005
Surly Wednesday Frameset - 2016	9.080000000000002
Ritchey Timberwolf Frameset - 2016	8.299999999999999
Pure Cycles Vine 8-Speed - 2016	8.740000000000002
Pure Cycles Western 3-Speed - Women's - 2015...	8.999999999999996
Electra Townie Original 21D - 2016	19.070000000000018

-this query give sum of total quantity of each product.

select p.product_name,sum(o.quantity)"total_qty"from products p right join order_items o on p.product_id=o.product_id group by product_name;

product_name	total_qty
Electra Townie Original 7D EQ - Women's - 2016	125
Trek Remedy 29 Carbon Frameset - 2016	125
Surly Straggler - 2016	147
Electra Townie Original 7D EQ - 2016	290
Trek Fuel EX 8 29 - 2016	143
Surly Wednesday Frameset - 2016	126
Ritchey Timberwolf Frameset - 2016	118
Pure Cycles Vine 8-Speed - 2016	133
Pure Cycles Western 3-Speed - Women's - 2015...	134
Electra Townie Original 21D - 2016	289

-this query gives sum of total stock available in each store.

select stores.store_name,sum(stocks.quantity)"stock_avilable" from stores left join stocks on stores.store_id=stocks.store_id group by store_name;

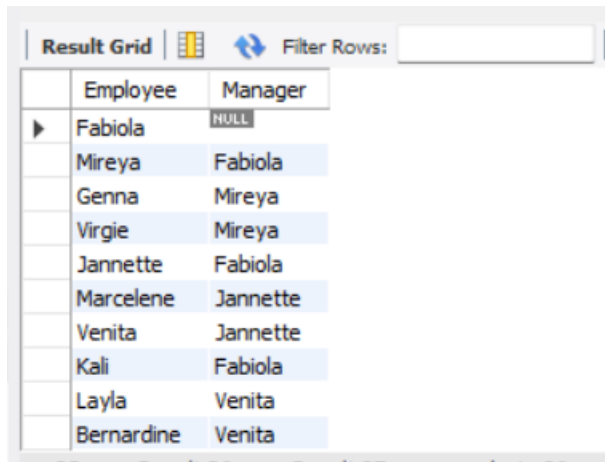| store_name	stock_avilable
Santa Cruz Bikes	4532
Baldwin Bikes	4359
Rowlett Bikes	4620

-this query gives manager of each employee within the table with the help of left join. (it also shows employee with null manager)

SELECT e.First_name as Employee, M.First_name as Manager

FROM staffs e

left Join staffs M

ON e.manager_Id = M.staff_Id;

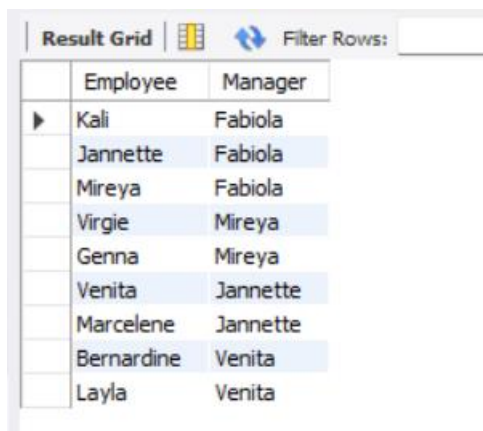| Employee	Manager
Fabiola	NULL
Mireya	Fabiola
Genna	Mireya
Virgie	Mireya
Jannette	Fabiola
Marcelene	Jannette
Venita	Jannette
Kali	Fabiola
Layla	Venita
Bernardine	Venita

--this query gives manager of each employee within the table with the help of inner join. (it shows only employee with assigned manger)

SELECT S.First_name as Employee, M.First_name as Manager

FROM staffs S

inner Join staffs M

ON S.manager_Id = M.staff_Id;
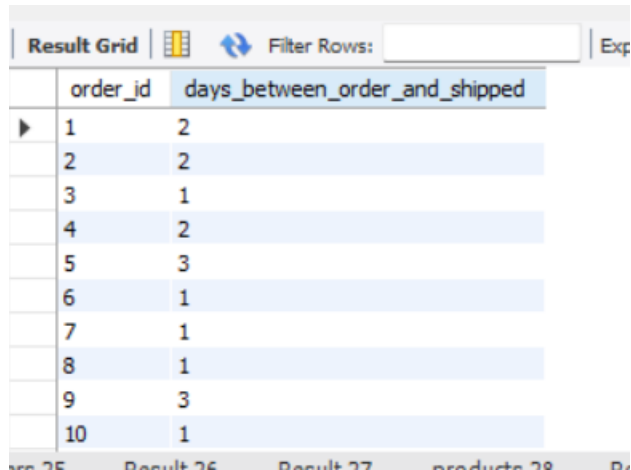
Employee	Manager
Kali	Fabiola
Jannette	Fabiola
Mireya	Fabiola
Virgie	Mireya
Genna	Mireya
Venita	Jannette
Marcelene	Jannette
Bernardine	Venita
Layla	Venita

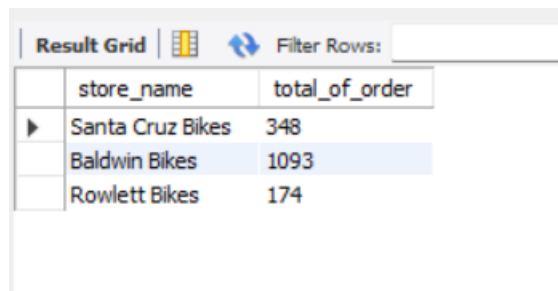**-this query calculates no. of days between order and shipped date of each order_id.**

SELECT order_id,DATEDIFF(shipped_date, order_date) AS days_between_order_and_shipped FROM orders;

order_id	days_between_order_and_shipped
1	2
2	2
3	1
4	2
5	3
6	1
7	1
8	1
9	3
10	1

-this query counts the no. order placed from each store.

select s.store_name,count(o.store_id)"total_of_order" from stores s right join orders o on s.store_id=o.store_id group by store_name ;

store_name	total_of_order
Santa Cruz Bikes	348
Baldwin Bikes	1093
Rowlett Bikes	174