

5. Queries

1. What is the total qty of Ground Nut purchased in 2019?

select sum(qty_in_quintal) as total_qty from purchase where commodity= 'Ground Nut' and extract(year from invoice_date)=2019;

Data Output		Explain	Messages	Notifications
	total_qty numeric			
1	232.30			

2. what is the total qty of commodities purchased in 2019?

select commodity, sum(qty_in_quintal) as total_qty from purchase where extract (year from invoice_date)=2019 group by commodity;

Data Output		Explain	Messages	Notifications
	commodity character varying (10)	total_qty numeric		
1	Ground Nut	232.30		
2	Pigeon Pea	213.50		

3. What is the Total Qty of commodity purchased by each district?

select district,commodity,sum(qty_in_quintal) as total_qty from farmers as f join purchase as p on f.farmer_id=p.farmer_id group by district,commodity order by total_qty asc;

Data Output		Explain	Messages	Notifications
	district character varying (15)	commodity character varying (10)	total_qty numeric	
1	Junagadh	Ground Nut	140.00	
2	Junagadh	Pigeon Pea	147.40	
3	Surat	Pigeon Pea	154.70	
4	Surat	Ground Nut	155.80	
5	Rajkot	Ground Nut	188.10	
6	Vadodara	Pigeon Pea	193.70	
7	Vadodara	Ground Nut	253.40	
8	Rajkot	Pigeon Pea	269.90	

4. What is the avg income of the five highest earning farmers?

select f.farmer_id,farmer_name, avg(payable_amt) as Avg_income from farmers as f join purchase as p on f.farmer_id=p.farmer_id group by f.farmer_id order by Avg_income desc limit 5;

Data Output		Explain	Messages	Notifications
	farmer_id [PK] character varying (9)	farmer_name character varying (20)	avg_income numeric	
1	031004125	Dipak Rathod	88017.666666666667	
2	031822078	Kanji Patel	84057.333333333333	
3	060319441	Pragnesh Solanki	78442.000000000000	
4	060214125	Vijay Vakharia	76661.666666666667	
5	032107245	Ram Oza	72388.000000000000	

5. List the farmers having land area more than five acre.

select * from (select farmer_name, UID, sum(land_area_in_acre) as Total_area from farmers group by UID,farmer_name) as T where Total_area>5;

	farmer_name character varying (20)	uid character varying (12)	total_area numeric
1	Rahul Patel	400044859621	10.50
2	Dipak Rathod	318628947613	8.50
3	Jignesh Patel	103846729512	12.00
4	Rakeshbhai Ramani	301245853279	5.60
5	Vishal Vyas	267893679543	7.00
6	Hari Gohel	286689768999	18.50
7	Pragnesh Solanki	152887231961	5.50
8	Arjanbhai Vadher	342378162946	16.00
9	Madhav Patel	278966959621	15.00
10	Mohan Jaat	205989097784	11.50

6. How many Farmers are getting benefitted from SCSCS?

select commodity, count(farmer_id) from (select distinct farmer_id,commodity from Purchase) as A group by commodity;

	commodity character varying (10)	count bigint
1	Ground Nut	36
2	Pigeon Pea	34

7. List the farmers having land in Rajkot.

select Farmer_id,farmer_name,district from farmers where district = 'Rajkot';

	farmer_id [PK] character varying (9)	farmer_name character varying (20)	district character varying (15)
1	031502101	Rakeshbhai Ramani	Rajkot
2	031210105	Ramesh Patel	Rajkot
3	031514005	Vaibhav Solanki	Rajkot
4	030701067	Jayntibhai Parmar	Rajkot
5	032107245	Ram Oza	Rajkot
6	031004125	Dipak Rathod	Rajkot

8. List the farmers selling Ground Nut between 25-oct-2020 and 25- oct-2021.

select f.farmer_id,farmer_name from farmers as f join purchase as p on f.farmer_id=p.farmer_id where invoice_date between '2020-10-25' and '2021-10-25' and commodity='Ground Nut';

	farmer_id [PK] character varying (9)	farmer_name character varying (20)
1	280122315	Mohan Jaat
2	280122315	Mohan Jaat
3	280123320	Madhav Patel
4	280231523	Sameer Patel
5	280233856	Ram Nagal
6	110112315	Saurabh Radadaiya
7	110114318	Vaibhav Vyas
8	110201523	Rahul Rupareliya

9. How much quantity of Pigeon Pea was purchased from a farmer in the kharif season of all years?

select farmer_id,sum(qty_in_quintal) from purchase where commodity = 'Pigeon Pea' group by farmer_id;

Data Output	Explain	Messages	Not
	farmer_id character varying (9)	sum numeric	
1	031822078	41.40	
2	110112312	20.00	
3	280233856	7.50	
4	060319441	39.50	
5	060214125	2.00	
6	110114318	11.10	
7	032719045	48.80	

10. What is total qty of Ground Nut purchased in all years?

select sum(qty_in_quintal) from purchase where commodity = 'Ground Nut';

Data Output	Ex
	sum numeric
1	737.30

--11. What is the total quantity of each commodity that every center got in 2021?

select center_id, commodity, sum(qty_in_quintal) FROM purchase where extract(year from invoice_date)=2021 group by center_id , commodity order by center_id;

Data Output	Explain	Messages	Notifications
	center_id character varying (5)	commodity character varying (10)	sum numeric
1	0307	Ground Nut	23.60
2	0310	Pigeon Pea	31.20
3	0312	Ground Nut	10.50
4	0312	Pigeon Pea	18.20
5	0318	Ground Nut	21.00
6	0318	Pigeon Pea	28.60

12. List the shops in Junagadh district.

select shop_name,shop_id from shop where district = 'Junagadh';

	shop_name character varying (15)	shop_id [PK] character varying (8)
1	Saroj	01120111
2	Keshav	05140111
3	Mushkan	01010211
4	Mahadev	02010211
5	keshav	06050211
6	shiv	01060311
7	Ravi	17100311

13. What is the total quantity of commodities transferred to the shops in 'Vanthali' taluka between 25th October 2020 and 25th October 2021?

select s.shop_id,shop_name,sum(qty_in_quintal) from shop as s join shop_transport as t on s.shop_id=t.shop_id where taluka ='Vanthali' and tp_date between '2020-10-25' and '2021-10-25' group by s.shop_id, shop_name;

	shop_id [PK] character varying (8)	shop_name character varying (15)	sum numeric
1	01060311	shiv	14.00
2	17100311	Ravi	13.40

14. List the farmers who do not sell their commodities to SCSCCL.

select distinct farmer_id from farmers group by farmer_id except (select distinct farmer_id from purchase group by farmer_id);

	farmer_id character varying (9)
1	110310963

15. What are the total number of registrations on uid = '401212347894'?

select count(farmer_id) as No_of_registration from farmers where uid='401212347894';

	no_of_registration bigint
1	3

16. Details of employees working at Olpad-2 center.

select employee_id,employee_name,center_name,manager_id,taluka from employee as e join center as c on e.center_id=c.center_id where center_name='Olpad-2';

Data Output Explain Messages Notifications

	employee_id character varying (3)	employee_name character varying (15)	center_name character varying (15)	manager_id character varying (2)	taluka character varying (15)
1	S02	Jigar Raj	Olpad-2	28	Olpad

17. Which warehouses are managed by Raj Sharma? select * from warehouse as w join manager as m on

w.manager_id=m.manager_id where manager_name='Raj Sharma';

Data Output Explain Messages Notifications

	warehouse_id character varying (3)	warehouse_name character varying (15)	manager_id character varying (2)	capacity_in_quintal numeric (10,2)	manager_id character varying (2)	manager_name character varying (20)	district character varying (15)
1	061	Deepak	06	700.00	06	Raj Sharma	Vadodara
2	062	Surya	06	600.00	06	Raj Sharma	Vadodara

18. list of employees managed by all the managers.

select employee_id,employee_name from

(select center_id,manager_id from center union select warehouse_id,manager_id from warehouse)

as M join

(select center_id,employee_id,employee_name from employee union select warehouse_id,employee_id,employee_name from employee)

as E on M.center_id = E.center_id where manager_id = '11';

Data Output Explain Messages Notifications

	employee_id character varying (3)	employee_name character varying (15)
1	J01	Ramesh Singh
2	J05	Ram Kakade
3	J06	Shailja Shah
4	J04	Hri Gadhiya
5	J03	Jenish Dhawan
6	J02	Parul Popat

19. What was the total quantity of commodity that a shop having ID 01041003 got in all the years?

select s.shop_id,s.shop_name,st.commodity,sum(qty_in_quintal) as total_quntity from shop as s join shop_transport as st on s.shop_id=st.shop_id where s.shop_id='01041003' group by(s.shop_id,st.commodity);

Data Output Explain Messages Notifications

	shop_id character varying (8)	shop_name character varying (15)	commodity character varying (15)	total_quntity numeric
1	01041003	Madhuram store	Ground Nut	28.40
2	01041003	Madhuram store	Pigeon Pea	33.90

20. List the stock availability on every date in the warehouse having id 281.

select warehouse_id, date, commodity, stock_in_quintal from stocks where warehouse_id='281' and extract(year from date)=2019;

	warehouse_id character varying (3)	date date	commodity character varying (15)	stock_in_quintal numeric (10,2)
1	281	2019-03-02	Pigeon Pea	3.50
2	281	2019-04-20	Pigeon Pea	25.60
3	281	2019-04-25	Pigeon Pea	29.60
4	281	2019-06-01	Pegeon Pea	0.00
5	281	2019-09-14	Ground Nut	26.30
6	281	2019-12-01	Ground Nut	0.00

21. What is the stock on 05-May-2019?

select warehouse_id, commodity, stock_in_quintal from stocks where warehouse_id='281' and date<='2019-05-05' order by date desc limit 1;

	warehouse_id character varying (3)	commodity character varying (15)	stock_in_quintal numeric (10,2)
1	281	Pigeon Pea	29.60

22. What is the total amount that SCSCSL paid to all the farmers every year?

select extract(year from invoice_date) as year, sum(payable_amt) as Amount_paid from purchase group by extract(year from invoice_date) order by year;

	year double precision	amount_paid numeric
1	2019	1663318.00
2	2020	2116015.00
3	2021	2338434.00

23. What is the total quantity of Ground Nut or Pigeon Pea purchased from a farmers?

select commodity , sum(qty_in_quintal) as total_purchase from purchase group by commodity;

	commodity character varying (10)	total_purchase numeric
1	Ground Nut	737.30
2	Pigeon Pea	765.70

24. List the farmers who sell Pigeon Pea but not Ground Nut.

```
select farmer_id from purchase where commodity = 'Pigeon Pea' except
select farmer_id from purchase where commodity = 'Ground Nut';
```

	farmer_id	
	character varying (9)	
1	060316959	
2	032107245	
3	060111512	

25. Farmer having id 110112315 transported his commodity to which warehouse?

```
select farmer_id,invoice_date,warehouse_id,P.commodity
from purchase as P join wh_transport as W on P.invoice_no = W.invoice_no where farmer_id
= '110112315';
```

	farmer_id	invoice_date	warehouse_id	commodity
	character varying (9)	date	character varying (3)	character varying (10)
1	110112315	2019-09-20	112	Ground Nut
2	110112315	2019-09-20	112	Ground Nut
3	110112315	2019-09-24	112	Ground Nut
4	110112315	2020-05-14	112	Pigeon Pea
5	110112315	2021-04-11	112	Pigeon Pea
6	110112315	2021-09-30	112	Ground Nut
7	110112315	2021-09-30	111	Ground Nut

26. List the farmers whose commodities got transported to a warehouse having id 281.

```
select distinct f.farmer_id,farmer_name from farmers as f join purchase as p on
f.farmer_id=p.farmer_id join wh_transport as wt on p.invoice_no=wt.invoice_no where
warehouse_id='281';
```

	farmer_id	farmer_name
	[PK] character varying (9)	character varying (20)
1	280231523	Sameer Patel
2	280349963	Shyam Tiwari
3	280123318	Vishal Vyas
4	280345741	Hari Gohel
5	280123320	Madhav Patel
6	280233856	Ram Nagal
7	280122315	Mohan Jaat
8	280121312	Sameer Patel

27. List the farmers who got paid more than 50,000 in 2020.

```
select f.farmer_id,f.farmer_name,payable_amt from farmers as f join  
purchase as p on f.farmer_id=p.farmer_id where payable_amt>50000 and extract(year from  
invoice_date)=2020';
```

[Data Output](#) [Explain](#) [Messages](#) [Notifications](#)

	farmer_id character varying (9)	farmer_name character varying (20)	payable_amt numeric (10,2)
1	280349963	Shyam Tiwari	77000.00
2	280341852	Sameer Patel	77000.00
3	280349963	Shyam Tiwari	110000.00
4	280123318	Vishal Vyas	88000.00
5	110201412	Kishan Mehta	77000.00
6	110306852	Rahul Rupareliya	77000.00
7	110201412	Kishan Mehta	110000.00
8	032316360	Arjanbhai Vadher	69300.00

28. Display the date and warehouse on which the stock of Pigeon Pea becomes zero.

```
select s.warehouse_id,w.warehouse_name,date from stocks as s join warehouse as w on  
s.warehouse_id=w.warehouse_id where stock_in_quintal=0 and commodity='Pigeon Pea';
```

[Data Output](#) [Explain](#) [Messages](#) [Notifications](#)

	warehouse_id character varying (3)	warehouse_name character varying (15)	date date
1	111	Praksh	2019-06-01
2	112	Rakesh	2019-06-15
3	111	Praksh	2020-06-01
4	112	Rakesh	2020-06-15
5	111	Praksh	2021-06-01
6	112	Rakesh	2021-06-15
7	031	Gondal	2019-06-15

29. List the centers who have purchased commodities less than 51 quintal.

```
select c.center_id,center_name,qty_in_quintal,invoice_date from purchase as p join center as c  
on p.center_id=c.center_id where commodity='Ground Nut' and season='Kharif' and  
qty_in_quintal<50;
```

[Data Output](#) [Explain](#) [Messages](#) [Notifications](#)

	center_id character varying (5)	center_name character varying (15)	qty_in_quintal numeric (5,2)	invoice_date date
1	28011	Olpad-1	5.30	2019-09-03
2	28011	Olpad-1	15.00	2019-09-06
3	28012	Olpad-2	6.00	2019-09-13
4	28011	Olpad-1	9.00	2019-10-15
5	2802	Mangrol	4.50	2019-10-24
6	2803	Mandvi	4.50	2019-11-26
7	28011	Olpad-1	8.50	2020-09-05
8	2803	Mandvi	2.00	2020-09-05

30. Which warehouse had maximum quantity of Pigeon Pea in 2019?

```
select s.warehouse_id,w.warehouse_name,sum(s.in_qty_in_quintal) as total_qty from
warehouse as w join stocks as s on w.warehouse_id=s.warehouse_id where
commodity='Pigeon Pea' and extract(year from s.date)='2019' group by
(s.warehouse_id,w.warehouse_name) order by (total_qty) desc limit 1;
```

Data Output Explain Messages Notifications			
	warehouse_id character varying (3)	warehouse_name character varying (15)	total_qty numeric
1	031	Gondal	50.00

31. Which warehouse had minimum quantity of Ground Nut in 2020?

```
select s.warehouse_id,w.warehouse_name,sum(s.in_qty_in_quintal) as total_qty from
warehouse as w join stocks as s on w.warehouse_id=s.warehouse_id where
commodity='Ground Nut' and extract(year from s.date)='2020' group by
(s.warehouse_id,w.warehouse_name) order by (total_qty) asc limit 1;
```

Data Output Explain Messages Notifications			
	warehouse_id character varying (3)	warehouse_name character varying (15)	total_qty numeric
1	282	Pankaj	24.50

32. What is the average production of Ground Nut Per acre?

```
select district,(sum(qty_in_quintal)/sum(land_area_in_acre)) as avg_production_per_acre
from farmers as f join purchase as p on f.farmer_id=p.farmer_id where commodity='Ground
Nut' group by (district);
```

Data Output Explain Messages Notifications		
	district character varying (15)	avg_production_per_acre numeric
1	Junagadh	1.1618257261410788
2	Surat	0.82872340425531914894
3	Rajkot	1.8405088062622309
4	Vadodara	4.4456140350877193