

# 2.8 MUGARRIA

Taldea 5  
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## Aukeratutako Dataset-a

Kaggle webgune-tik **“Honey Production in US (2010-2021)”** dataset-a aukeratu da eta instalatzeko goian ezkerrean dagoen ikonoari eman zaio. Csv fitxategi moduan instalatu da.

**US\_honey\_production\_dataset.csv** (26.12 kB)

Detail Compact Column

9 of 9 columns

**About this file**

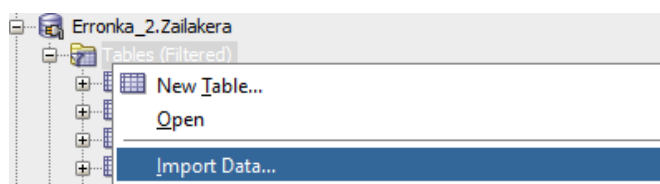
This dataset provides insight into honey production, demand, and supply across different states of and supply across different states of the USA from 2010 to 2021.

#	state	colony_number	yield_per_colony	productions	stocks	average_price	value_of_prod	year
index number	Name of the state	Number of honey producing colonies. Honey producing colonies are the maximum number of Number of colonies	Honey yield per colony. Unit is pounds	Total production obtained by multiplying colony_number by yield_per_colony. Unit is pounds	Refers to stocks held by producers. Unit is pounds	Refers to average price per pound based on expanded sales. Unit is dollars.	Value of production obtained by multiplying production and average_price. Unit is dollars.	Year of which data is tabulated
0	Alabama	3%	3000	27	12.0k	1.3	238k	2010
478	Arizona	3%	550k	131	13.0m	874	83.9m	2021
479	Other (455)	95%						
8	Alabama	9800	54	73000	73000	248.0	1166000	2010
79	Wyoming	35000	54	265000	265000	172.0	3251000	2011
80	Alabama	8000	54	65000	65000	247.0	1067000	2012
188	SouthCarolina	9800	54	19000	19000	397.0	1929000	2014
197	Wisconsin	53000	54	1030000	1030000	238.0	6812000	2014
284	Florida	220000	54	832000	832000	197.0	23484000	2015
313	Vermont	7800	54	144000	144000	482.0	1520000	2017

Irudia 1-Dataset

## 2. Forma Normala

Hautatu den dataset-a 1. forma normalean dago eta 2. formara pasatu behar izango da. Hasi baino lehenago, formatu honen transformazioa dataset-a inportatzen egingo da. Hau egiteko **“Tables”** direktorioari eskuineko klika eman behar zaio eta or **“Import Data...”** aukeratuko da dataset-a inportatzeko.



Irudia 2-2. Forma Normala



Atal onetan “File” jartzen duen lekuan, deskargatu den dataset-a jarri beharko da.

state	state_code	num_colonies	max_colonies	lost_colonies	percent_lost	added_colo...	renovated_...	percent_ren...	quarter	year
Alabama	AL	7000	7000	1800	26	2800	250	4	1	2015
Arizona	AZ	35000	35000	4600	13	3400	2100	6	1	2015
Arkansas	AR	13000	14000	1500	11	1200	90	1	1	2015
California	CA	1440000	1690000	255000	15	250000	124000	7	1	2015
Colorado	CO	3500	12500	1500	12	200	140	1	1	2015
Connecticut	CT	3900	3900	870	22	290	0	0	1	2015
Florida	FL	305000	315000	42000	13	54000	25000	8	1	2015
Georgia	GA	104000	105000	14500	14	47000	9500	9	1	2015
Hawaii	HI	10500	10500	380	4	3400	760	7	1	2015
Idaho	ID	81000	88000	3700	4	2600	8000	9	1	2015

Irudia 3-2. Forma Normala

Dataset-a bi tabletan zatituko da, batean non atara diren datuak eta bestean produkzioaren datuak. Orregatik hurrengo irudia “NON” izena jartzen zaio taulari.

state	colony_num...	yield_per_c...	productions	stocks	average_price	value_of_prod	year	
0	Alabama	9000	54	73000	73000	240.0	1166000	2010
1	Arizona	24000	77	665000	665000	152.0	2809000	2010
2	Arkansas	25000	60	360000	360000	147.0	2205000	2010
3	California	410000	67	6318000	6318000	155.0	42579000	2010
4	Colorado	34000	56	533000	533000	152.0	2894000	2010
5	Florida	200000	69	1794000	1794000	156.0	21528000	2010
6	Georgia	55000	46	152000	152000	167.0	4225000	2010
7	Hawaii	10000	77	239000	239000	275.0	2118000	2010
8	Idaho	97000	27	1179000	1179000	161.0	4217000	2010
9	Illinois	9000	41	92000	92000	278.0	1026000	2010
10	Indiana	10000	43	151000	151000	223.0	959000	2010
11	Iowa	27000	49	463000	463000	192.0	2540000	2010
12	Kansas	9000	52	103000	103000	202.0	945000	2010
13	Kentucky	5000	67	67000	67000	272.0	911000	2010
14	Louisiana	36000	80	288000	288000	150.0	4320000	2010
15	Maine	5000	41	33000	33000	205.0	420000	2010
16	Michioan	71000	58	1524000	1524000	167.0	6877000	2010

Irudia 4-2. Forma Normala



Hemen bakarrik “state” eta “id” zutabeak utziko dira NON taula sortzeko. Ahurre jarraitzeko “Next”-eri eman beharko zaio.

Data Import Wizard - Step 3 of 5

**Choose Columns**

Select the columns to import from the data set and arrange them in the order you want.

**Available Columns**

- colony\_number
- yield\_per\_colony
- productions
- stocks
- average\_price
- value\_of\_prod
- year

**Selected Columns**

- state

**File Contents**

	state	colony_num...	yield_per_c...	productions	stocks	average_price	value_of_prod	year
0	Alabama	9000	54	73000	73000	240.0	1166000	2010
1	Arizona	24000	77	665000	665000	152.0	2809000	2010
2	Arkansas	25000	60	360000	360000	147.0	2205000	2010

Help < Back **Next >** Finish Cancel

Irudia 5-2. Forma Normala

Atal onetan ikusi al da zutabe oilen informazioa eta datuak. Ahurre jarraitzeko “Next”-eri eman beharko zaio.

Data Import Wizard - Step 4 of 5

**Column Definition**

For each column on left, define the column details of the database table that will be created to import this data into.

**Source Data Columns**

- state

**Target Table Columns**

Name: id

Data Type: NUMBER

Size/Precision: 38

Scale: 0

☒ Nullable? Default:

Comment:

**Data**

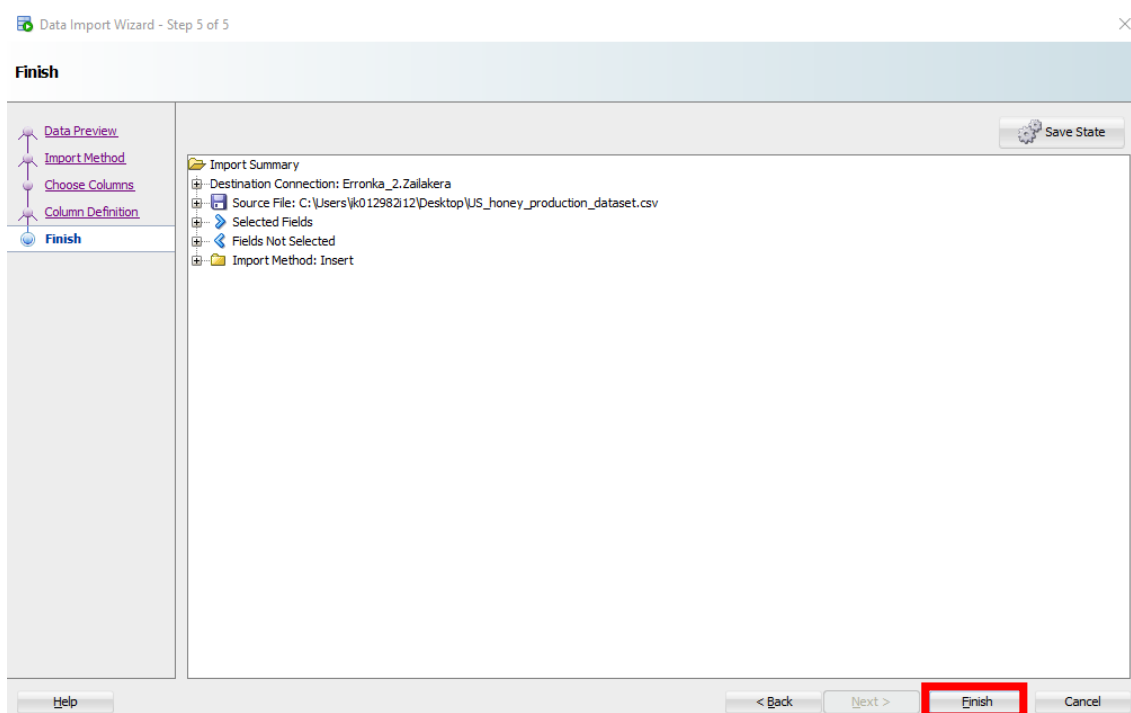
0  
1  
2  
3  
4  
5  
6  
7  
8  
9  
10

Help < Back **Next >** Finish Cancel

Irudia 6-2. Forma Normala



Bukatzeko “Finish”-eri emango zaio.



Irudia 7-2. Forma Normala

Erronka_2.Zailakera		NON
Columns	Data	Model   Constraints   Grants
		Sort..   Fil
	STATE	
1	0 Alabama	
2	1 Arizona	
3	2 Arkansas	
4	3 California	
5	4 Colorado	
6	5 Florida	
7	6 Georgia	

Irudia 8-2. Forma Normala





Irudi aueta dena errepikatzen da baina Produktzioa taula sortzeko.

Data Import Wizard - Step 2 of 4

### Import Method

Specify the method for importing data. For External Table method, an external table will be created to read the data in the file. For Staging External Table method, an external table will be created as a staging table for importing the target table. For other methods, a new table is created and the data is imported.

Import Method:

☐ Send Create Script to SQL Worksheet

Table Name:

☐ Import Row Limit:

File Contents

	state	colony_num...	yield_per_c...	productions	stocks	average_price	value_of_prod	year
0	Alabama	9000	54	73000	73000	240.0	1166000	2010
1	Arizona	24000	77	665000	665000	152.0	2809000	2010
2	Arkansas	25000	60	360000	360000	147.0	2205000	2010
3	California	410000	67	6318000	6318000	155.0	42579000	2010
4	Colorado	34000	56	533000	533000	152.0	2894000	2010
5	Florida	200000	69	1794000	1794000	156.0	21528000	2010
6	Georgia	55000	46	152000	152000	167.0	4225000	2010
7	Hawaii	10000	77	239000	239000	275.0	2118000	2010
8	Idaho	97000	27	1179000	1179000	161.0	4217000	2010
9	Illinois	9000	41	92000	92000	278.0	1026000	2010
10	Indiana	10000	43	151000	151000	223.0	959000	2010
11	Iowa	27000	49	463000	463000	192.0	2540000	2010
12	Kansas	9000	52	103000	103000	202.0	945000	2010
13	Kentucky	5000	67	67000	67000	272.0	911000	2010
14	Louisiana	36000	80	288000	288000	150.0	4320000	2010
15	Maine	5000	41	33000	33000	205.0	420000	2010
16	Michioan	71000	58	1524000	1524000	167.0	6877000	2010

Help < Back Next > Finish Cancel

Irudia 9-2. Forma Normala

Data Import Wizard - Step 3 of 5

### Choose Columns

Select the columns to import from the data set and arrange them in the order you want.

Available Columns

Selected Columns

state  
colony\_number  
yield\_per\_colony  
productions  
stocks  
average\_price  
value\_of\_prod  
year

File Contents

	state	colony_num...	yield_per_c...	productions	stocks	average_price	value_of_prod	year
0	Alabama	9000	54	73000	73000	240.0	1166000	2010
1	Arizona	24000	77	665000	665000	152.0	2809000	2010
2	Arkansas	25000	60	360000	360000	147.0	2205000	2010

Help < Back Next > Finish Cancel

Irudia 10-2. Forma Normala



Data Import Wizard - Step 4 of 5

### Column Definition

For each column on left, define the column details of the database table that will be created to import this data into.

Data Preview

Import Method

Choose Columns

**Column Definition**

Finish

Source Data Columns

state  
colony\_number  
yield\_per\_colony  
productions  
stocks  
average\_price  
value\_of\_prod  
year

Status

Target Table Columns

Name: id

Data Type: NUMBER

Size/Precision: 38

Scale: 0

☒ Nullable? Default:

Comment:

Data

0  
1  
2  
3  
4  
5  
6  
7  
8  
9  
10

Help < Back Next > Finish Cancel

Irudia 11-2. Forma Normala



Bloke anonimo bat kurtso batekin sortu behar izan da produkzio taulako id-ak aldatzeko eta NON taulako zerrenda batzuk ezabatzeko, ez errepikatzeko. Datu batzuk ez dira ondo aldatu bi tauletan, orduan eskuz aldatu behar izan dira.

```
Declare
  cursor kur1 is SELECT id, state from NON order by state asc, id asc;
  r_kur1 kur1%rowtype;
  a_state NON.state%type:='dsad';
Begin
  open kur1;
  FETCH kur1 into r_kur1;
  while kur1%found loop
    if a_state!=r_kur1.state then
      update Produkzioa set id=r_kur1.id where state=r_kur1.state;
      a_state:=r_kur1.state;
      delete from NON where id!= r_kur1.id and state=r_kur1.state;
    end if;
    FETCH kur1 into r_kur1;
  end loop;
  close kur1;
  update NON set id=40 where state='SouthCarolina';
  update Produkzioa set id=40 where state='SouthCarolina';
END;
```

188	SouthCarolina
30	SouthDakota

Aldaketak eginda gero **“state”** zutabea ezabatu da produkzio taulatik, jada ez zen beharrezkoa. **“alter table produkzioa drop column state;”** agindua erabiliz.



Orrela geratu dira bi taulak.

ID	COLONY_NUM...	YIELD_PER_C...	PROD...	STOCKS	AVERAGE_PRICE	VALUE_OF_...	YEAR	
1	0	7000	47	13000	13000	383	1260000	2015
2	0	7000	52	33000	33000	345	1256000	2016
3	0	7000	45	22000	22000	288	907000	2017
4	0	6000	45	14000	14000	4	1004000	2018
5	0	7000	42	44000	44000	3	994000	2019
6	0	7000	39	66000	66000	6	1507000	2020
7	0	8000	40	112000	112000	6	1917000	2021
8	0	9000	54	73000	73000	240	1166000	2010
9	0	9000	50	63000	63000	251	1130000	2011
10	0	8000	54	65000	65000	247	1067000	2012
11	0	7000	52	55000	55000	285	1037000	2013
12	0	7000	53	26000	26000	353	1310000	2014
13	1	23000	53	427000	427000	155	1889000	2011

Irudia 12-2. Forma Normala

ID	STATE
1	0 Alabama
2	1 Arizona
3	2 Arkansas
4	3 California
5	4 Colorado
6	5 Florida
7	6 Georgia
8	7 Hawaii

Irudia 13-2. Forma Normala



### 3. Forma Normala

3. forma normaleko erlazioa egiteko bi taulen id zutabeen arteko erlazioa egin da. Aita taula “**NON**” izango zen eta seme taula “**Produkzioa**”. Aurrena PRIMARY KEY-ak sortu dira, NON-entzako id zutabea izango zen eta Produkzioa taularentzako **id** eta **year** zutabeak izango dira.

#### PRIMARY KEY-ak:

```
alter table PRODUKZIOA add constraint pk_produkzioa primary key (id,year);
```

```
alter table NON add constraint pk_NON primary key (id);
```

#### FOREIGN KEY-a:

```
alter table produkzioa add CONSTRAINT fk_id FOREIGN KEY (id) REFERENCES NON(id);
```

T5_2.PRODUKZIOA		T5_2.NON	
ID	NUMBER (38)	P * ID	NUMBER (38)
COLONY_NUMBER	NUMBER (38)	P * STATE	VARCHAR2 (26 BYTE)
YIELD_PER_COLONY	NUMBER (38)		
PRODUCTIONS	NUMBER (38)		
STOCKS	NUMBER (38)		
AVERAGE_PRICE	NUMBER (38)		
VALUE_OF_PROD	NUMBER (38)		
YEAR	NUMBER (38)		
			PK_NON (ID, STATE)
			PK_NON (ID, STATE)

Irudia 14-3. Forma Normala

CONSTRAINT NAME	CONSTRAINT TYPE	SEARCH CONDITION	R OWNER	R TABLE NAME	R CONSTRAINT NAME
FK_ID	Foreign_Key	(null)	T5_2	NON	PK_NON
2 PK_PRODUKZIOA	Primary_Key	(null)	(null)	(null)	(null)

Irudia 15-3. Forma Normala