```
20    --counting how many countries are in the db with names starting with A
21    SELECT COUNT("countryCODE")
22    FROM country_tbl
23    WHERE "countryNAME" LIKE 'A%';
```

Data Output   Explain   Messages   Notifications

count bigint
10

(row 1)

```
25    --checking the production of all agri products on a single country
26    SELECT *
27    FROM production_tbl
28    WHERE "countryCode" = 'PHL';
```

Data Output   Explain   Messages   Notifications

	countryCode character varying	productID integer	Y1992 double precision	Y1993 double precision	Y1994 double precision	Y1995 double precision	Y1996 double precision	Y1997 double precision
1	PHL	2511	0	0	0	0	0	
2	PHL	2511	1897	1834	2218	2153	1957	
3	PHL	2805	305	314	352	376	377	
4	PHL	2805	5715	5912	6058	6458	7051	
5	PHL	2513	0	0	0	0	0	
6	PHL	2513	30	32	29	27	29	
7	PHL	2514	2626	2955	3185	3353	3511	
8	PHL	2514	1136	905	1281	786	596	
9	PHL	2515	22	0	0	0	0	
10	PHL	2515	0	0	0	0	0	
11	PHL	2516	5	4	5	7	7	
12	PHL	2516	2	3	5	4	6	
13	PHL	2517	0	1	1	1	1	
14	PHL	2518	1	0	0	0	0	

```
30    --checking the average global temperature during year 2000
31    SELECT AVG("Y2000") AS "2000 Ave Global Temp"
32    FROM temperature_tbl;
```

Data Output   Explain   Messages   Notifications

2000 Ave Global Temp double precision
18.819432218197196

(row 1)

```
34  --checking the price changes during 2008-2012 of products with productIDs of 2600's
35  SELECT "productID", "Y2012", "Y2011", "Y2010", "Y2009", "Y2008"
36  FROM price_tbl
37  WHERE "productID" BETWEEN '2600' AND '2700';
```

Data Output   Explain   Messages   Notifications

	productID [PK] character varying	Y2012 double precision	Y2011 double precision	Y2010 double precision	Y2009 double precision	Y2008 double precision
1	2611	867.9580002	891.1004995	1033.203256	909.039471	1107.306983
2	2615	984.281644	975.9143078	881.418018	847.9511971	843.6297535
3	2633	2377.069389	2978.490741	3130.596518	2895.024838	2572.758914
4	2635	348.9151245	346.1605614	316.7372255	313.9566667	269.5058333
5	2630	110.6414978	115.9957751	84.10337318	77.12749016	106.2400187

```
39  --checking the max temperature during year 2012
40  SELECT MAX("Y2012") AS "2012 Max Temp"
41  FROM temperature_tbl;
42  |
```

Data Output   Explain   Messages   Notifications

	2012 Max Temp double precision
1	29.11345833

```
43  --checking the total global production of a single agri product on a single year
44  SELECT SUM("Y2012") AS "2012 Global Wheat Production"
45  FROM production_tbl
46  WHERE "productID" = '2511';
```

Data Output   Explain   Messages   Notifications

	2012 Global Wheat Production double precision
1	576597

```sql
48  --joining tables
49  SELECT *
50  FROM country_tbl
51  LEFT JOIN production_tbl ON production_tbl."countryCode"=country_tbl."countryCODE";
```

Data Output | Explain | Messages | Notifications

	countryNAME character varying	countryCODE character varying	countryCode character varying	productID integer	Y1992 double precision	Y1993 double precision	Y1994 double
1	Afghanistan	AFG	AFG	2511	1582	1840	
2	Afghanistan	AFG	AFG	2805	249	218	
3	Afghanistan	AFG	AFG	2513	40	50	
4	Afghanistan	AFG	AFG	2513	120	155	
5	Afghanistan	AFG	AFG	2514	90	141	
6	Afghanistan	AFG	AFG	2514	170	272	
7	Afghanistan	AFG	AFG	2517	18	22	
8	Afghanistan	AFG	AFG	2520	0	0	
9	Afghanistan	AFG	AFG	2531	210	210	
10	Afghanistan	AFG	AFG	2536	29	29	
11	Afghanistan	AFG	AFG	2537	0	0	
12	Afghanistan	AFG	AFG	2542	50	47	
13	Afghanistan	AFG	AFG	2543	0	0	
14	Afghanistan	AFG	AFG	2745	4	4	

```sql
53  --filtering countries with no temperature readings
54  SELECT *
55  FROM country_tbl
56  LEFT JOIN temperature_tbl ON temperature_tbl."countryCODE"=country_tbl."countryCODE"
57  WHERE temperature_tbl."Y2012" IS NOT NULL;
```

Data Output | Explain | Messages | Notifications

	countryNAME character varying	countryCODE character varying	Y1992 double precision	Y1993 double precision	Y1994 double precision	Y1995 double precision	Y1996 double precision
1	Afghanistan	AFG	14.05608333	14.43925	14.75475	14.85916667	14.4
2	Albania	ALB	13.08466667	13.12258333	14.09966667	12.78208333	12.73
3	Algeria	DZA	22.767	23.45083333	23.64208333	23.7225	23.734333
4	Angola	AGO	22.49858333	22.291	22.18941667	22.93616667	22.479
5	Argentina	ARG	14.73916667	15.09866667	15.57866667	15.14983333	15.211583
6	Armenia	ARM	7.614666667	7.769666667	9.02125	9.892166667	9.8191666
7	Australia	AUS	21.93258333	22.16016667	22.03025	21.95516667	22.325333
8	Austria	AUT	7.615583333	6.858666667	8.164916667	6.8465	5.863
9	Azerbaijan	AZE	25.4655	25.54983333	26.0245	25.76866667	25.385416

```sql
59  --querying the top 10 corn producers during 2012
60  SELECT product_tbl."productID", "product_name", "countryCode", "Y2012"
61  FROM product_tbl
62  LEFT JOIN production_tbl ON production_tbl."productID"=product_tbl."productID"
63  WHERE product_tbl."productID" = '2514'
64  ORDER BY "Y2012" DESC
65  LIMIT 10;
```

Data Output   Explain   Messages   Notifications

	productID integer	product_name character varying	countryCode character varying	Y2012 double precision
1	2514	Maize and products	CHN	140000
2	2514	Maize and products	USA	109607
3	2514	Maize and products	BRA	38871
4	2514	Maize and products	MEX	14086
5	2514	Maize and products	MEX	12063
6	2514	Maize and products	JPN	10857
7	2514	Maize and products	ITA	10500
8	2514	Maize and products	CAN	10474
9	2514	Maize and products	CHN	9391
10	2514	Maize and products	IDN	8764

```sql
67  --filtering agri products with no reported price
68  SELECT *
69  FROM product_tbl
70  LEFT JOIN price_tbl ON CAST (price_tbl."productID" AS int)=product_tbl."productID"
71  WHERE price_tbl."Y2012" IS NOT NULL;
```

Data Output   Explain   Messages   Notifications

	productID integer	product_name character varying	productID character varying	Y1992 double precision	Y1993 double precision	Y1994 double precision	Y1995 double precision	Y d
4	2577	Palm Oil	2577	320.3297341	312.1423194	437.2712302	337.0223403	
5	2580	Olive Oil	2580	3177.9435	2703.63525	3148.844417	4499.512729	
6	2513	Barley and products	2513	78.67519012	71.37691574	72.64898472	104.0118937	
7	2514	Maize and products	2514	104.212808	102.0399653	107.77819	123.4513156	
8	2615	Bananas	2615	473.0833333	443.0258333	439.7908333	445.1025	
9	2960	Fish, Seafood	2960	5.901078621	5.009571941	5.011666823	4.775742293	
10	2633	Cocoa Beans and prod...	2633	1099.419983	1111.271067	1395.682271	1432.542053	
11	2635	Tea (including mate)	2635	199.7412084	185.6352399	183.319149	164.1560059	
12	2573	Sunflowerseed Oil	2573	562.1807514	682.1724215	723.5300188	631.7102618	
13	2630	Coffee and products	2630	43.6243674	53.49531205	119.8150244	126.8260905	
14	2542	Sugar (Raw Equivalent)	2542	9.069762746	10.02061431	12.10952369	13.27821517	
15	2805	Rice (Milled Equivalent)	2805	267.6666667	237.25	269.4583333	320.8013891	

```sql
73  --determining the highest priced agri product on 2012
74  SELECT product_tbl."productID","product_name", "Y2012"
75  FROM price_tbl
76  LEFT JOIN product_tbl ON CAST (price_tbl."productID" AS int)=product_tbl."productID"
77  WHERE "Y2012" = (
78      SELECT MAX("Y2012")
79      FROM price_tbl
80  );
```

Data Output   Explain   Messages   Notifications

productID integer	product_name character varying	Y2012 double precision
1	2580	Olive Oil	3019.367529