California Avocados Production

Add a "Be large-hearted like this ancient fruit," says Melbourne- based chef SCOTT PICKETT of the versatility of the avocado bit of body text

Highest Production In County

■Maximum Production County is a San Diego

AVOCADO SALES GROW WHEN CALIFORNIA AVOCADOS ARE IN SEASON!

Shoppers anxiously anticipate the California season because of the consistent quality, freshness and homegrown taste of fresh California Avocados. They value the California difference and spend more when California Avocados are available. Retailers can benefit from the California season's higher sales velocity. increased dollar sales and shopper preference.

The best avocados have California in them.

Shoppers anxiously anticipate the California season because there is a California difference.
They value the care our nearly 3,000 growers put into nurturing each avocado to ensure they get that creamy California avocado taste with every slice.

Also

- -Game Of Thrones in Ireland
- -Human vs Divine
- - Upholding Nelson Mandela's values
- - A doctor speaks up for meditation

@reallygreatsite

Title Of Project

“California Avocados Production”

Using MySQL

Under Guidence Of

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SYMBIOSIS SKILL AND PROFESSIONAL UNIVERSITY

Symbiosis Bhavan, Model Colony, Pune 16

❖ Introduction:

Avocados are native to Central America and the West Indies. While the Spanish were familiar with avocados, they did not include them in the mission gardens. The first recorded avocado tree in California was planted in 1856 by Thomas White of San Gabriel. The first commercial orchard was planted in 1908. In 1913 the variety 'Fuerte' was introduced. This became the first important commercial variety, due to its good taste and cold tolerance. Despite its short season and erratic bearing it remained the industry standard for several decades [3] . The blackskinned 'Hass' avocado was selected from a seedling grown by Robert Hass of La Habra in 1926. 'Hass' was a better bearer and had a longer season, but was initially rejected by consumers already familiar with the green-skinned 'Fuerte'. However, by 1972 'Hass' surpassed 'Fuerte' as the dominant variety, and as of 2012 accounted for about 95% of avocados grown in California

❖ Types Of Analysis

1. Descriptive Analysis: What Happened?

The Dietary Guidelines recommend limiting calories from added sugars and saturated fats and reduce sodium intake. Avocados are naturally sodium and sugar free as well as low in saturated fat. The Guidelines emphasize good fats, like the type found in avocados, as part of healthy eating patterns. The fat in avocados is mostly unsaturated.

Is intended to help you shift your diet towards healthier choices including those from plant foods like vegetables, fruits, whole grains, oils, legumes, nuts, seeds as well as nonfat or low-fat dairy foods and/or fortified soy beverages.

2. Diagnostic Analysis: What Should Happen?

Frederick O. Popenoe, owner of the West India Gardens nursery in Altadena, Los Angeles County, sent his son, Wilson Popenoe, and his employee Carl Schmidt, on collecting expeditions in 1911 to find superior selections of avocado that might be productive in California. Carl Schmidt sought out fruit that looked good in the market places, then tried to follow the trail back to the tree to sample budwood for shipment to California.

3. Predictive Analysis: What Will Happened?

As soon as the trees arrive, examine the bottom of the root balls by removing a few trees from the pots or sleeves (very carefully!). If roots are found that have dark brown discolorations in the interior of a given feeder root, then a lab or a University farm advisor should take root samples and have them examined for Phytophthora. In previous years, on rare occasion, some nurseries had trees that were infected with Phytophthora root rot. This hasn't been the case in recent years, but it is still a good idea to double-check. Once the trees are planted, and trees start to die, the source of the root rot cannot be determined.

4. Prescriptive Analytics: What Should Happen?

Avocados are frost-sensitive, and are grown mostly along the southern coast.The project mission is to turn a million unproductive fruit trees in community homesteads to productive commercial viable fruit trees in the next ten years. The project would need Government assistance for the first 3 years after which the project will become self-sustainable. The funding which is needed from Government is for the first 3 years operational and implementation cost as well as the capital expenditure and training.

❖ Dataset:

https://www.kaggle.com/datasets/jarredpriester/california-avocado-production-19802020?select=cali_avocados.csv

❖ Tools:

- MySQL
- MS Word
- MS Excel

❖ Observations

- Tables
- Graphs

❖ Project Work

- **Basic Operations-**

1.Adding the Column from the table

```
mysql> alter table avocados add column Defected_Product varchar(50) after Price_P_U;
Query OK, 0 rows affected (0.05 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc avocados;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| Year             | int         | YES  |     | NULL    |       |
| Commodity_Code   | int         | YES  |     | NULL    |       |
| Crop_Name        | varchar(13) | YES  |     | NULL    |       |
| County_Code      | int         | YES  |     | NULL    |       |
| County           | varchar(16) | YES  |     | NULL    |       |
| Harvested_Acres  | int         | YES  |     | NULL    |       |
| Yield            | decimal(3,2)| YES  |     | NULL    |       |
| Production       | int         | YES  |     | NULL    |       |
| Price_P_U        | decimal(7,2)| YES  |     | NULL    |       |
| Defected_Product | varchar(50) | YES  |     | NULL    |       |
| Unit             | varchar(5)  | YES  |     | NULL    |       |
| Value            | int         | YES  |     | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
12 rows in set (0.00 sec)
```

2.Drop the column from the table

```
mysql> alter table avocados drop column  Defected_Product;
Query OK, 0 rows affected (0.13 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc avocados;
+-----------------+-------------+------+-----+---------+-------+
| Field           | Type        | Null | Key | Default | Extra |
+-----------------+-------------+------+-----+---------+-------+
| Year            | int         | YES  |     | NULL    |       |
| Commodity_Code  | int         | YES  |     | NULL    |       |
| Crop_Name       | varchar(13) | YES  |     | NULL    |       |
| County_Code     | int         | YES  |     | NULL    |       |
| County          | varchar(16) | YES  |     | NULL    |       |
| Harvested_Acres | int         | YES  |     | NULL    |       |
| Yield           | decimal(3,2)| YES  |     | NULL    |       |
| Production      | int         | YES  |     | NULL    |       |
| Price_P_U       | decimal(7,2)| YES  |     | NULL    |       |
| Unit            | varchar(5)  | YES  |     | NULL    |       |
| Value           | int         | YES  |     | NULL    |       |
+-----------------+-------------+------+-----+---------+-------+
11 rows in set (0.00 sec)
```

3. Select * From avocados

```
mysql> select * from avocados;
```

Year	Commodity_Code	Crop_Name	County_Code	County	Harvested_Acres	Yield	Production	Price_P_U	Unit	Value
2020	221999	AVOCADOS ALL	53	Monterey	223	5.56	1240	2379.84	Tons	2951000
2020	221999	AVOCADOS ALL	65	Riverside	3020	4.32	13400	3200.31	Tons	88697000
2020	221999	AVOCADOS ALL	71	San Bernardino	370	2.16	799	2617.02	Tons	2091000
2020	221999	AVOCADOS ALL	73	San Diego	14400	3.51	50500	3028.87	Tons	152958000
2020	221999	AVOCADOS ALL	79	San Luis Obispo	4240	5.90	25000	1886.76	Tons	47169000
2020	221999	AVOCADOS ALL	83	Santa Barbara	5770	4.89	28200	2842.59	Tons	80161000
2020	221999	AVOCADOS ALL	111	Ventura	16400	4.29	70300	2556.57	Tons	179727000
2019	221999	AVOCADOS ALL	53	Monterey	225	6.58	1480	2500.00	Tons	3700000
2019	221999	AVOCADOS ALL	65	Riverside	2940	5.48	16100	2505.53	Tons	40339000
2019	221999	AVOCADOS ALL	71	San Bernardino	397	3.53	1400	2604.29	Tons	3646000
2019	221999	AVOCADOS ALL	73	San Diego	14900	2.38	35400	3958.08	Tons	140116000
2019	221999	AVOCADOS ALL	79	San Luis Obispo	4440	2.75	12200	3186.48	Tons	38875000
2019	221999	AVOCADOS ALL	83	Santa Barbara	5410	1.98	10700	3309.44	Tons	35411000
2019	221999	AVOCADOS ALL	111	Ventura	16500	3.02	49800	2349.02	Tons	116981000
2019	221999	AVOCADOS ALL	991	Sum of Others	1151	3.80	566	2120.00	Tons	4357000
2018	221999	AVOCADOS ALL	53	Monterey	256	4.53	1160	2250.00	Tons	2610000
2018	221999	AVOCADOS ALL	65	Riverside	4270	3.79	16200	2378.27	Tons	38528000
2018	221999	AVOCADOS ALL	71	San Bernardino	457	3.85	1760	2379.55	Tons	4188000
2018	221999	AVOCADOS ALL	73	San Diego	17700	2.66	47100	2569.81	Tons	121038000
2018	221999	AVOCADOS ALL	79	San Luis Obispo	4160	4.62	19200	2403.39	Tons	46145000
2018	221999	AVOCADOS ALL	83	Santa Barbara	4930	4.56	22500	2338.53	Tons	52617000
2018	221999	AVOCADOS ALL	111	Ventura	17100	3.08	52700	1959.24	Tons	103252000
2018	221999	AVOCADOS ALL	991	Sum of Others	1136	2.26	2572	2417.57	Tons	6218000
2017	221999	AVOCADOS ALL	53	Monterey	383	3.08	1180	3239.83	Tons	3823000
2017	221999	AVOCADOS ALL	65	Riverside	4520	3.92	17700	2258.36	Tons	39973000
2017	221999	AVOCADOS ALL	71	San Bernardino	477	3.08	1470	2349.66	Tons	3454000
2017	221999	AVOCADOS ALL	73	San Diego	15000	2.30	34500	3541.74	Tons	122190000
2017	221999	AVOCADOS ALL	79	San Luis Obispo	4080	2.35	9570	2852.14	Tons	27295000
2017	221999	AVOCADOS ALL	83	Santa Barbara	4270	2.46	10500	3676.76	Tons	38606000
2017	221999	AVOCADOS ALL	111	Ventura	17400	3.12	54300	2185.64	Tons	118680000
2017	221999	AVOCADOS ALL	991	Sum of Others	1178	1.80	2126	3331.14	Tons	7082000
2016	221999	AVOCADOS ALL	53	Monterey	245	5.39	1320	2430.30	Tons	3208000
2016	221999	AVOCADOS ALL	65	Riverside	4190	4.15	17400	1919.08	Tons	33392000
2016	221999	AVOCADOS ALL	71	San Bernardino	505	3.09	1560	1360.26	Tons	2122000
2016	221999	AVOCADOS ALL	73	San Diego	17700	3.28	58000	2348.72	Tons	136226000
2016	221999	AVOCADOS ALL	79	San Luis Obispo	4010	4.96	19900	2242.61	Tons	44628000

❖ Analysis

1.Count Distinct year

```
mysql> select count(distinct Year) from avocados;
+---------------------+
| count(distinct Year) |
+---------------------+
|                  25 |
+---------------------+
1 row in set (0.00 sec)
```

2.max production

```
mysql> select max(Production) from avocados;
+-----------------+
| max(Production) |
+-----------------+
|          121150 |
+-----------------+
1 row in set (0.02 sec)
```

3.higest harvest acers county year

```
mysql> select max( Harvested_Acres),County,Year from avocados;
+-----------------------+-----------+------+
| max( Harvested_Acres) | County    | Year |
+-----------------------+-----------+------+
|                 26549 | Monterey  | 2020 |
+-----------------------+-----------+------+
1 row in set (0.00 sec)
```

4.Minimum harvest acers County Year

```
mysql> select min( Harvested_Acres),County,Year from avocados;
+-----------------------+-----------+------+
| min( Harvested_Acres) | County    | Year |
+-----------------------+-----------+------+
|                    34 | Monterey  | 2020 |
+-----------------------+-----------+------+
1 row in set (0.00 sec)
```

5. How Many data are in the table

```
mysql> select count(*) from avocados;
+----------+
| count(*) |
+----------+
|      227 |
+----------+
1 row in set (0.02 sec)
```

6.Find get Unique County from the table

```
mysql> select distinct County from avocados;
+------------------+
| County           |
+------------------+
| Monterey         |
| Riverside        |
| San Bernardino   |
| San Diego        |
| San Luis Obispo  |
| Santa Barbara    |
| Ventura          |
| Sum of Others    |
| San Luis Obisp   |
| Los Angeles      |
| Orange           |
| Tulare           |
```

7. County Wise Avocados Production

```
mysql> select County,County_Code,Production from avocados order by Value;
+------------------+-------------+------------+
| County           | County_Code | Production |
+------------------+-------------+------------+
| Monterey         |          53 |         85 |
| Los Angeles      |          37 |        100 |
| Monterey         |          53 |         96 |
| Sum of Others    |         991 |       4573 |
| Los Angeles      |          37 |         50 |
| Los Angeles      |          37 |         64 |
| Los Angeles      |          37 |         71 |
| Los Angeles      |          37 |         85 |
| Los Angeles      |          37 |        101 |
| Los Angeles      |          37 |        146 |
| Sum of Others    |         991 |         93 |
| Los Angeles      |          37 |         70 |
| Los Angeles      |          37 |        123 |
| Los Angeles      |          37 |        267 |
| Los Angeles      |          37 |         88 |
| Monterey         |          53 |        111 |
| Sum of Others    |         991 |       5784 |
| Los Angeles      |          37 |        243 |
| Los Angeles      |          37 |        193 |
| Sum of Others    |         991 |        190 |
| Monterey         |          53 |        274 |
| Los Angeles      |          37 |        341 |
| Monterey         |          53 |        275 |
| Monterey         |          53 |        204 |
| Monterey         |          53 |        192 |
| Monterey         |          53 |        237 |
| Monterey         |          53 |        377 |
| Monterey         |          53 |        350 |
| Monterey         |          53 |        346 |
| San Bernardino   |          71 |        899 |
| Los Angeles      |          37 |        627 |
| Monterey         |          53 |        422 |
```

```
mysql> select County,avg(Yield) as Production from avocados group by County order by Production;
+------------------+------------+
| County           | Production |
+------------------+------------+
| Los Angeles      |   2.478125 |
| San Luis Obisp   |   2.810000 |
| Ventura          |   2.855200 |
| Sum of Others    |   2.891667 |
| Santa Barbara    |   2.945200 |
| Orange           |   2.959000 |
| Monterey         |   3.044000 |
| San Diego        |   3.074800 |
| Riverside        |   3.258400 |
| San Luis Obispo  |   3.258750 |
| Tulare           |   3.586250 |
| San Bernardino   |   3.906000 |
+------------------+------------+
12 rows in set (0.02 sec)
```

```
mysql> select County,sum(Yield)as Production from avocados group by County order by Production;
+-----------------+------------+
| County          | Production |
+-----------------+------------+
| San Luis Obisp  |       2.81 |
| Tulare          |      28.69 |
| Orange          |      29.59 |
| Los Angeles     |      39.65 |
| Sum of Others   |      52.05 |
| Ventura         |      71.38 |
| Santa Barbara   |      73.63 |
| Monterey        |      76.10 |
| San Diego       |      76.87 |
| San Luis Obispo |      78.21 |
| Riverside       |      81.46 |
| San Bernardino  |      97.65 |
+-----------------+------------+
12 rows in set (0.00 sec)
```

8.Year Wise Avocados Production

```
mysql> Select Year,sum(Production) from avocados group by Year;
+------+-----------------+
| Year | sum(Production) |
+------+-----------------+
| 2020 |          189439 |
| 2019 |          127646 |
| 2018 |          163192 |
| 2017 |          131346 |
| 2016 |          189231 |
| 2015 |          147632 |
| 2014 |          169279 |
| 2013 |          295066 |
| 2012 |          231529 |
| 2011 |          156687 |
| 2010 |          248171 |
| 2009 |          108182 |
| 2008 |          141012 |
| 2007 |          140496 |
| 2006 |          299052 |
| 2005 |          190340 |
| 2004 |          217126 |
| 2003 |          175899 |
| 2002 |          190572 |
| 2001 |          174310 |
| 2000 |          131500 |
| 1999 |          122759 |
| 1998 |          149677 |
| 1997 |          154776 |
| 1996 |          163008 |
+------+-----------------+
25 rows in set (0.00 sec)
```

```
mysql> select Year,avg(Production) from avocados group by Year;
+------+-----------------+
| Year | avg(Production) |
+------+-----------------+
| 2020 |      27062.7143 |
| 2019 |      15955.7500 |
| 2018 |      20399.0000 |
| 2017 |      16418.2500 |
| 2016 |      23653.8750 |
| 2015 |      18454.0000 |
| 2014 |      21159.8750 |
| 2013 |      36883.2500 |
| 2012 |      28941.1250 |
| 2011 |      17409.6667 |
| 2010 |      27574.5556 |
| 2009 |      12020.2222 |
| 2008 |      15668.0000 |
| 2007 |      15610.6667 |
| 2006 |      33228.0000 |
| 2005 |      19034.0000 |
| 2004 |      21712.6000 |
| 2003 |      17589.9000 |
| 2002 |      19057.2000 |
| 2001 |      17431.0000 |
| 2000 |      13150.0000 |
| 1999 |      12275.9000 |
| 1998 |      13607.0000 |
| 1997 |      14070.5455 |
| 1996 |      16300.8000 |
+------+-----------------+
25 rows in set (0.00 sec)
```

```
mysql> select Year,min( Harvested_Acres) from avocados group by Year;
+------+-----------------------+
| Year | min( Harvested_Acres) |
+------+-----------------------+
| 2020 |                   223 |
| 2019 |                   225 |
| 2018 |                   256 |
| 2017 |                   383 |
| 2016 |                   245 |
| 2015 |                   229 |
| 2014 |                   200 |
| 2013 |                   200 |
| 2012 |                   193 |
| 2011 |                    78 |
| 2010 |                    87 |
| 2009 |                    80 |
| 2008 |                    81 |
| 2007 |                    53 |
| 2006 |                    60 |
| 2005 |                   101 |
| 2004 |                    59 |
| 2003 |                    34 |
| 2002 |                    46 |
| 2001 |                    62 |
| 2000 |                    47 |
| 1999 |                    41 |
| 1998 |                    86 |
| 1997 |                    92 |
| 1996 |                    95 |
+------+-----------------------+
25 rows in set (0.00 sec)
```

```
mysql> select Year,max( Harvested_Acres) from avocados group by Year;
+------+----------------------+
| Year | max( Harvested_Acres) |
+------+----------------------+
| 2020 |                16400 |
| 2019 |                16500 |
| 2018 |                17700 |
| 2017 |                17400 |
| 2016 |                18500 |
| 2015 |                19500 |
| 2014 |                19700 |
| 2013 |                21100 |
| 2012 |                22400 |
| 2011 |                17700 |
| 2010 |                19100 |
| 2009 |                24684 |
| 2008 |                26549 |
| 2007 |                26064 |
| 2006 |                26012 |
| 2005 |                26326 |
| 2004 |                26122 |
| 2003 |                25482 |
| 2002 |                25729 |
| 2001 |                25922 |
| 2000 |                25997 |
| 1999 |                26347 |
| 1998 |                26347 |
| 1997 |                22600 |
| 1996 |                23947 |
+------+----------------------+
25 rows in set (0.00 sec)
```

9. Display Record crop Production County Starting Name With ‘S%’

```
mysql> select  Crop_Name,County from avocados where County like 'S%';
+--------------+-----------------+
| Crop_Name    | County          |
+--------------+-----------------+
| AVOCADOS ALL | San Bernardino  |
| AVOCADOS ALL | San Diego       |
| AVOCADOS ALL | San Luis Obispo |
| AVOCADOS ALL | Santa Barbara   |
| AVOCADOS ALL | San Bernardino  |
| AVOCADOS ALL | San Diego       |
| AVOCADOS ALL | San Luis Obispo |
| AVOCADOS ALL | Santa Barbara   |
| AVOCADOS ALL | Sum of Others   |
| AVOCADOS ALL | San Bernardino  |
| AVOCADOS ALL | San Diego       |
| AVOCADOS ALL | San Luis Obispo |
| AVOCADOS ALL | Santa Barbara   |
| AVOCADOS ALL | Sum of Others   |
| AVOCADOS ALL | San Bernardino  |
| AVOCADOS ALL | San Diego       |
| AVOCADOS ALL | San Luis Obispo |
| AVOCADOS ALL | Santa Barbara   |
| AVOCADOS ALL | Sum of Others   |
| AVOCADOS ALL | San Bernardino  |
| AVOCADOS ALL | San Diego       |
| AVOCADOS ALL | San Luis Obispo |
| AVOCADOS ALL | Santa Barbara   |
| AVOCADOS ALL | Sum of Others   |
| AVOCADOS ALL | San Bernardino  |
| AVOCADOS ALL | San Diego       |
| AVOCADOS ALL | San Luis Obispo |
| AVOCADOS ALL | Santa Barbara   |
| AVOCADOS ALL | Sum of Others   |
| AVOCADOS ALL | San Bernardino  |
| AVOCADOS ALL | San Diego       |
| AVOCADOS ALL | San Luis Obispo |
| AVOCADOS ALL | Santa Barbara   |
```

10. Display Record crop Production County Starting Name With ‘V%’

```
mysql> select  Crop_Name,County from avocados where County like 'V%';
+--------------+---------+
| Crop_Name    | County  |
+--------------+---------+
| AVOCADOS ALL | Ventura |
| AVOCADOS ALL | Ventura |
| AVOCADOS ALL | Ventura |
| AVOCADOS ALL | Ventura |
| AVOCADOS ALL | Ventura |
| AVOCADOS ALL | Ventura |
| AVOCADOS ALL | Ventura |
| AVOCADOS ALL | Ventura |
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| AVOCADOS ALL | Ventura |
| AVOCADOS ALL | Ventura |
| AVOCADOS ALL | Ventura |
| AVOCADOS ALL | Ventura |
+--------------+---------+
25 rows in set (0.00 sec)
```

11.Total sum from Yield :

```
mysql> SELECT SUM(YIELD) FROM AVOCADOS;
+------------+
| SUM(YIELD) |
+------------+
|     708.09 |
+------------+
1 row in set (0.00 sec)
```

12. Maximum Commodity Code, County Code, County, Harvested Acres, Production and Value.

```
mysql> select * from avocados where Production=(select max(Production) from avocados);
+------+---------------+--------------+-------------+-----------+-----------------+-------+------------+-----------+-------+-----------+
| Year | Commodity_Code | Crop_Name     | County_Code | County     | Harvested_Acres | Yield | Production | Price_P_U | Unit  | Value     |
+------+---------------+--------------+-------------+-----------+-----------------+-------+------------+-----------+-------+-----------+
| 2006 |         221999 | AVOCADOS ALL  |          73 | San Diego  |           26012 |  4.66 |     121150 |   1133.35 | Tons  | 137305800 |
+------+---------------+--------------+-------------+-----------+-----------------+-------+------------+-----------+-------+-----------+
1 row in set (0.02 sec)
```

```
mysql> select * from avocados where Harvested_Acres=(select max(Harvested_Acres) from avocados);
+------+---------------+--------------+-------------+-----------+-----------------+-------+------------+-----------+-------+-----------+
| Year | Commodity_Code | Crop_Name     | County_Code | County     | Harvested_Acres | Yield | Production | Price_P_U | Unit  | Value     |
+------+---------------+--------------+-------------+-----------+-----------------+-------+------------+-----------+-------+-----------+
| 2008 |         221999 | AVOCADOS ALL  |          73 | San Diego  |           26549 |  2.25 |      59805 |   2419.44 | Tons  | 144694900 |
+------+---------------+--------------+-------------+-----------+-----------------+-------+------------+-----------+-------+-----------+
1 row in set (0.00 sec)
```

13.Show Second Highest Value of Production

```
mysql> select max(Value) from avocados where Value<(select max(Value) from avocados);
+------------+
| max(Value) |
+------------+
|  209723000 |
+------------+
1 row in set (0.00 sec)
```

```
mysql> select max(Value),Production from avocados where Value<(select max(Value) from avocados);
+------------+------------+
| max(Value) | Production |
+------------+------------+
|  209723000 |       1240 |
+------------+------------+
1 row in set (0.00 sec)
```

14.Show Highest Values

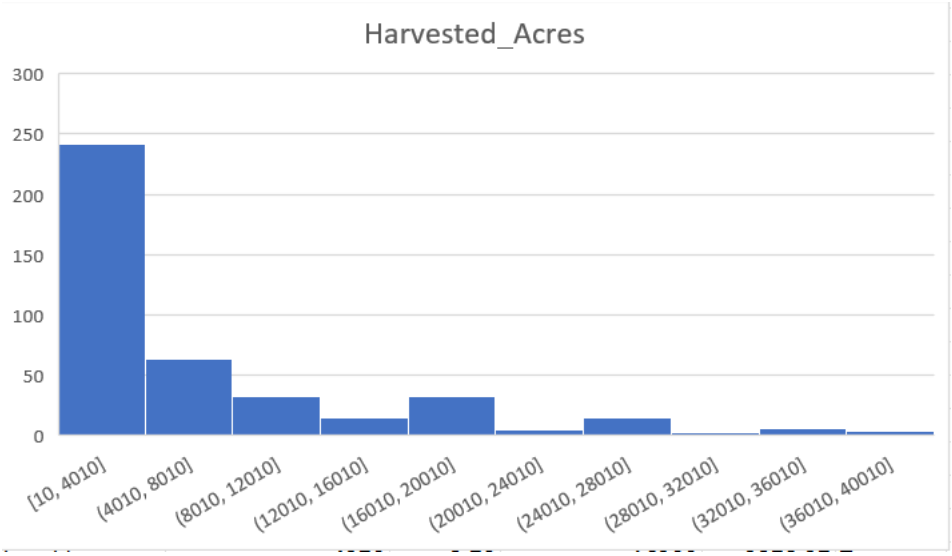
```
mysql> select County,Production,Unit,Value from avocados where Yield>(select avg(Yield) from avocados);
+------------------+------------+-------+-----------+
| County           | Production | Unit  | Value     |
+------------------+------------+-------+-----------+
| Monterey         |       1240 | Tons  |   2951000 |
| Riverside        |      13400 | Tons  |  88697000 |
| San Diego        |      50500 | Tons  | 152958000 |
| San Luis Obispo  |      25000 | Tons  |  47169000 |
| Santa Barbara    |      28200 | Tons  |  80161000 |
| Ventura          |      70300 | Tons  | 179727000 |
| Monterey         |       1480 | Tons  |   3700000 |
| Riverside        |      16100 | Tons  |  40339000 |
| San Bernardino   |       1400 | Tons  |   3646000 |
| Sum of Others    |        566 | Tons  |   4357000 |
| Monterey         |       1160 | Tons  |   2610000 |
| Riverside        |      16200 | Tons  |  38528000 |
| San Bernardino   |       1760 | Tons  |   4188000 |
| San Luis Obispo  |      19200 | Tons  |  46145000 |
| Santa Barbara    |      22500 | Tons  |  52617000 |
| Riverside        |      17700 | Tons  |  39973000 |
| Ventura          |      54300 | Tons  | 118680000 |
| Monterey         |       1320 | Tons  |   3208000 |
| Riverside        |      17400 | Tons  |  33392000 |
| San Diego        |      58000 | Tons  | 136226000 |
| San Luis Obispo  |      19900 | Tons  |  44628000 |
| Santa Barbara    |      24600 | Tons  |  63483000 |
| Ventura          |      61600 | Tons  | 129000000 |
| Sum of Others    |       4851 | Tons  |   9255000 |
| San Bernardino   |       1620 | Tons  |   2051000 |
| Santa Barbara    |      23400 | Tons  |  46901000 |
| Riverside        |      18700 | Tons  |  35343000 |
| San Bernardino   |        822 | Tons  |   1322000 |
| San Diego        |      59100 | Tons  | 154038000 |
| Santa Barbara    |      26400 | Tons  |  59936000 |
| Monterey         |       1420 | Tons  |   3002000 |
| Riverside        |      24200 | Tons  |  41207000 |
| San Bernardino   |        917 | Tons  |   1531000 |
```

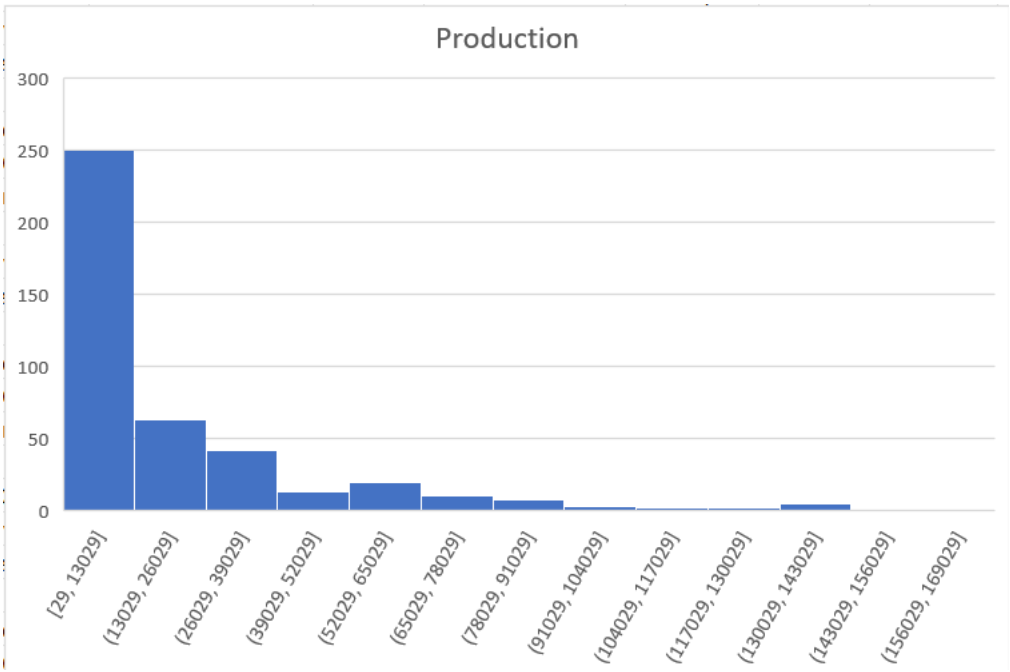
15.Display top 30 records using limit

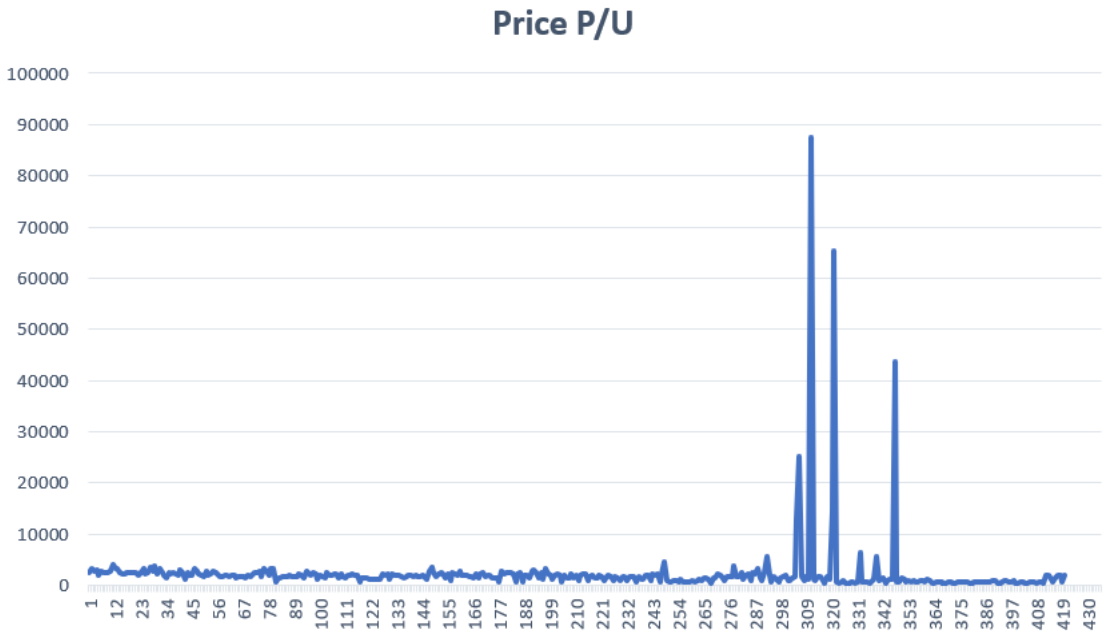
```
mysql> select * from avocados limit 30;
```

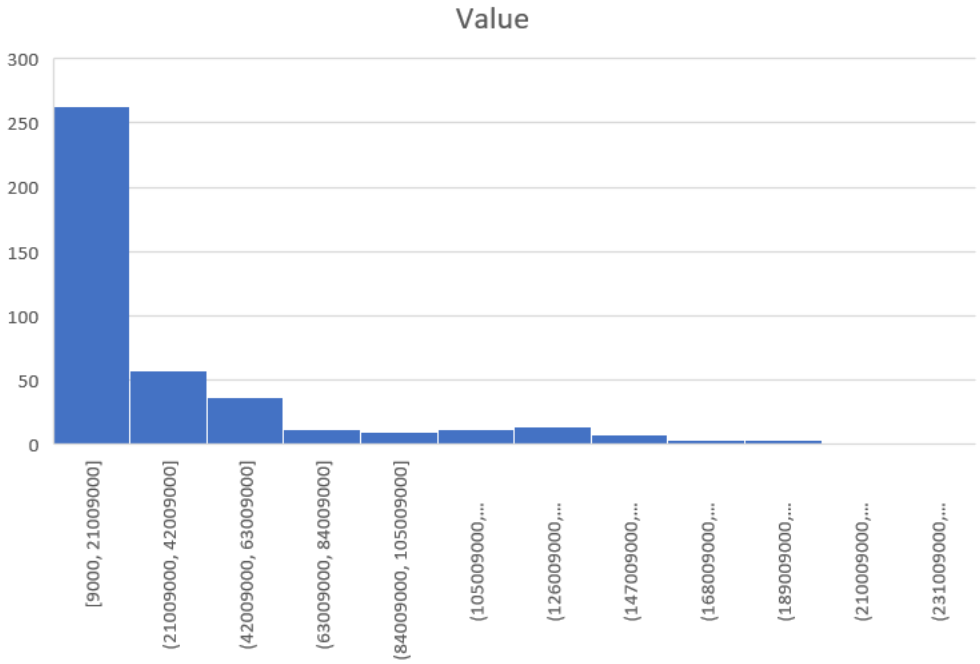
Year	Commodity_Code	Crop_Name	County_Code	County	Harvested_Acres	Yield	Production	Price_P_U	Unit	Value
2020	221999	AVOCADOS ALL	53	Monterey	223	5.56	1240	2379.84	Tons	2951000
2020	221999	AVOCADOS ALL	65	Riverside	3020	4.32	13400	3200.31	Tons	88697000
2020	221999	AVOCADOS ALL	71	San Bernardino	370	2.16	799	2617.02	Tons	2091000
2020	221999	AVOCADOS ALL	73	San Diego	14400	3.51	50500	3028.87	Tons	152958000
2020	221999	AVOCADOS ALL	79	San Luis Obispo	4240	5.90	25000	1886.76	Tons	47169000
2020	221999	AVOCADOS ALL	83	Santa Barbara	5770	4.89	28200	2842.59	Tons	80161000
2020	221999	AVOCADOS ALL	111	Ventura	16400	4.29	70300	2556.57	Tons	179727000
2019	221999	AVOCADOS ALL	53	Monterey	225	6.58	1480	2500.00	Tons	3700000
2019	221999	AVOCADOS ALL	65	Riverside	2940	5.48	16100	2505.53	Tons	40339000
2019	221999	AVOCADOS ALL	71	San Bernardino	397	3.53	1400	2604.29	Tons	3646000
2019	221999	AVOCADOS ALL	73	San Diego	14900	2.38	35400	3958.08	Tons	140116000
2019	221999	AVOCADOS ALL	79	San Luis Obispo	4440	2.75	12200	3186.48	Tons	38875000
2019	221999	AVOCADOS ALL	83	Santa Barbara	5410	1.98	10700	3309.44	Tons	35411000
2019	221999	AVOCADOS ALL	111	Ventura	16500	3.02	49800	2349.02	Tons	116981000
2019	221999	AVOCADOS ALL	991	Sum of Others	1151	3.80	566	2120.00	Tons	4357000
2018	221999	AVOCADOS ALL	53	Monterey	256	4.53	1160	2250.00	Tons	2610000
2018	221999	AVOCADOS ALL	65	Riverside	4270	3.79	16200	2378.27	Tons	38528000
2018	221999	AVOCADOS ALL	71	San Bernardino	457	3.85	1760	2379.55	Tons	4188000
2018	221999	AVOCADOS ALL	73	San Diego	17700	2.66	47100	2569.81	Tons	121038000
2018	221999	AVOCADOS ALL	79	San Luis Obispo	4160	4.62	19200	2403.39	Tons	46145000
2018	221999	AVOCADOS ALL	83	Santa Barbara	4930	4.56	22500	2338.53	Tons	52617000
2018	221999	AVOCADOS ALL	111	Ventura	17100	3.08	52700	1959.24	Tons	103252000
2018	221999	AVOCADOS ALL	991	Sum of Others	1136	2.26	2572	2417.57	Tons	6218000
2017	221999	AVOCADOS ALL	53	Monterey	383	3.08	1180	3239.83	Tons	3823000
2017	221999	AVOCADOS ALL	65	Riverside	4520	3.92	17700	2258.36	Tons	39973000
2017	221999	AVOCADOS ALL	71	San Bernardino	477	3.08	1470	2349.66	Tons	3454000
2017	221999	AVOCADOS ALL	73	San Diego	15000	2.30	34500	3541.74	Tons	122190000
2017	221999	AVOCADOS ALL	79	San Luis Obispo	4080	2.35	9570	2852.14	Tons	27295000
2017	221999	AVOCADOS ALL	83	Santa Barbara	4270	2.46	10500	3676.76	Tons	38606000
2017	221999	AVOCADOS ALL	111	Ventura	17400	3.12	54300	2185.64	Tons	118680000

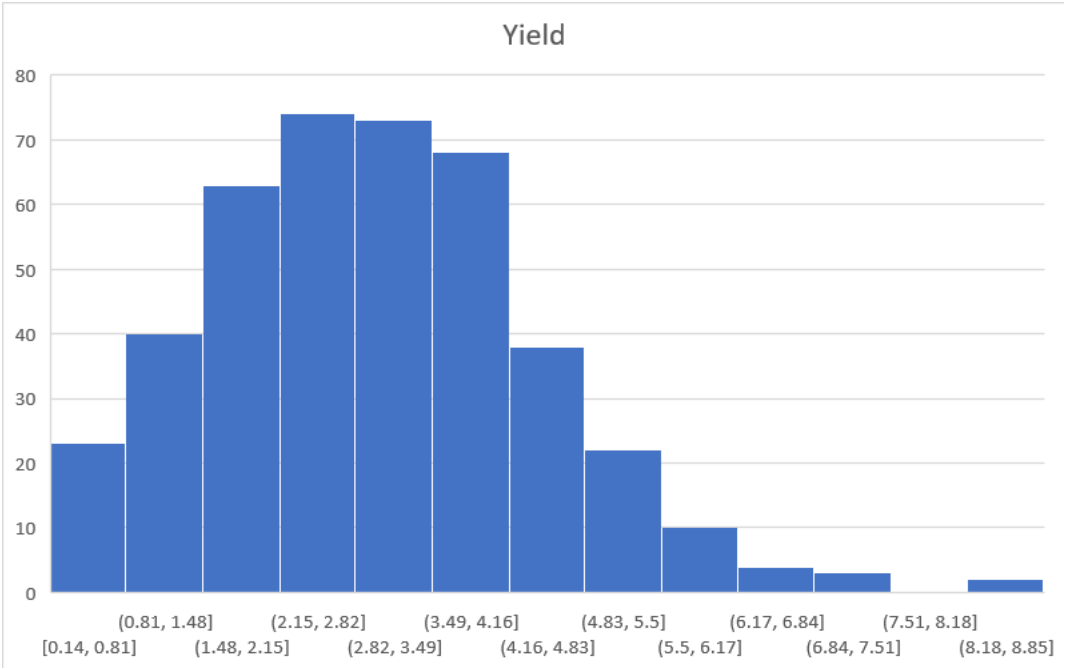
```
30 rows in set (0.00 sec)
```

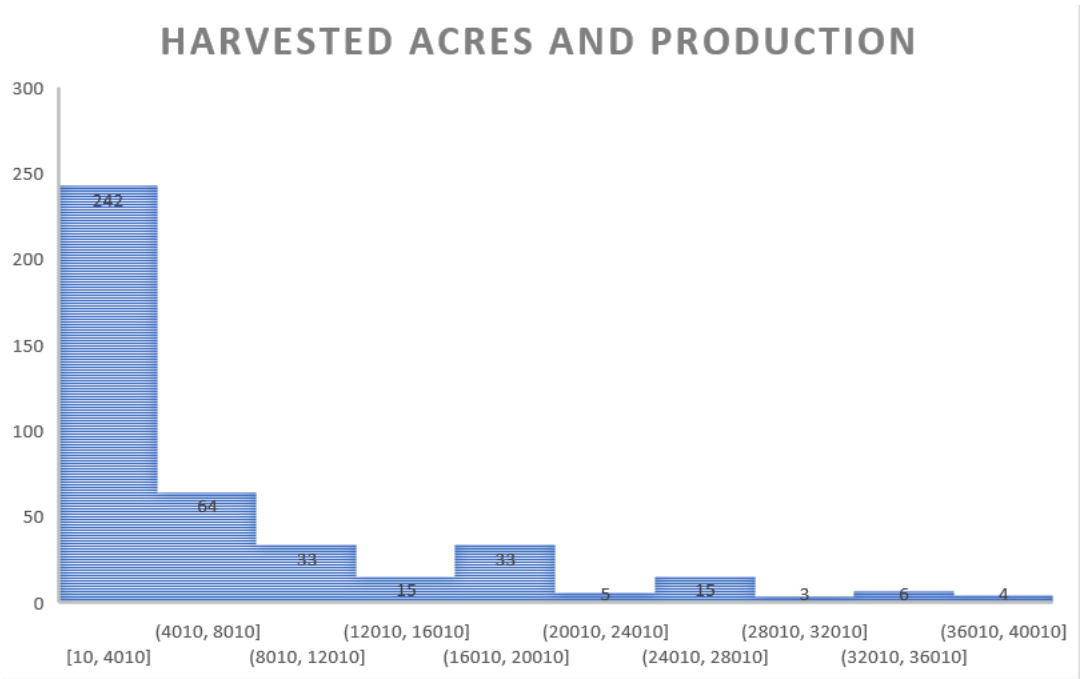

Harvested_Acres
300
250
200
150
100
50
0
[10, 4010]
(4010, 8010]
(8010, 12010]
(12010, 16010]
(16010, 20010]
(20010, 24010]
(24010, 28010]
(28010, 32010]
(32010, 36010]
(36010, 40010]

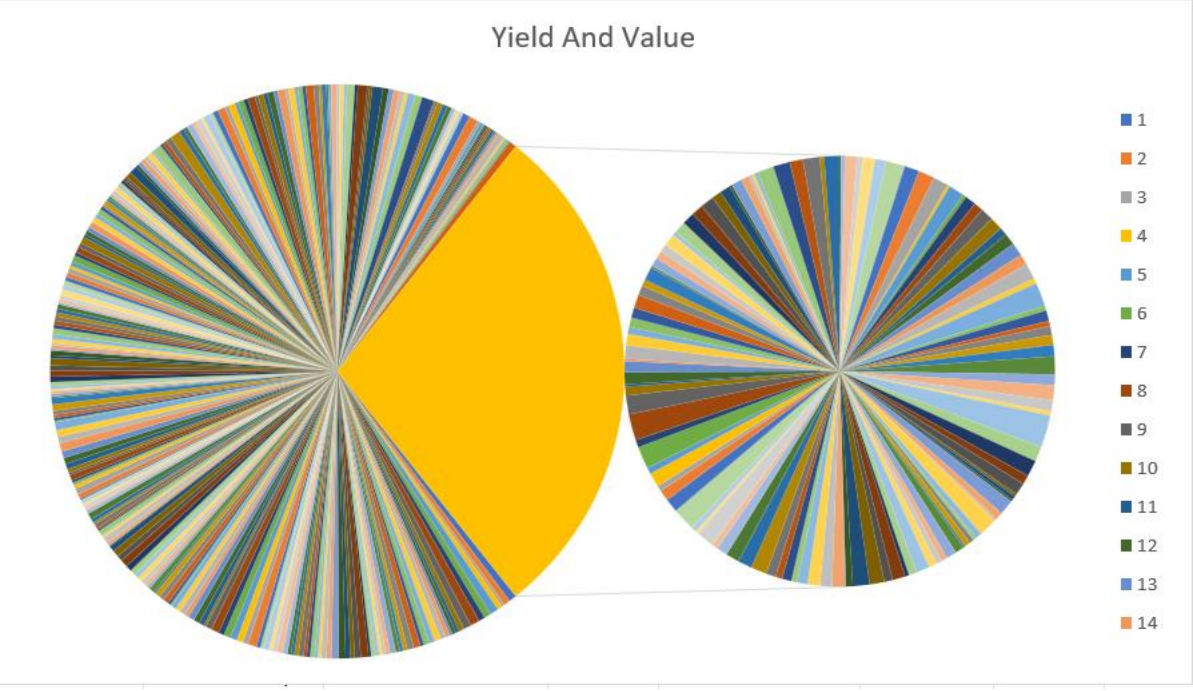

Production
300
250
200
150
100
50
0
[29, 13029]
(13029, 26029]
(26029, 39029]
(39029, 52029]
(52029, 65029]
(65029, 78029]
(78029, 91029]
(91029, 104029]
(104029, 117029]
(117029, 130029]
(130029, 143029]
(143029, 156029]
(156029, 169029]

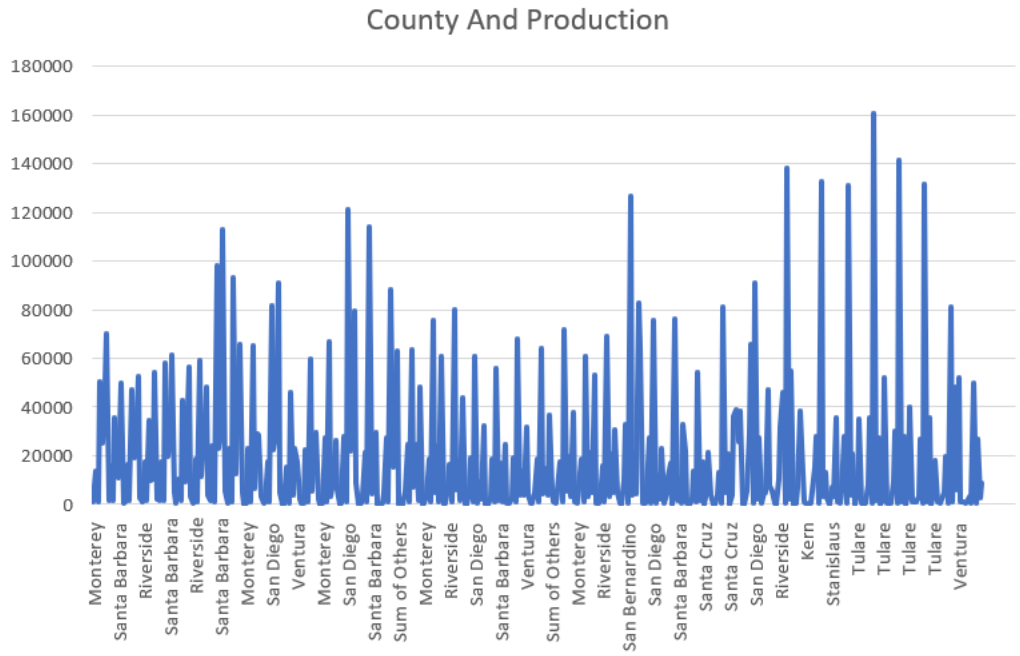

Price P/U
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
1
12
23
34
45
56
67
78
89
100
111
122
133
144
155
166
177
188
199
210
221
232
243
254
265
276
287
298
309
320
331
342
353
364
375
386
397
408
419
430


Value
300
250
200
150
100
50
0
[9000, 21009000]
(21009000, 42009000]
(42009000, 63009000]
(63009000, 84009000]
(84009000, 105009000]
(105009000,...
(126009000,...
(147009000,...
(168009000,...
(189009000,...
(210009000,...
(231009000,...


Yield
80
70
60
50
40
30
20
10
0
(0.81, 1.48]
(2.15, 2.82]
(3.49, 4.16]
(4.83, 5.5]
(6.17, 6.84]
(7.51, 8.18]
[0.14, 0.81]
(1.48, 2.15]
(2.82, 3.49]
(4.16, 4.83]
(5.5, 6.17]
(6.84, 7.51]
(8.18, 8.85]


HARVESTED ACRES AND PRODUCTION
300
250
200
150
100
50
0
242
64
33
15
33
5
15
3
6
4
(4010, 8010]
(12010, 16010]
(20010, 24010]
(28010, 32010]
(36010, 40010]
[10, 4010]
(8010, 12010]
(16010, 20010]
(24010, 28010]
(32010, 36010]


Yield And Value
1
2
3
4
5
6
7
8
9
10
11
12
13
14


County And Production
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
Monterey
Santa Barbara
Riverside
Santa Barbara
Riverside
Santa Barbara
Monterey
San Diego
Ventura
Monterey
San Diego
Santa Barbara
Sum of Others
Monterey
Riverside
San Diego
Santa Barbara
Ventura
Sum of Others
Monterey
Riverside
San Bernardino
San Diego
Santa Barbara
Santa Cruz
Santa Cruz
San Diego
Riverside
Kern
Stanislaus
Tulare
Tulare
Tulare
Tulare
Ventura

❖ Conclusion:

This report presents the results of research directed toward examination of the effects of CAC advertising and promotion programs on the demand (and price) for California avocados over the period from 1961-62 through 1994-95. Annual demand and supply response relationships were estimated, with generally good results as measured by standard statistical tests and concurrence with theoretical expectations.