SELECT \* FROM FOOD\_PRICES;

-- Q1. Count of records

SELECT COUNT(date)

FROM FOOD\_PRICES;

-- Q2. Find out from how many states data are taken

-- A2. 27 states and 4 Union terrirories (Andaman nicobar, Chandigargh, Delhi, Puducheri)

SELECT count(DISTINCT admin1) as state

FROM FOOD\_PRICES WHERE admin1 is not null;

-- Q3. How to find out the states which have had the highest prices of Rice under cereals and tubers category - Retail purchases

SELECT admin1 as state,market,category,commodity,pricetype,max(price) as mprice

FROM FOOD\_PRICES

WHERE category ="cereals and tubers" AND pricetype = "Retail" AND commodity ="Rice"

group by 1,2 order by mprice desc;

-- Q4. Find out the states and market which have had the highest prices of Rice under cereals and tubers category- Wholesale purchases

SELECT admin1 as state,market,category,commodity,unit,pricetype,max(price) as mprice

FROM FOOD\_PRICES

WHERE category ="cereals and tubers" AND pricetype = "Wholesale" AND commodity ="Rice"

group by 1,2,5 order by mprice desc;

-- Q5.Find out the states and market which have had the highest prices of Milk under milk and dairy category- Retail purchases only

-- A5.Only in 7 states Raw milk is sold

SELECT admin1 as state,market,category,commodity,pricetype,max(price) as mprice

FROM FOOD\_PRICES

WHERE category ="milk and dairy" AND pricetype = "Retail" AND commodity ="Milk"

group by 1,2 order by mprice desc;

-- Q6.Find out the states and market which have had the highest prices of Milk (pasteurized) under milk and dairy category- Retail purchases only

SELECT admin1 as state,market,category,commodity,pricetype,max(price) as mprice

FROM FOOD\_PRICES

WHERE category ="milk and dairy" AND pricetype = "Retail" AND commodity ="Milk (pasteurized)"

group by 1,2 order by mprice desc;

-- Q7. Find out the states and market which have had the highest prices of Ghee (vanaspati) under oil and fats- Retail purchases only

-- A7. Mysore(Karnataka) seems to have the highest of Ghee(vanaspathi) prices

SELECT admin1 as state,market,category,commodity,pricetype,max(price) as mprice

FROM FOOD\_PRICES

WHERE admin1 is not null AND category ="oil and fats" AND commodity ="Ghee (vanaspati)"

group by 1,2,5 order by mprice desc;

-- Q8. Finding out the avegarge price of oil and fats as whole

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="oil and fats";

-- Q9. Find out the average prices for each type of oil under oil and fats

-- A9. Groundnut Oil has the highest average price of 148.5 INR and palm oil has the lowest average price of 100 INR

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="oil and fats" AND commodity ="oil (mustard)";

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="oil and fats" AND commodity ="oil (groundnut)";

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="oil and fats" AND commodity ="oil (sunflower)";

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="oil and fats" AND commodity ="oil (palm)";

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="oil and fats" AND commodity ="oil (soybean)";

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="oil and fats" AND commodity ="Ghee (vanaspati)";

-- Q10. Finding out the average prices of lentils

-- A10. Urad has the highest average price of 102.13 INR and chickpeas has the lowest average price of 46.23 INR

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="pulses and nuts" AND commodity = "Lentils (moong)";

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="pulses and nuts" AND commodity = "Lentils (urad)";

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="pulses and nuts" AND commodity = "Lentils (masur)";

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="pulses and nuts" AND commodity = "chickpeas";

-- Q11. Finding out the average price of Onions and tomatoes

-- A11. Average price of Onion is 28 INR and Average price of Tomato is 30.3 INR

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="vegetables and fruits" AND commodity = "Onions";

SELECT AVG(price) as Averageprice

FROM FOOD\_PRICES

WHERE category ="vegetables and fruits" AND commodity = "Tomatoes";

-- Q12 Find out which commodity has the highest price

-- A12 Tea(black) has the highest price throughout all the years (Data for Tea available only from the year 2013)

SELECT date, admin1 as state,market,category,commodity,pricetype,max(price) as mprice

FROM FOOD\_PRICES

WHERE pricetype = "Retail"

group by 1,2,3,4,5,6 order by mprice desc;

-- Q13 Find out the commodities which has the highest prices recently year 2022

-- A Tea comes first,oil comes second, lentils comes third

SELECT date, market,zone, category,commodity,MAX(price) as Highest\_price

FROM commodity\_prices

where date = "15/07/22" and pricetype = "Retail"

Group by market,zone,category,commodity

order by Highest\_price DESC;

-- Q14 Create a table for zones

-- Select city and State from food prices ind table and insert it into zones table

DROP Table if exists zones;

CREATE TABLE `zones` (

`City` VARCHAR(255),

`State` VARCHAR (255),

`zone` VARCHAR(255),

PRIMARY KEY(`City`, `State`)

);

Insert into zones

select DISTINCT admin2, admin1, NULL

from FOOD\_PRICES

where admin2 is not NULL;

SET SQL\_SAFE\_UPDATES = 0;

UPDATE `zones` SET zone ='South' WHERE State LIKE 'Tamil Nadu';

UPDATE `zones` SET zone ='South' WHERE State LIKE 'Telangana';

UPDATE `zones` SET zone ='South' WHERE State LIKE 'Andhra Pradesh';

UPDATE `zones` SET zone ='South' WHERE State LIKE 'Kerala';

UPDATE `zones` SET zone ='South' WHERE State LIKE 'Karnataka';

update `zones`set zone = 'North' WHERE State = 'Himachal Pradesh';

update `zones`set zone = 'North' WHERE State = 'Punjab';

update `zones`set zone = 'North' WHERE State = 'Uttarakhand';

update `zones`set zone = 'North' WHERE State = 'Uttar Pradesh';

update `zones`set zone = 'North' WHERE State = 'Haryana';

update `zones`set zone = 'East' WHERE State = 'Bihar';

update `zones`set zone = 'East' WHERE State = 'Orissa';

update `zones`set zone = 'East' WHERE State = 'Jharkhand';

update `zones`set zone = 'East' WHERE State = 'West Bengal';

update `zones`set zone = 'West' WHERE State = 'Rajasthan';

update `zones`set zone = 'West' WHERE State = 'Gujarat';

update `zones`set zone = 'West' WHERE State = 'Goa';

update `zones`set zone = 'West' WHERE State = 'Maharashtra';

update `zones`set zone = 'Central' WHERE State = 'Madhya Pradesh';

update `zones`set zone = 'Central' WHERE State = 'Chhattisgarh';

update `zones`set zone = 'North East' WHERE State = 'Assam';

update `zones`set zone = 'North East' WHERE State = 'Sikkim';

update `zones`set zone = 'North East' WHERE State = 'Manipur';

update `zones`set zone = 'North East' WHERE State = 'Meghalaya';

update `zones`set zone = 'North East' WHERE State = 'Nagaland';

update `zones`set zone = 'North East' WHERE State = 'Mizoram';

update `zones`set zone = 'North East' WHERE State = 'Tripura';

update `zones`set zone = 'North East' WHERE State = 'Arunachal Pradesh';

update `zones`set zone = 'Union Territory' WHERE State = 'Chandigarh';

update `zones`set zone = 'Union Territory' WHERE State = 'Delhi';

update `zones`set zone = 'Union Territory' WHERE State = 'Puducherry';

update `zones`set zone = 'Union Territory' WHERE State = 'Andaman and Nicobar';

Select \*

from zones;

-- Q15 JOIN zones table and FOOD\_PRICES AND Create a view

Create view commodity\_prices as

Select fo.date,zo.City,zo.State,fo.market,zo.zone,fo.latitude,fo.longitude,fo.category,fo.commodity,fo.unit,fo.priceflag,fo.pricetype,fo.currency,fo.price,fo.usdprice

from zones zo

JOIN FOOD\_PRICES fo

WHERE zo.State = fo.admin1;

select DISTINCT market

from commodity\_prices;

-- Q16 Average price of commodities zone wise

--

Select date,zone,category,commodity, AVG(price) as Average\_price

FROM commodity\_prices

WHERE date = "15/07/22"

Group by zone,category,commodity

order by commodity,Average\_price DESC;

-- Q17 Find out the price differences between 2022 and 2012

DROP Table if exists price\_differencesB;

Create Table price\_differencesB

(State varchar(255),

zone varchar(255),

category varchar(255),

commodity varchar(255),

Average\_price\_2012 double);

INSERT INTO price\_differencesB

SELECT State,zone,category,commodity,round(avg(price)) from commodity\_prices

WHERE date = "15/12/12" AND pricetype = "Retail"

group by 1,2,3,4;

DROP Table if exists price\_differencesC;

Create Table price\_differencesC

(State varchar(255),

zone varchar(255),

category varchar(255),

commodity varchar(255),

Average\_price\_2022 double);

INSERT INTO price\_differencesC

SELECT State,zone,category,commodity,round(avg(price)) from commodity\_prices

WHERE date = "15/07/22" and pricetype = "Retail"

group by 1,2,3,4;

SELECT B.State,B.zone,B.category,B.commodity,B.Average\_price\_2012,C.Average\_price\_2022,C.Average\_price\_2022 - B.Average\_price\_2012 as Diff\_bw\_price

FROM price\_differencesB B

JOIN price\_differencesC C

WHERE B.category = C.category AND B.commodity = C.commodity

order by zone;

-- Q18 Find out the average prices of each category food products zone wise

-- South zone has the highest avg price for cereals and tubers(Potatoes,rice,wheat,wheat flour),North zone hasthe lowest average

-- North East zone has the highest avg price for Milk and dairy, South zone has the lowest average

-- North East zone has the highest avg price for Miscellaneous food(Sugar,salt,jaggery,Tea(black)),Union territory has the lowest average

-- Union Territory has the highest avg price for oil and fats(Ghee,Groundnut,Mustard,palm,soybean,sunflower),Central has the lowest average

-- Union Territory,North East has the highest avg price for pulses and nuts(chickpeas and other types of lentils), Central has the lowest average

-- North East zone has the highest avg price for vegetablesand fruits, South has the lowest average

SELECT zone,category, round(avg(price)) as avgprice

from commodity\_prices

where pricetype = "Retail" and date = "15/07/22"

group by 1,2

order by category,avgprice DESC;

-- Q19 Find out the average prices of each commodity zone wise

SELECT zone,commodity, round(avg(price)) as avgprice

from commodity\_prices

where pricetype = "Retail" and date = "15/07/22"

group by 1,2

order by commodity,avgprice DESC;

-- Q20 Drop unnecessary tables

DROP table food\_pricesnew;