BIGDATA INTEGRATION TOOL

HANDLING VARIOUS TYPE OF DATA IN A ONE TOOL

Jeon Dabin

Integration Tool

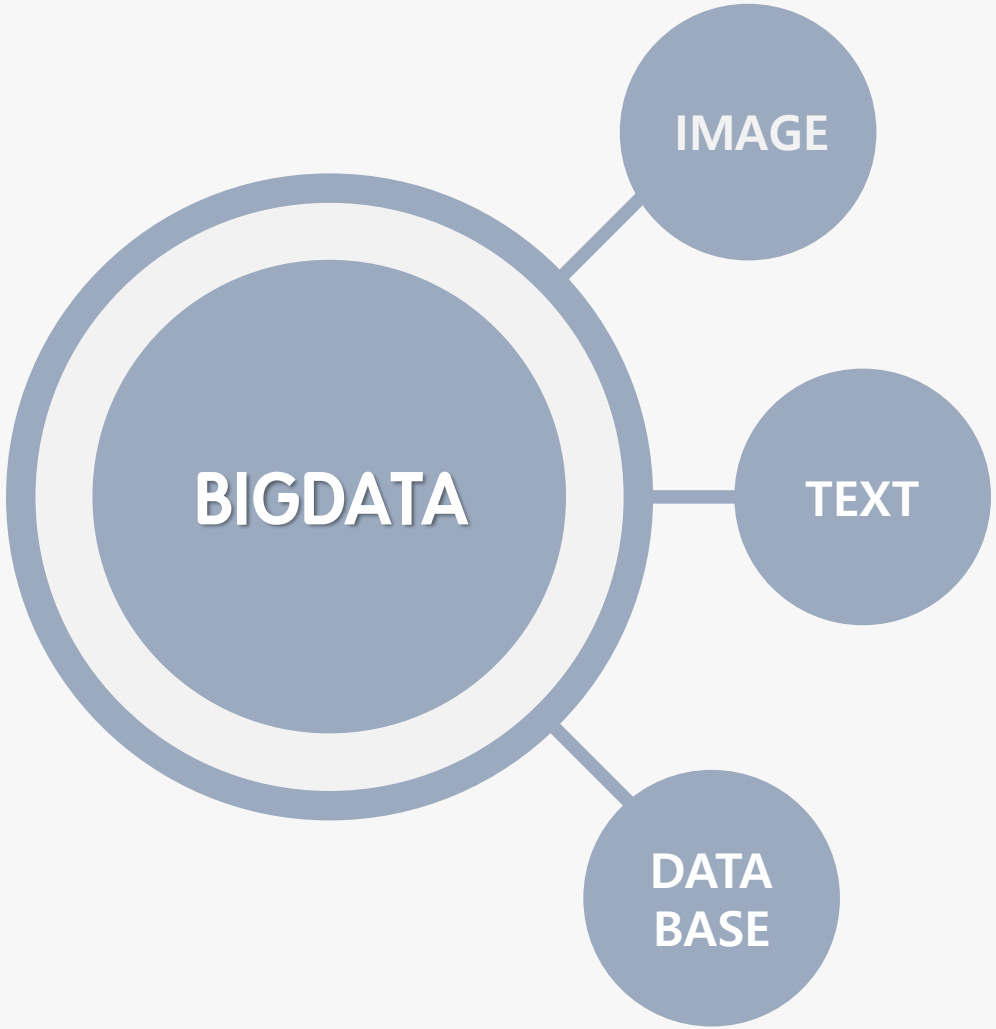
Image Reference : https://thecustomizewindows.com/2017/05/integration-big-data-tools-wordpress/

What is Bigdata Integration Tool ?

Different types of files are used in a single tool

Interconnectivity between files

No need to use various programs



> “ Handling data at once
> Use Database easily ”

Useful Point

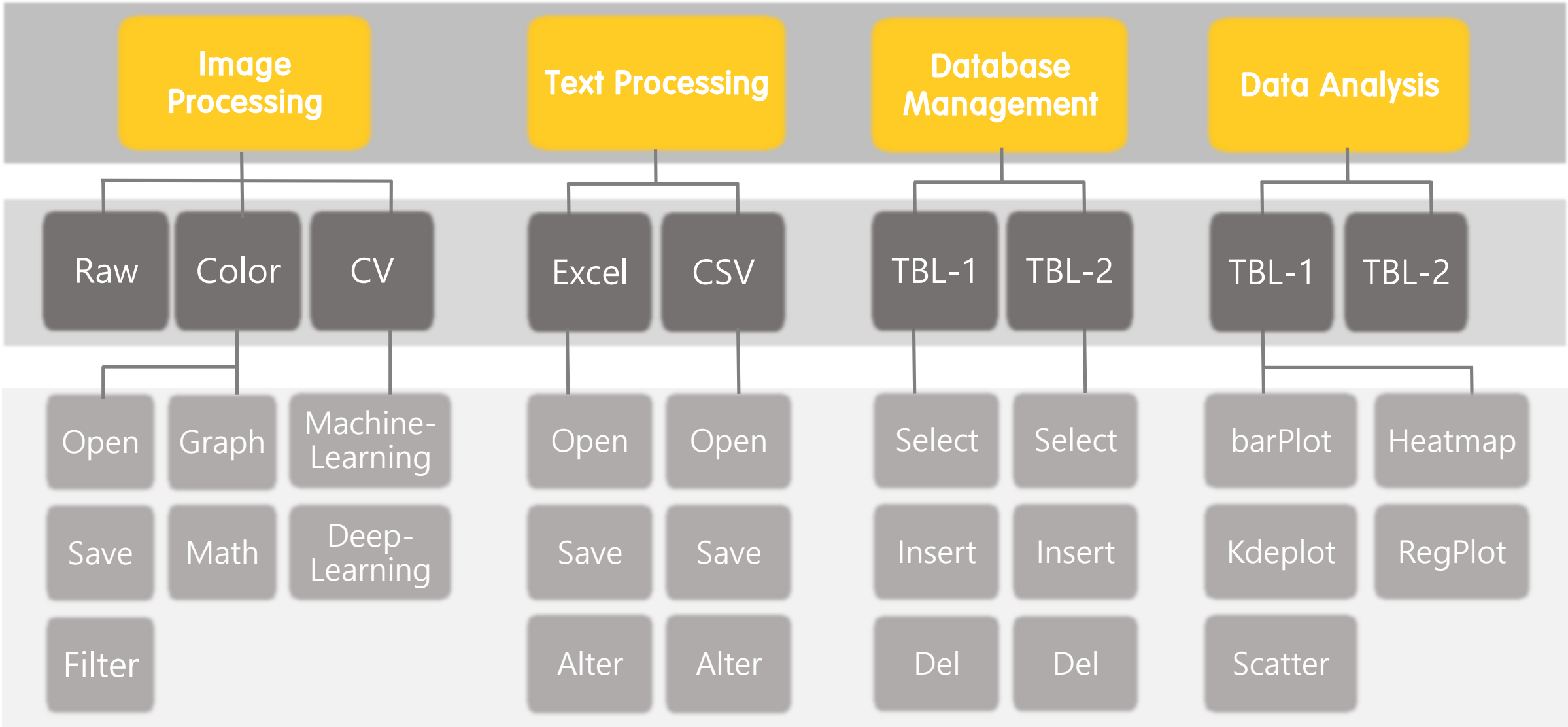
- Compatibility
- Portability

- Time-saving
- No need to use various programs.

- It's easy to add other features.
- Detailed adjustment is possible.

- Connects to other DB with ID, password and IP address.

Menu Configuration



CompnayDB

Monthly SalesTBL

Id	invoice	product	cost	date

Monthly SuppliesTBL

supplier	invoice	product	cost	date

CustomerTBL

Id	name	age	gender	nation

SupplierTBL

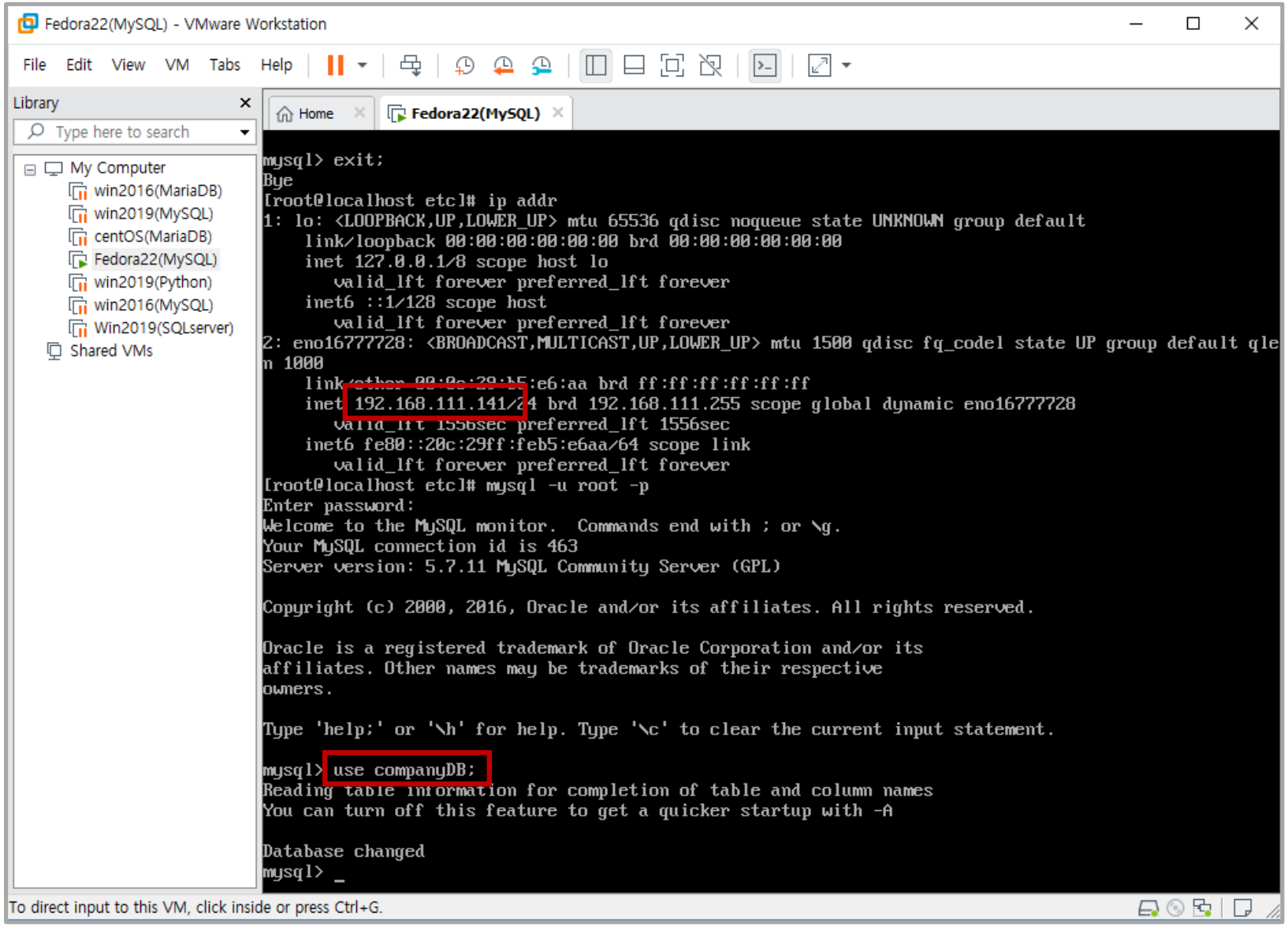
Supplier	ceo	classify	start_date	location

ProductTBL

product	number	classify	import	location

DATABASE SETTING

" Fedora22 (Installed MySQL) "

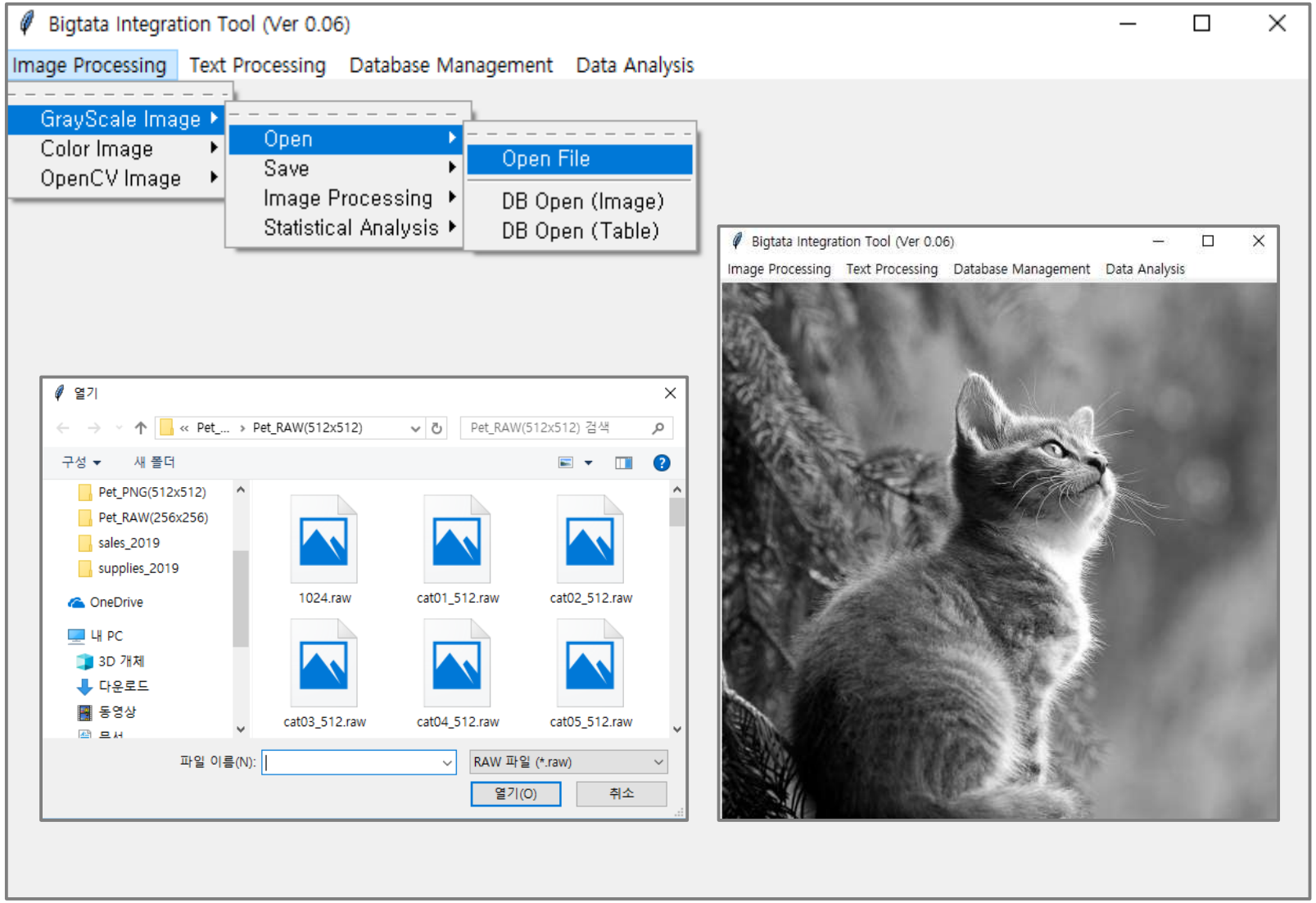


- DATASET-

	A	B	C
1	id	invoice_nu	product_n
2	Dabin	100-1001	3672
3	Bloomber	100-1002	7759
4	Bloomber	100-1002	4859
5	MySQL	100-1003	5358
6	Stella	100-1004	251
7	Teemo	100-1005	2864
8	SQL_Serve	100-1006	2120
9	Bloomber	100-1007	2737
10	Bloomber	100-1007	8143
11	Bloomber	100-1007	6319
12	SQL_Serve	100-1008	9654
13	Dabin	100-1009	8008
14	MySQL	100-1010	3993
15	PostgreSQ	100-1011	5884
16	Bloomber	100-1012	1636
17	Bloomber	100-1012	2594
18	RedLover	100-1013	3381
19	Power	100-1014	1612
20	Stella	100-1014	1460
21	MySQL	100-1014	9814
22	PostgreSQ	100-1015	1609

RUN “ Bigdata Intrgration Tool ”

Image Processing (Raw)



〈 Image Load Process 〉

Input Image

↓ load

In Image

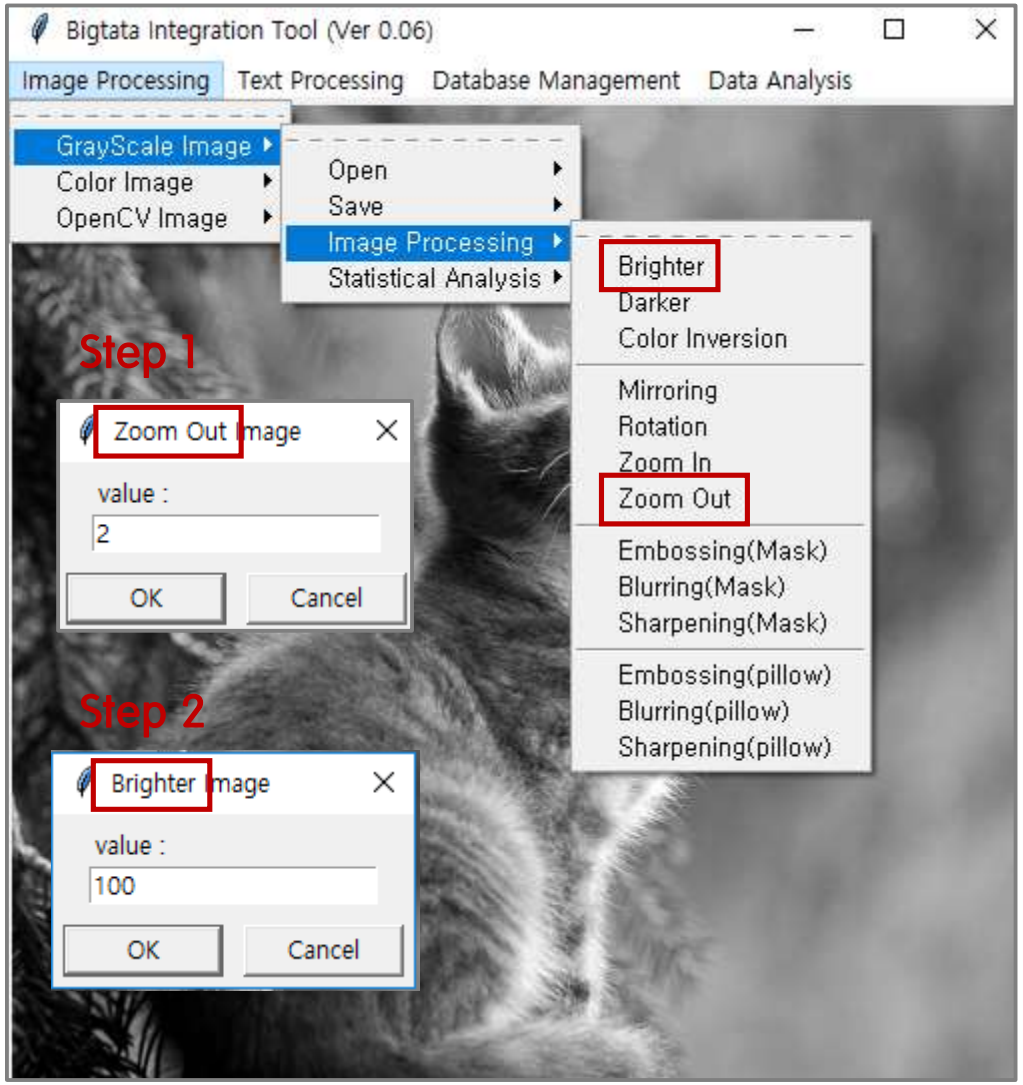
↓ Filter

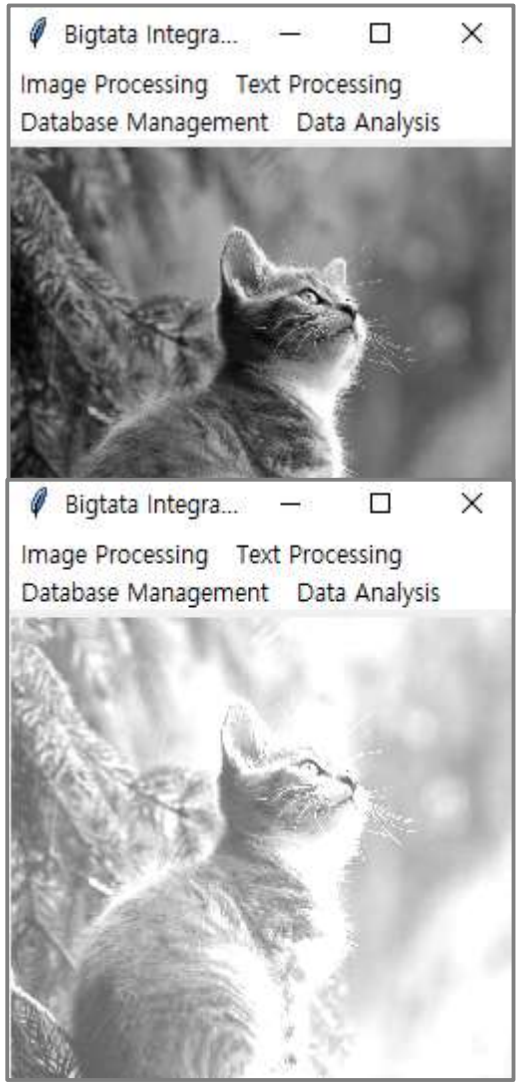
Out Image

↓ Save

Output Image

Image Processing (Raw)





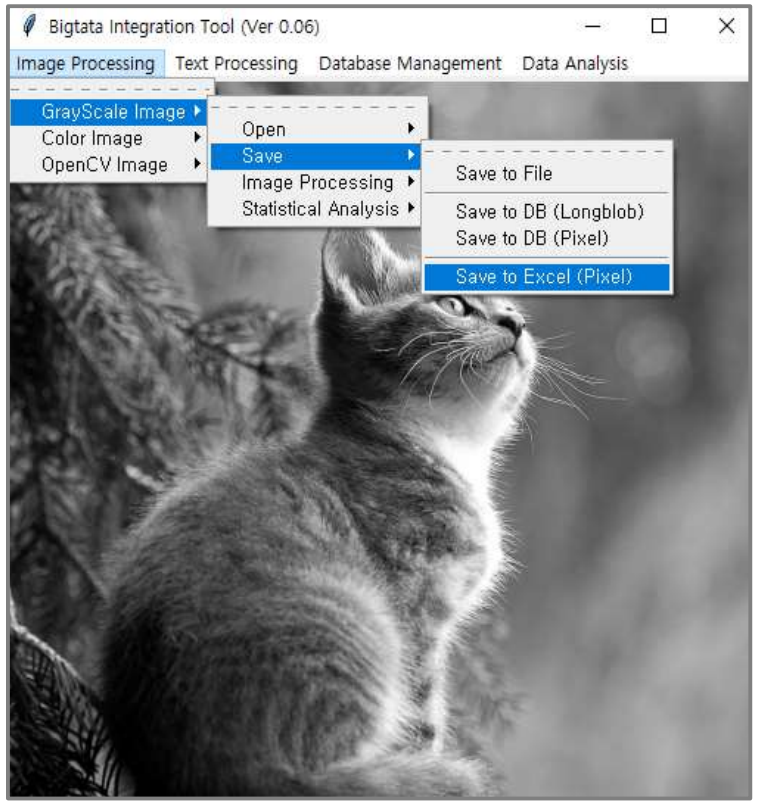
〈 Without Package 〉

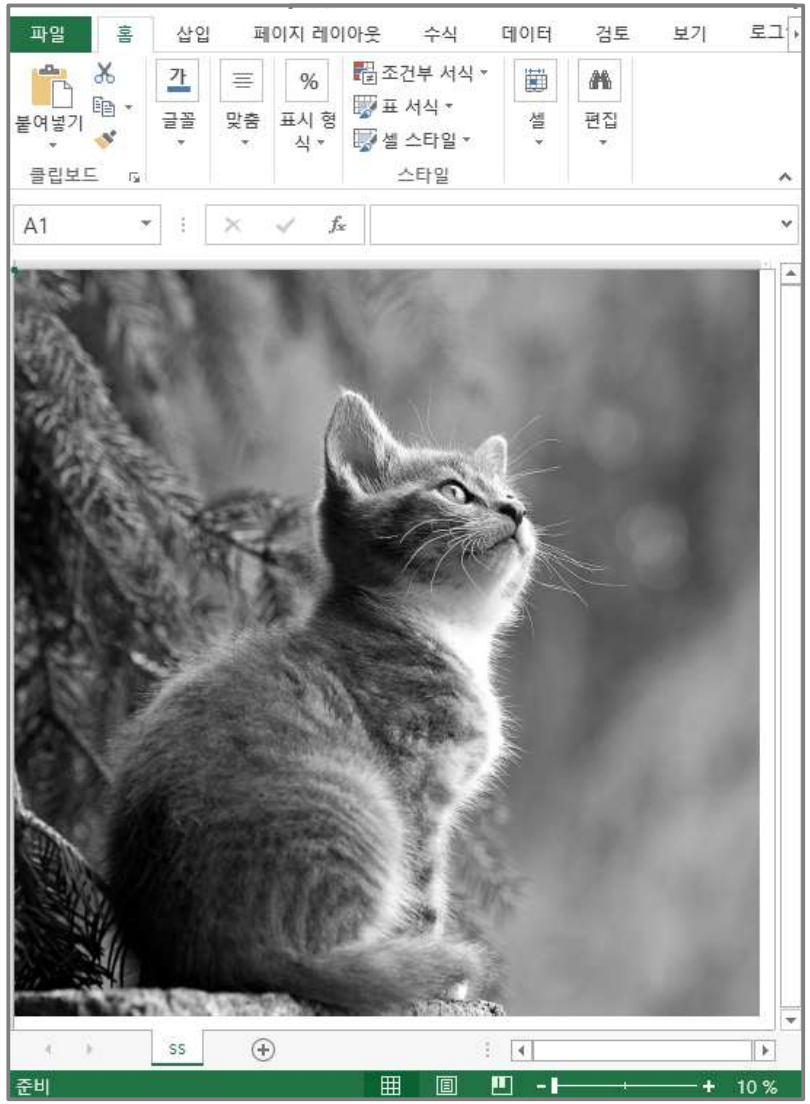
Duplicate multiple effects

Detailed adjustment

- Zoom out value
- Brighter value, ect

Image Processing (Raw)



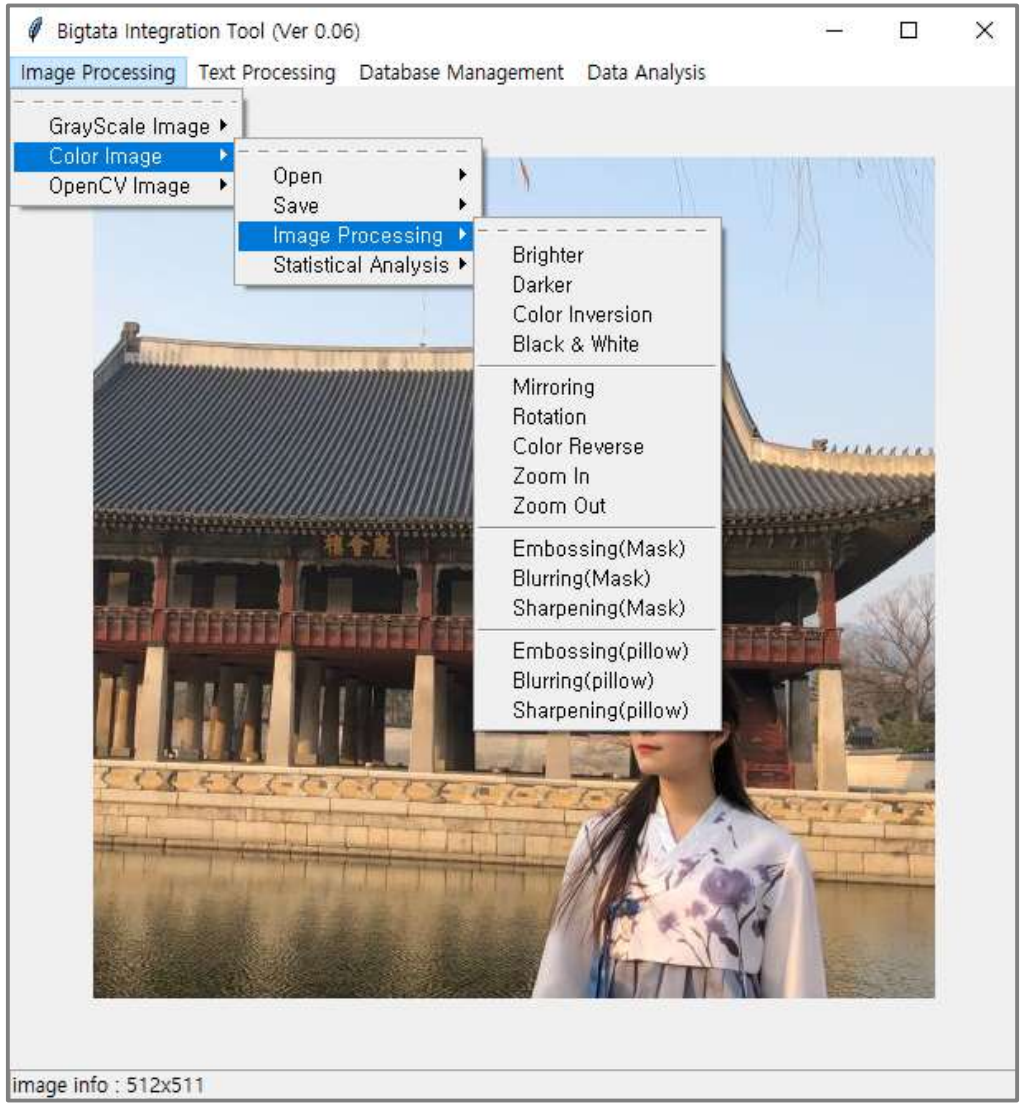


〈 Save to Excel 〉

Interworking between Image file and Excel file

Principle :
To add a color by specifying value between 0 and 225 for each pixel in an Excel

Image Processing (Color)



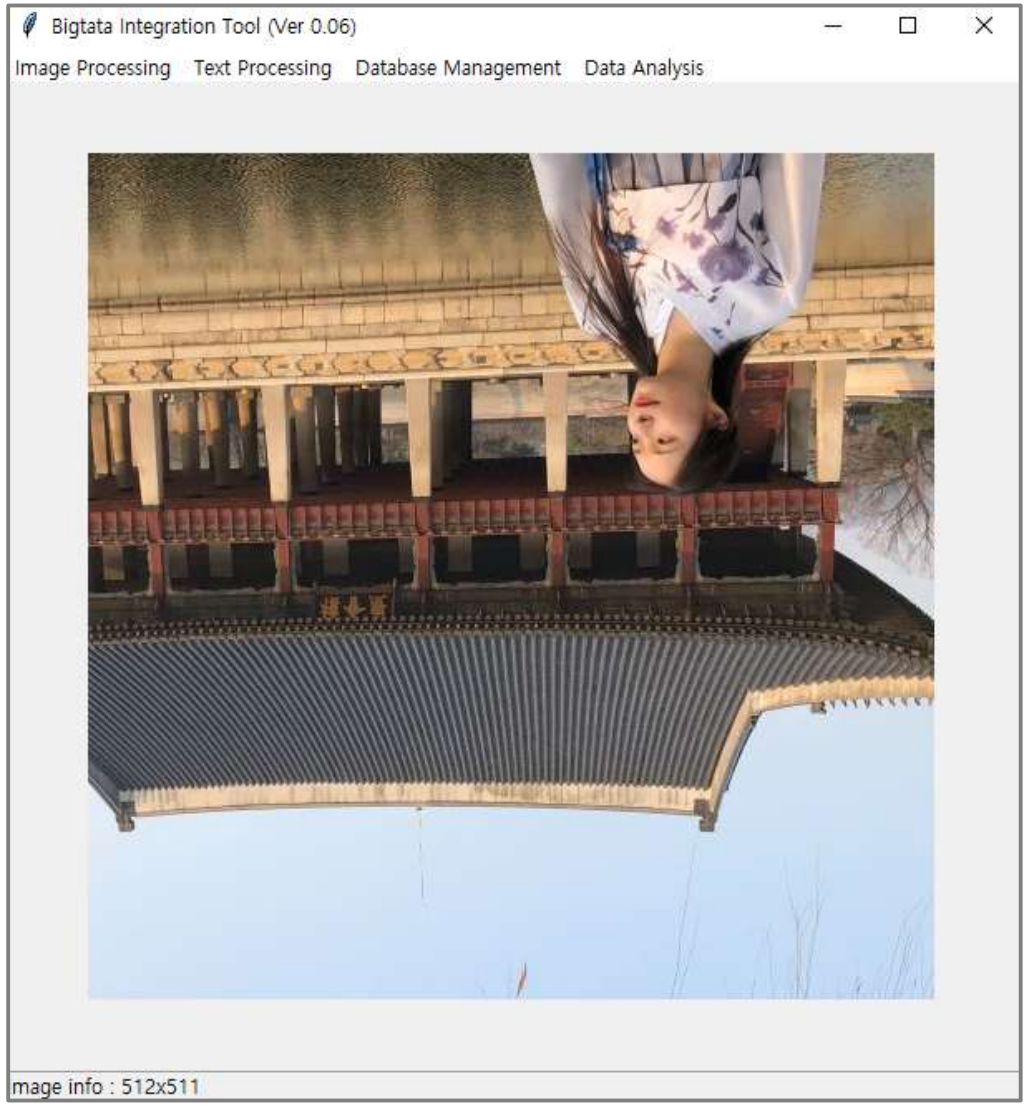


Image Processing (Color)

Original Image

Color Reverse

Black & White

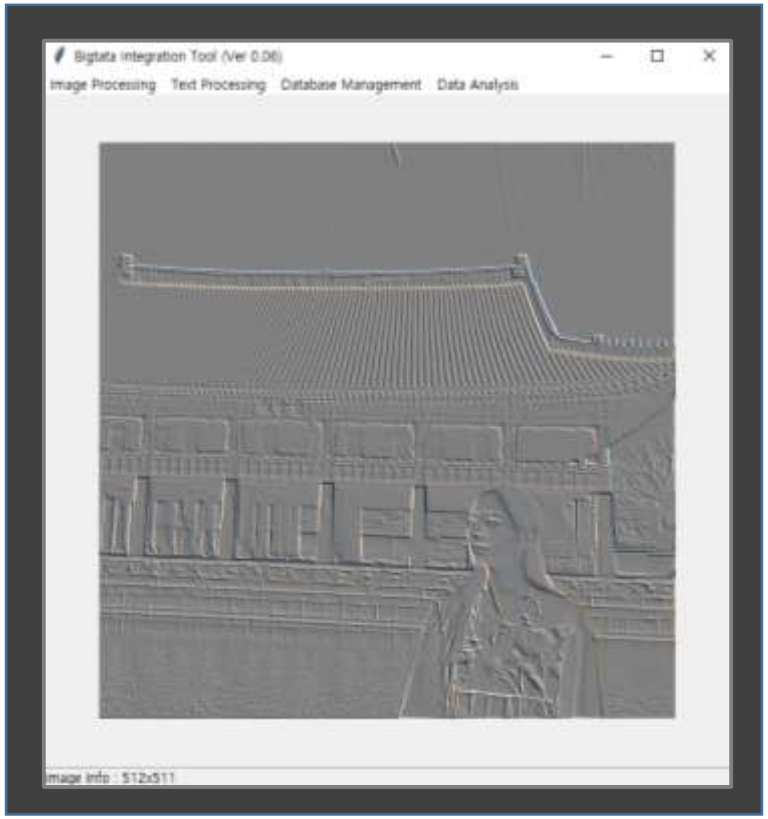
Can apply various Effect

The effects continue to be added

Image Processing (Color)

Original Image

Embossing (Pillow)



Embossing (Mask)

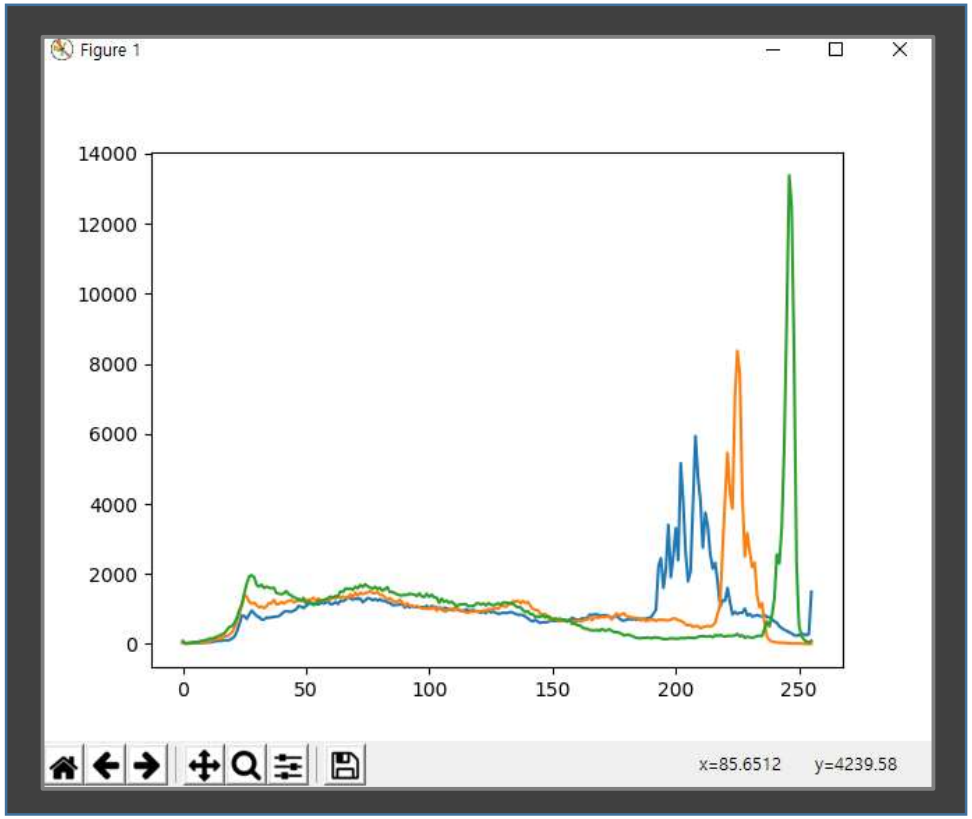
Same Effect , Difference Output

a wide range option of choice

Image Processing (Color)

Original Image

Proportion of RGB

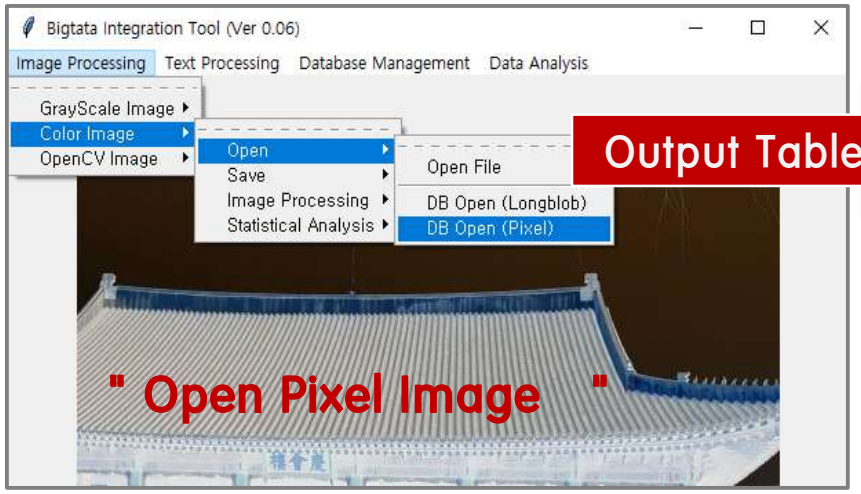


Use : Matplotlib

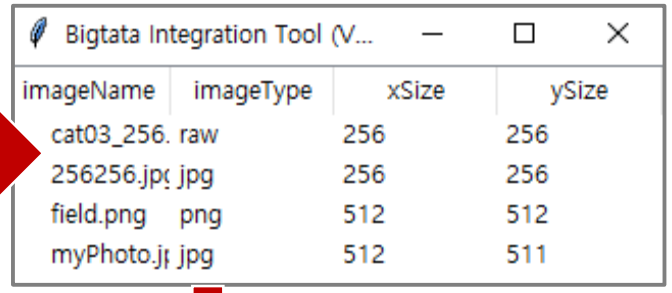
See the color variation

The color that is mostly used in this picture is green

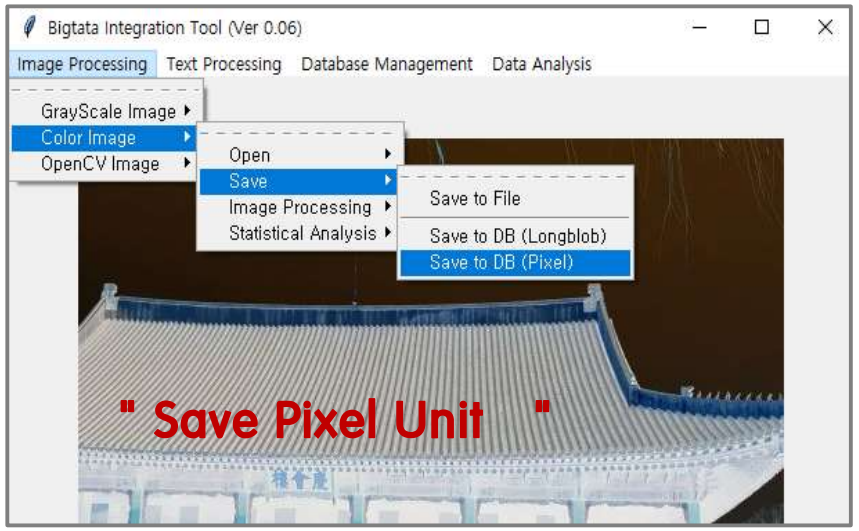
Image Processing (Color)



Output Table



Double Click



〈 ColorImageTBL 〉

Id : auto_increment

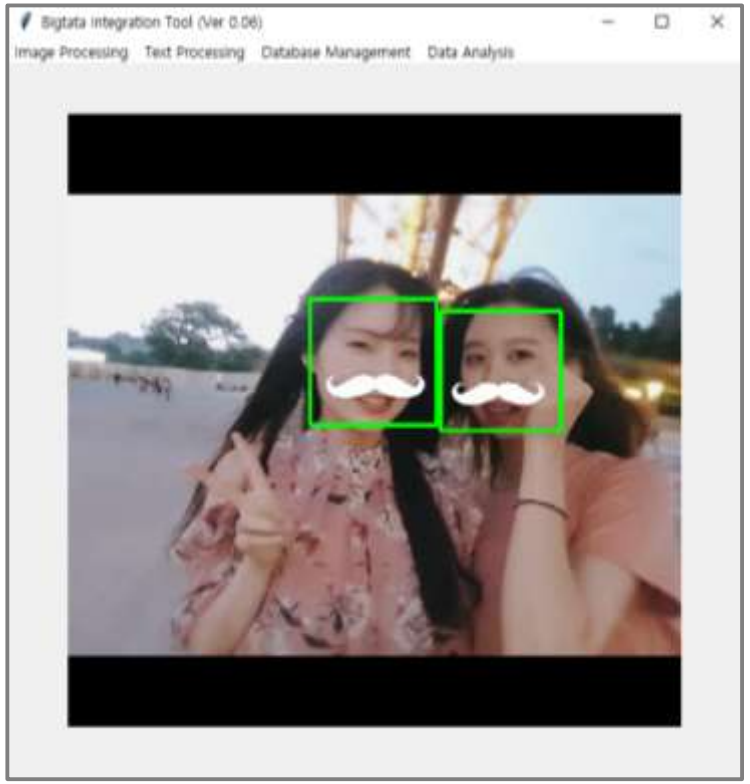
imageName
imageType

xSize : width
ySize : height

X : x-coordinate
Y : y-coordinate

R : red color value
G : green color
B : blue color value

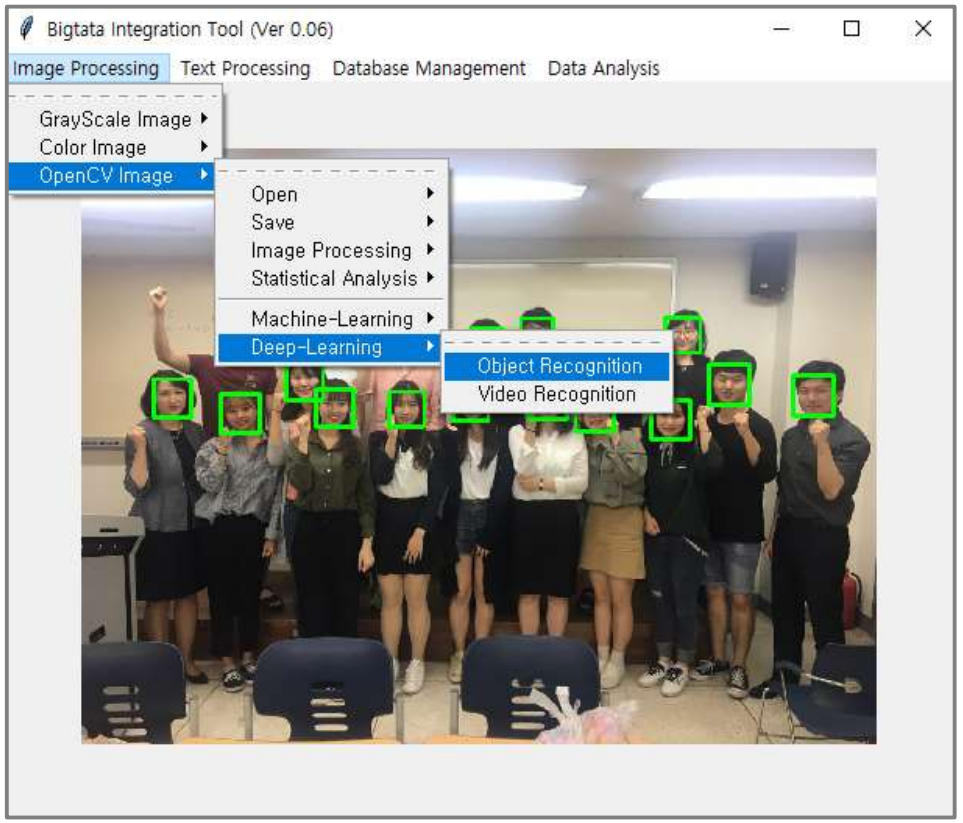
“ Application of Machine-Learning “

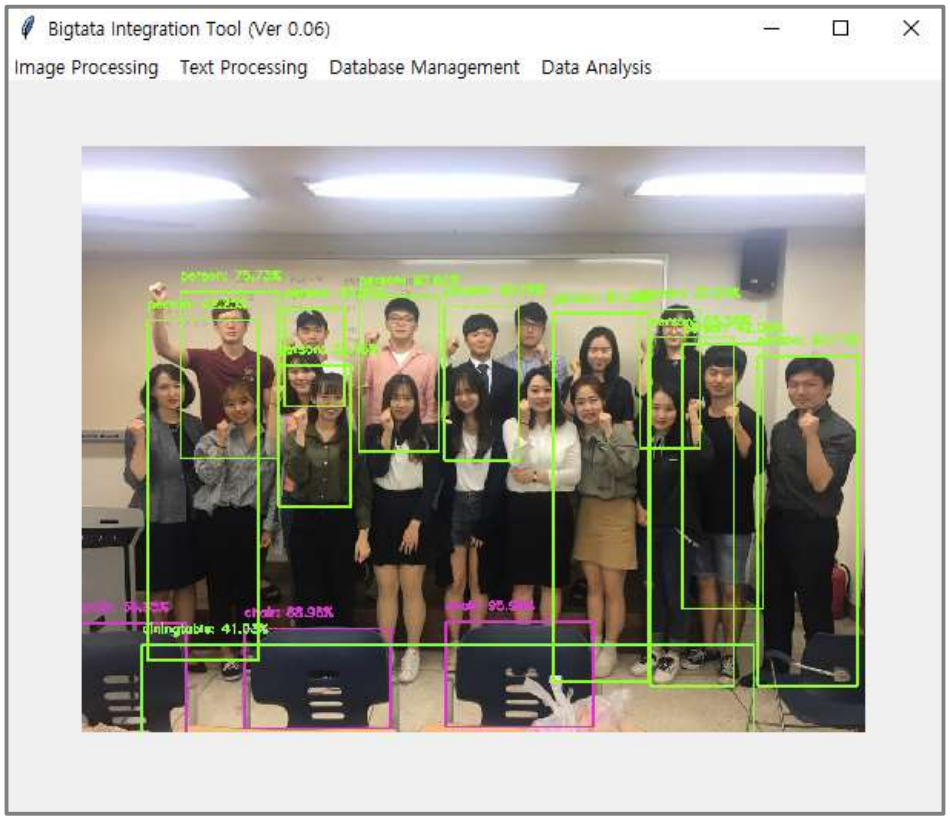


Step1 : face recognition
Step2 : Stickers can be attached to the face at the desired position

OPENCV DEEP-LEARNING

“ Application of Deep-Learning “

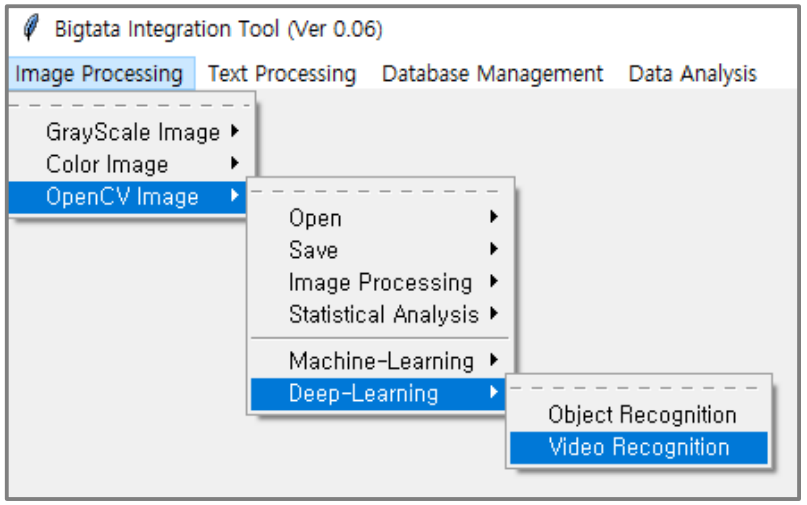


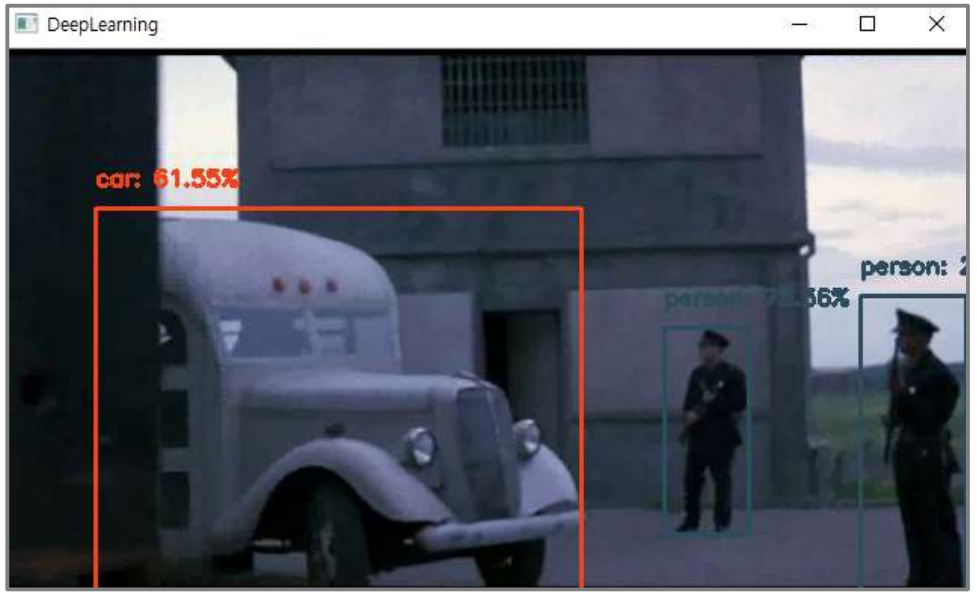


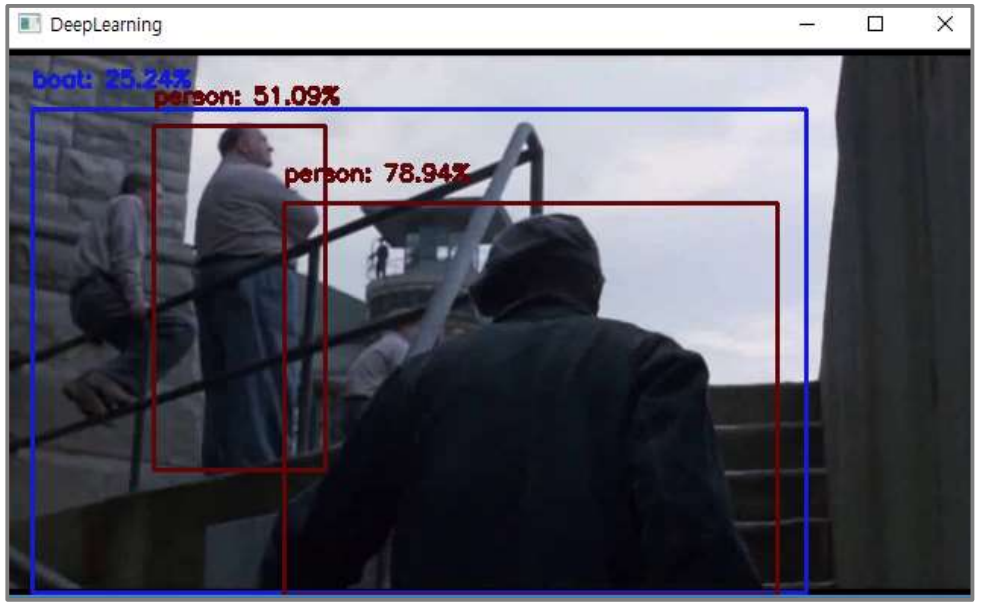
Step1: Identification Object (such as chair, person)
Step2 : Displays the probability that an image is an object

OPENCV DEEP-LEARNING

“ Application of Deep-Learning “



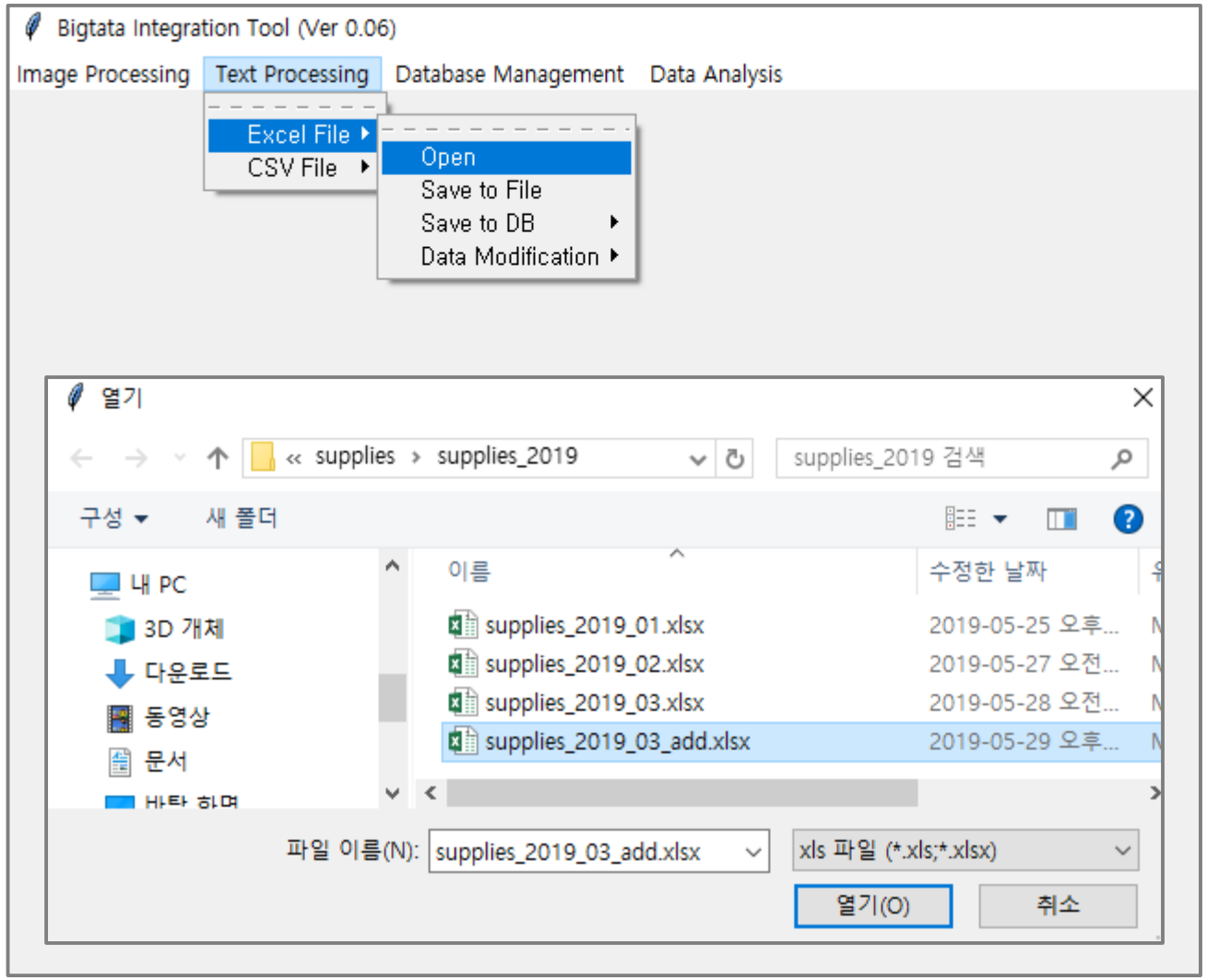


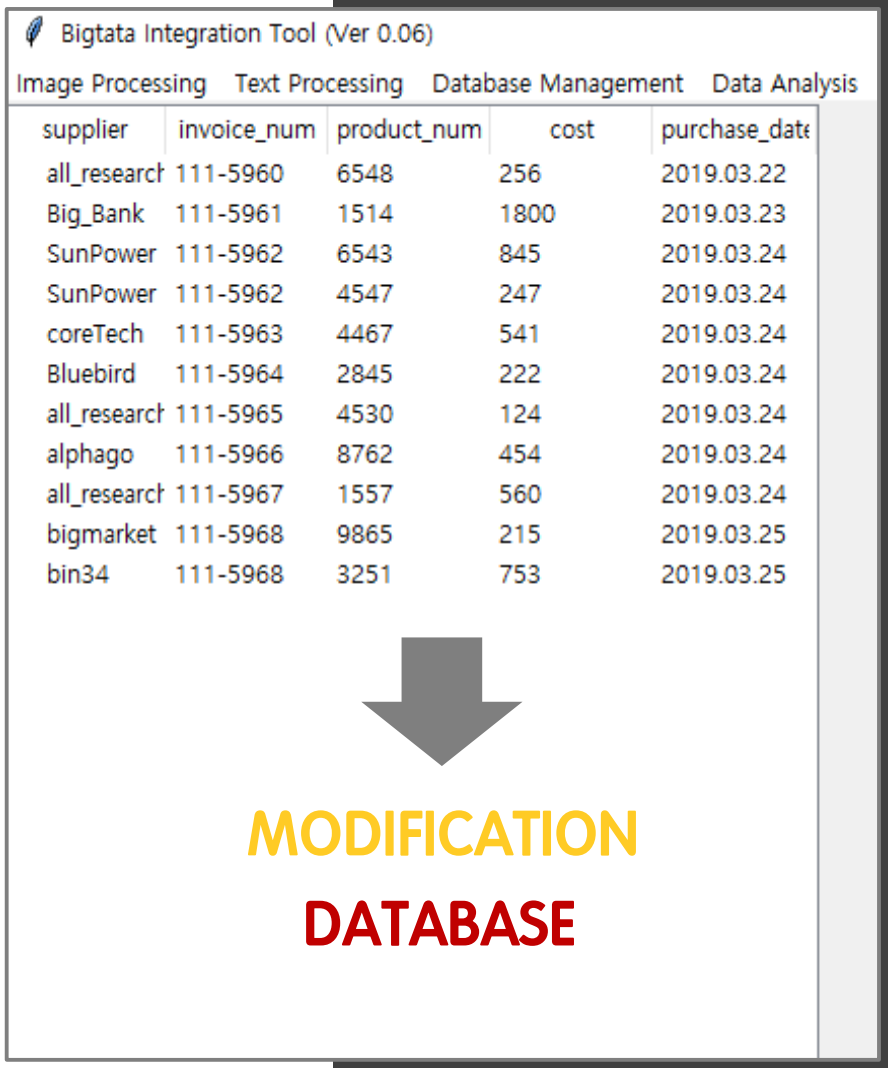


Step1 : Recognition of a scene in a video
Step2: Recognize objects in a single scene

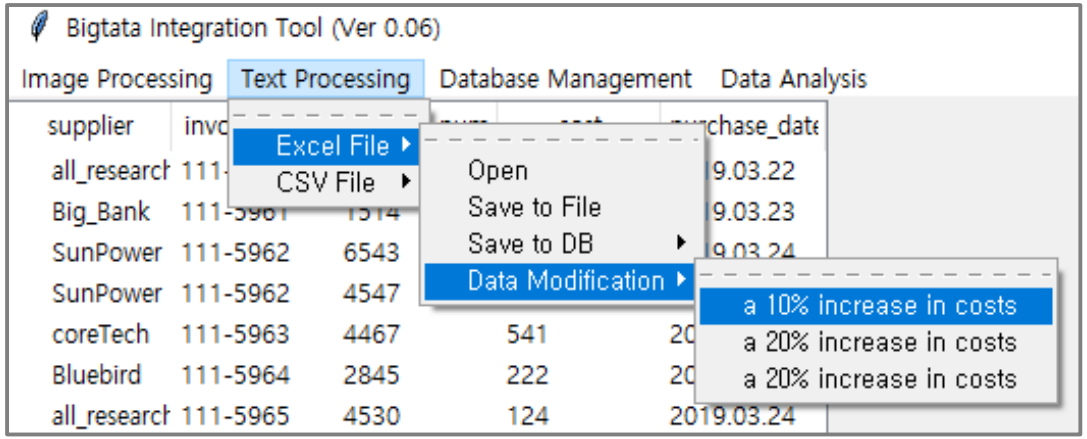
You can check how many times a particular object or person appears in the video

Text Processing (Excel)

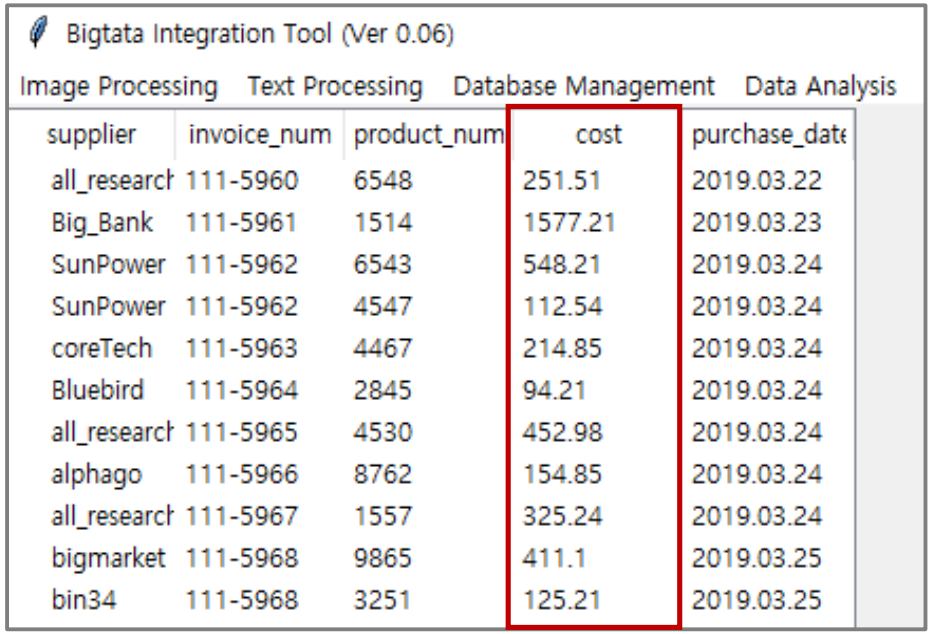




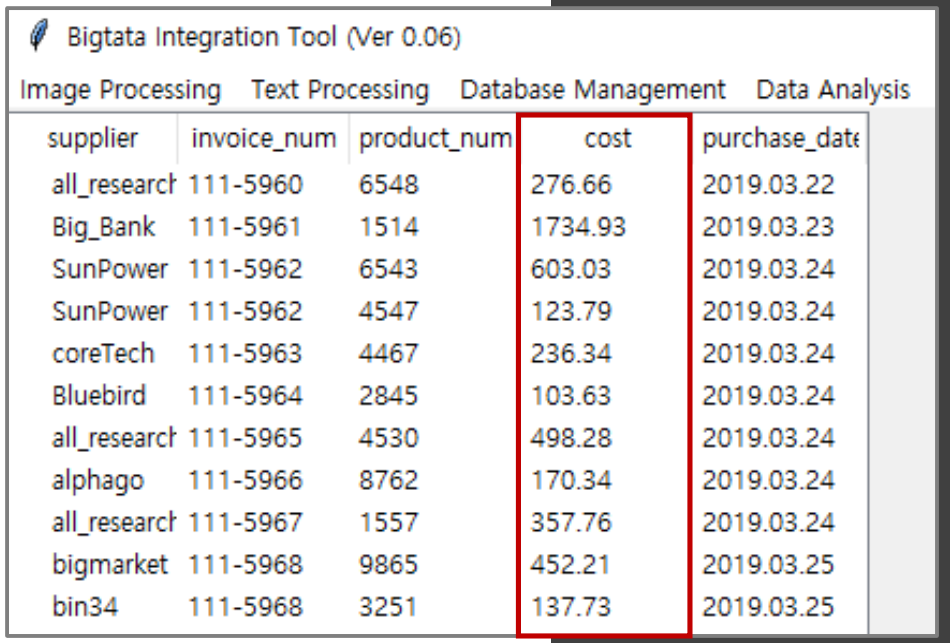
Text Processing (Excel)



Modify Excel file directly

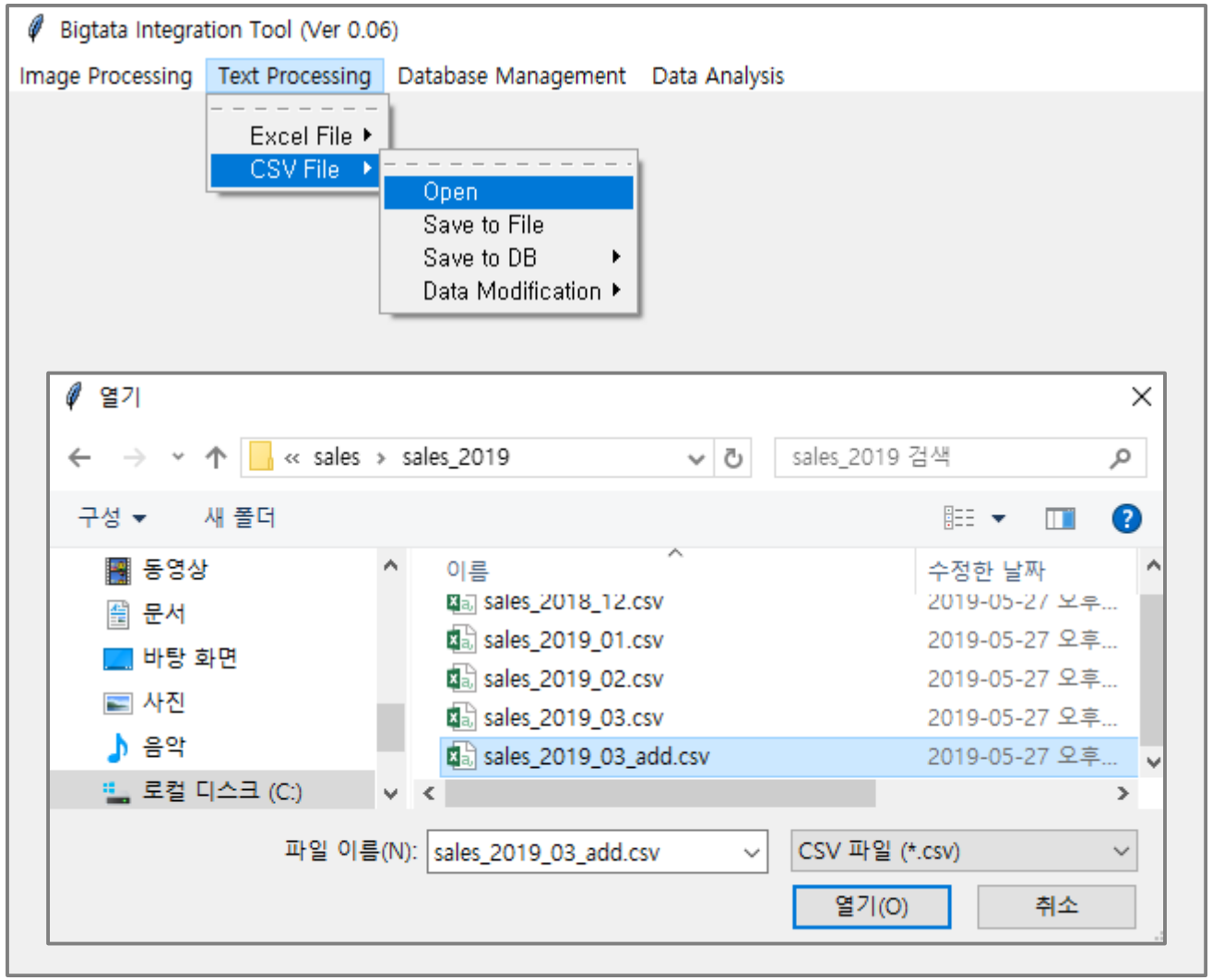


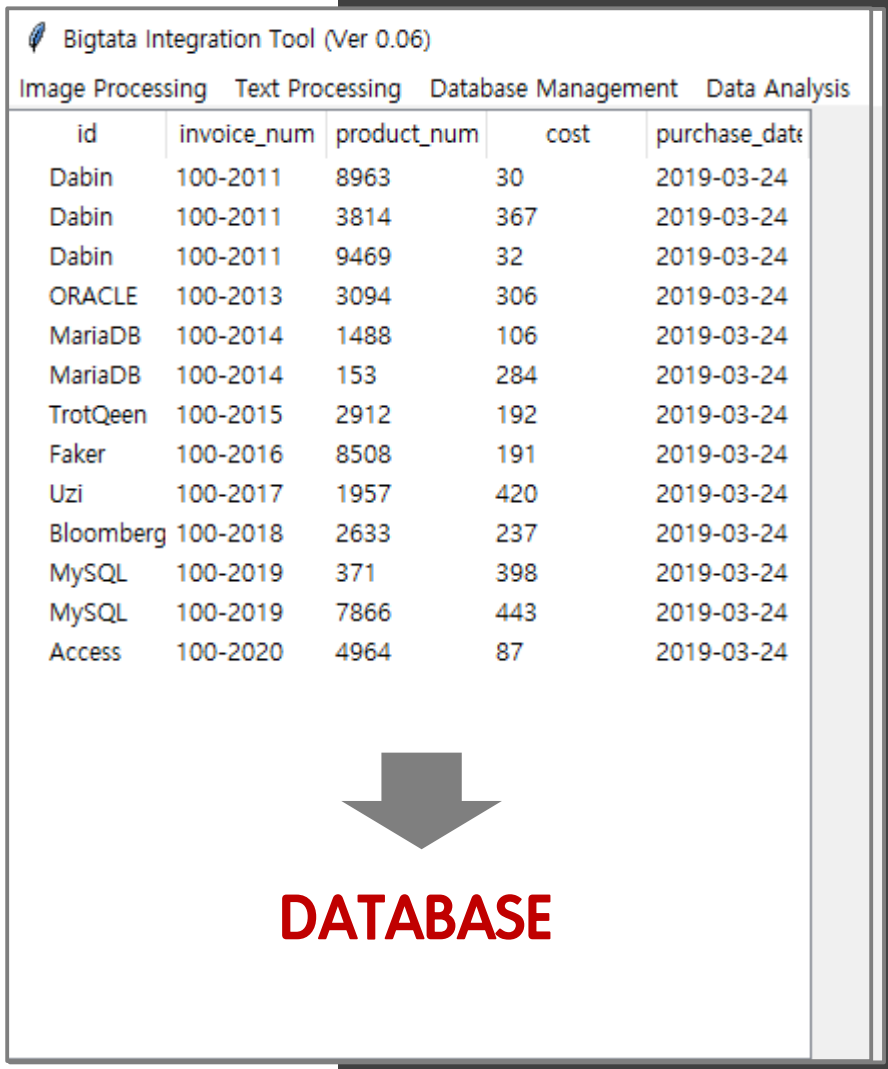
supplier	invoice_num	product_num	cost	purchase_date
all_research	111-5960	6548	251.51	2019.03.22
Big_Bank	111-5961	1514	1577.21	2019.03.23
SunPower	111-5962	6543	548.21	2019.03.24
SunPower	111-5962	4547	112.54	2019.03.24
coreTech	111-5963	4467	214.85	2019.03.24
Bluebird	111-5964	2845	94.21	2019.03.24
all_research	111-5965	4530	452.98	2019.03.24
alphago	111-5966	8762	154.85	2019.03.24
all_research	111-5967	1557	325.24	2019.03.24
bigmarket	111-5968	9865	411.1	2019.03.25
bin34	111-5968	3251	125.21	2019.03.25



supplier	invoice_num	product_num	cost	purchase_date
all_research	111-5960	6548	276.66	2019.03.22
Big_Bank	111-5961	1514	1734.93	2019.03.23
SunPower	111-5962	6543	603.03	2019.03.24
SunPower	111-5962	4547	123.79	2019.03.24
coreTech	111-5963	4467	236.34	2019.03.24
Bluebird	111-5964	2845	103.63	2019.03.24
all_research	111-5965	4530	498.28	2019.03.24
alphago	111-5966	8762	170.34	2019.03.24
all_research	111-5967	1557	357.76	2019.03.24
bigmarket	111-5968	9865	452.21	2019.03.25
bin34	111-5968	3251	137.73	2019.03.25

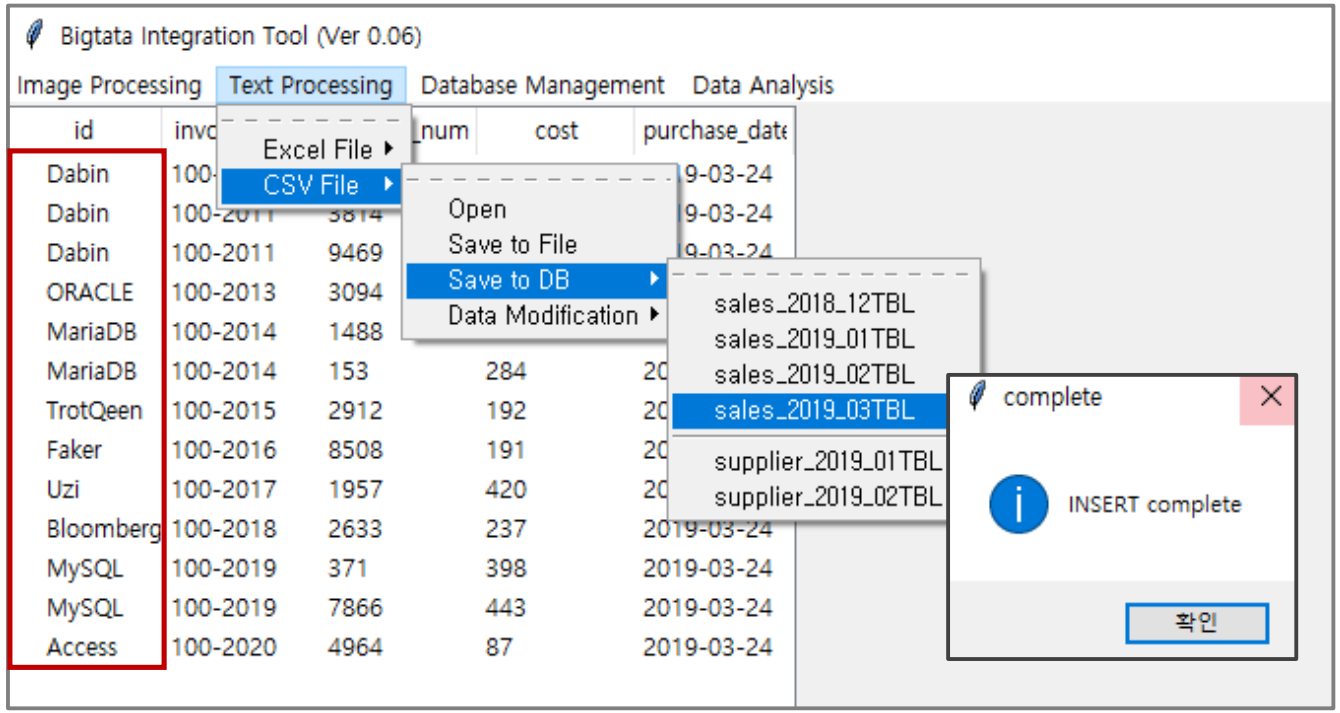
Text Processing (CSV)

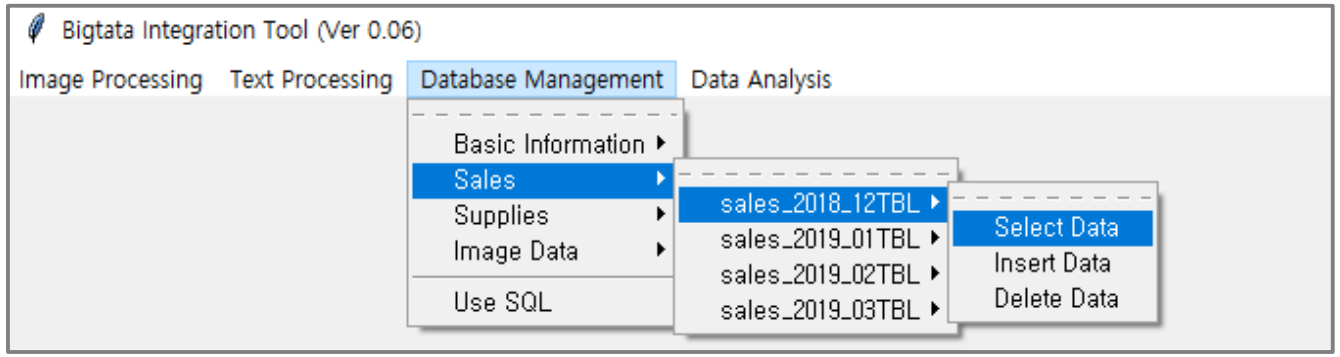


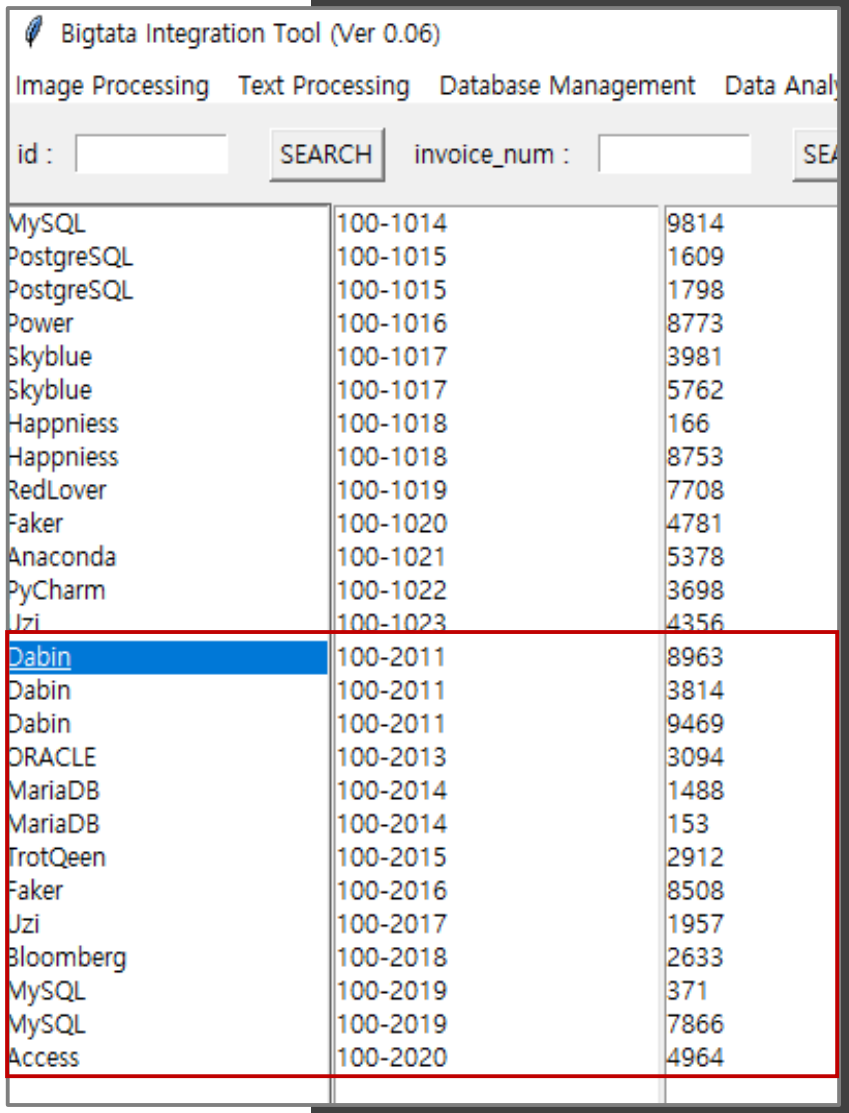


id	invoice_num	product_num	cost	purchase_date
Dabin	100-2011	8963	30	2019-03-24
Dabin	100-2011	3814	367	2019-03-24
Dabin	100-2011	9469	32	2019-03-24
ORACLE	100-2013	3094	306	2019-03-24
MariaDB	100-2014	1488	106	2019-03-24
MariaDB	100-2014	153	284	2019-03-24
TrotQeen	100-2015	2912	192	2019-03-24
Faker	100-2016	8508	191	2019-03-24
Uzi	100-2017	1957	420	2019-03-24
Bloomberg	100-2018	2633	237	2019-03-24
MySQL	100-2019	371	398	2019-03-24
MySQL	100-2019	7866	443	2019-03-24
Access	100-2020	4964	87	2019-03-24

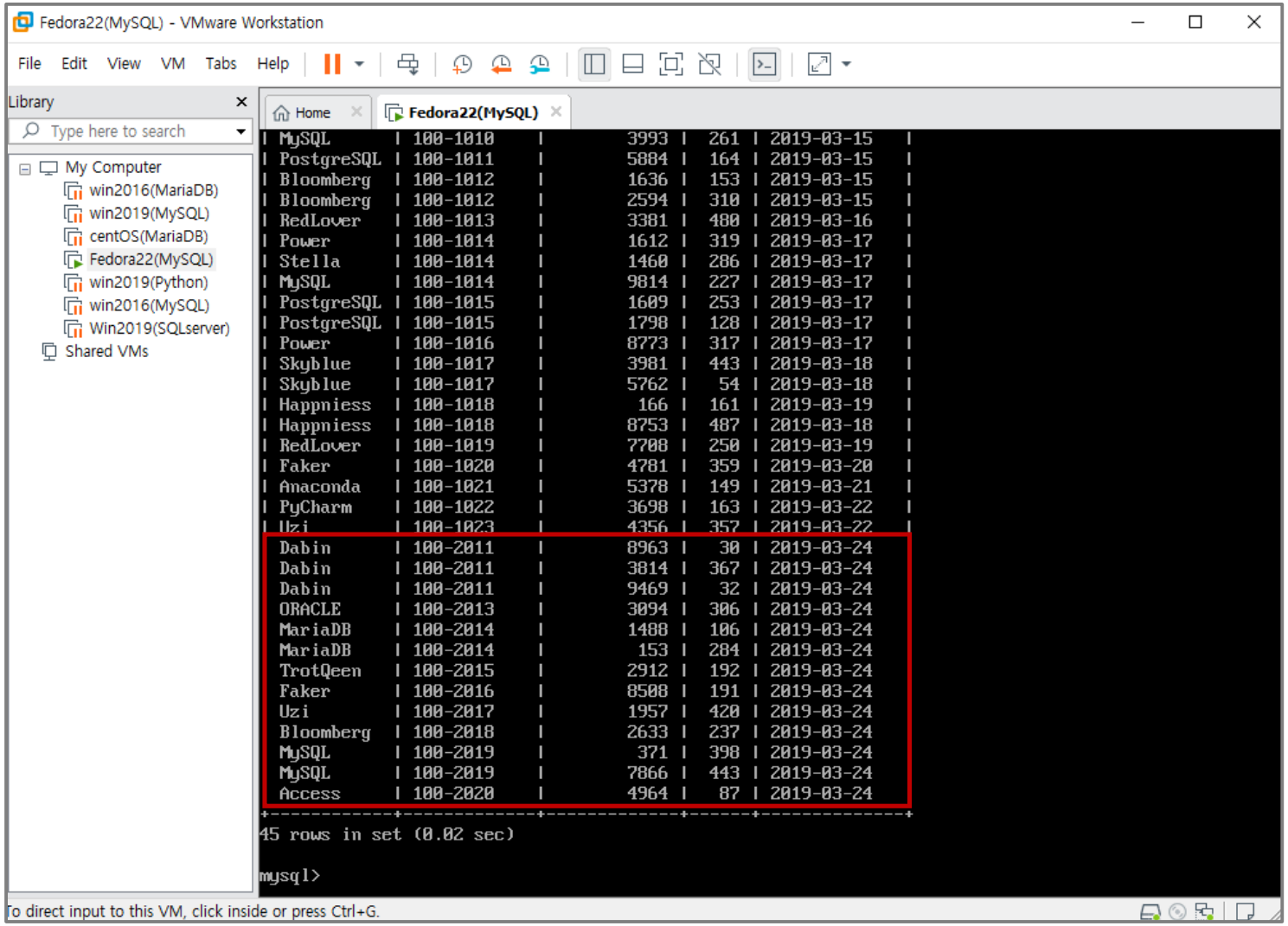
Text Processing (CSV)







Text Processing (CSV)

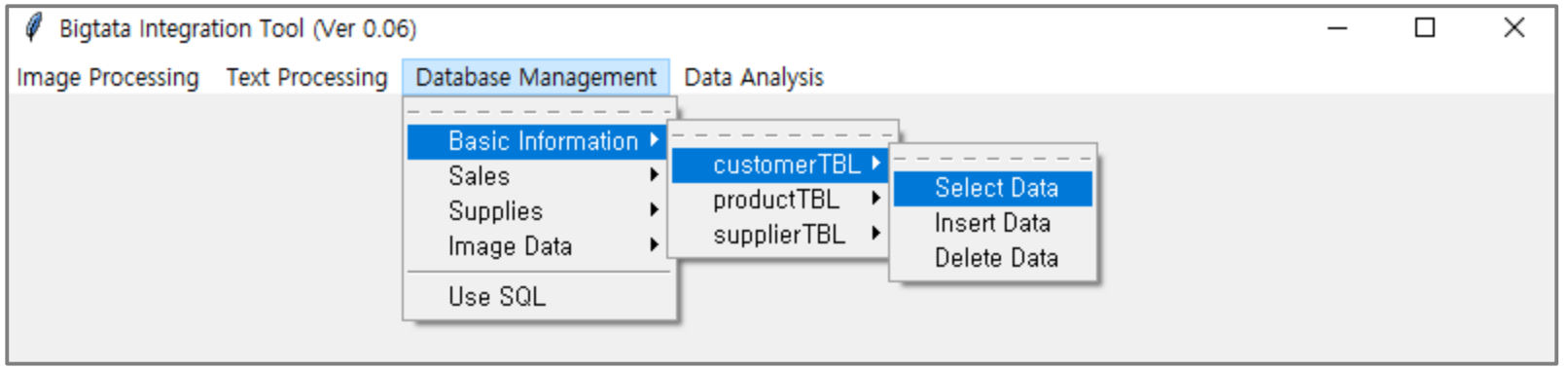


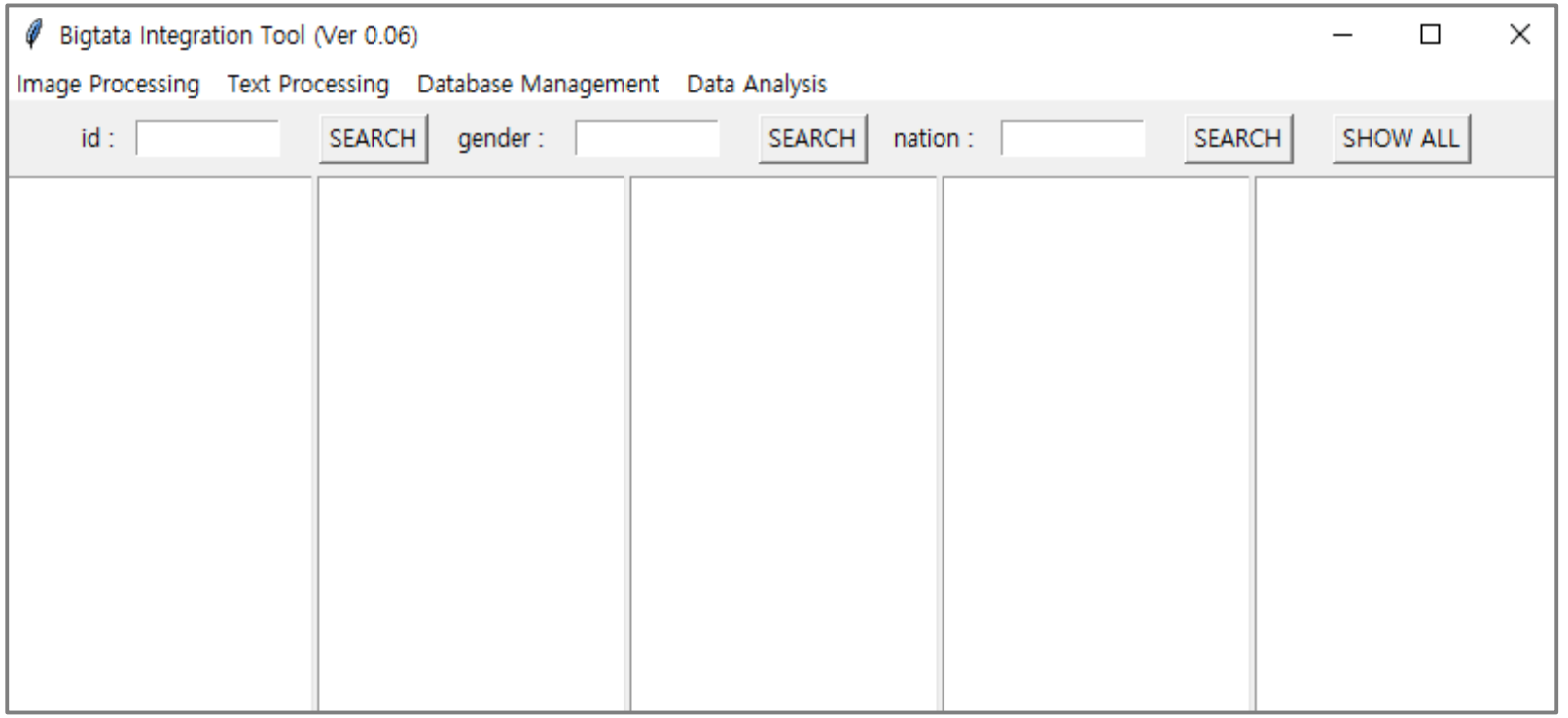
Direct Check at Fedora

select * from sales_2019_03TBL;

USE DATABASE

" CustomerTBL "



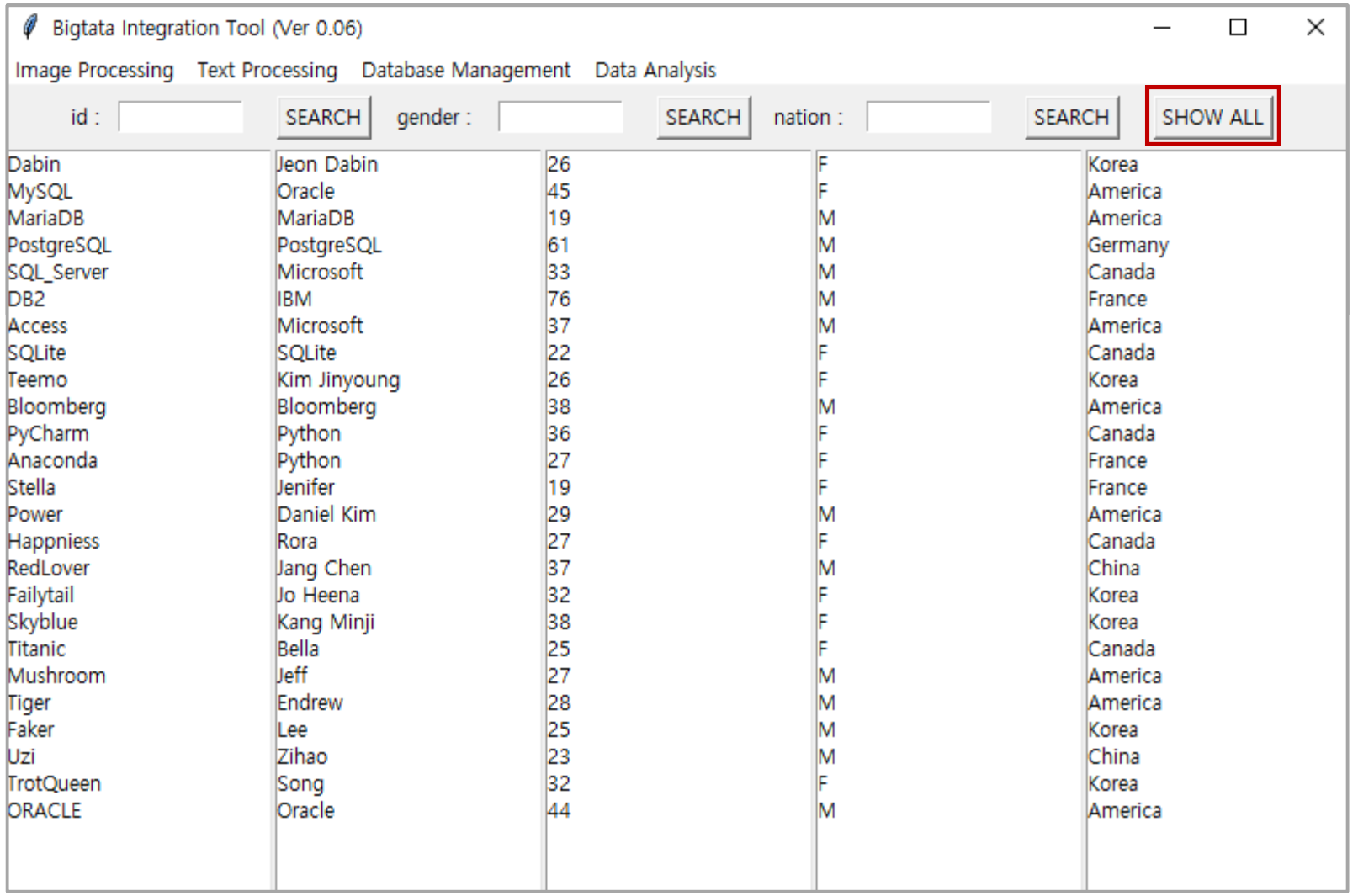


Sales_2019_03TBL

	A	B	C
1	id	invoice_nu	product_n
2	Dabin	100-1001	3672
3	Bloomber	100-1002	7759
4	Bloomber	100-1002	4859
5	MySQL	100-1003	5358
6	Stella	100-1004	251
7	Teemo	100-1005	2864
8	SQL_Serve	100-1006	2120
9	Bloomber	100-1007	2737
10	Bloomber	100-1007	8143
11	Bloomber	100-1007	6319
12	SQL_Serve	100-1008	9654
13	Dabin	100-1009	8008
14	MySQL	100-1010	3993
15	PostgreSC	100-1011	5884
16	Bloomber	100-1012	1636
17	Bloomber	100-1012	2594
18	RedLover	100-1013	3381
19	Power	100-1014	1612
20	Stella	100-1014	1460
21	MySQL	100-1014	9814
22	PostgreSC	100-1015	1609

USE DATABASE

" CustomerTBL "



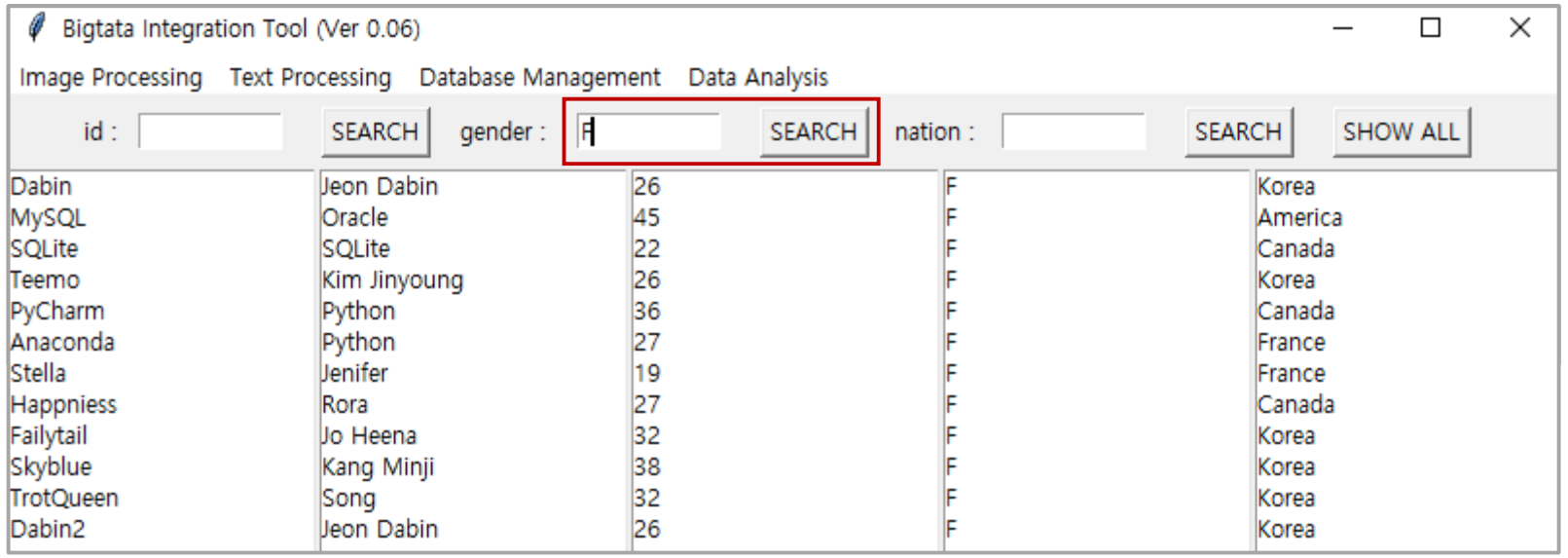
Dabin	Jeon Dabin	26	F	Korea
MySQL	Oracle	45	F	America
MariaDB	MariaDB	19	M	America
PostgreSQL	PostgreSQL	61	M	Germany
SQL_Server	Microsoft	33	M	Canada
DB2	IBM	76	M	France
Access	Microsoft	37	M	America
SQLite	SQLite	22	F	Canada
Teemo	Kim Jinyoung	26	F	Korea
Bloomberg	Bloomberg	38	M	America
PyCharm	Python	36	F	Canada
Anaconda	Python	27	F	France
Stella	Jenifer	19	F	France
Power	Daniel Kim	29	M	America
Happniess	Rora	27	F	Canada
RedLover	Jang Chen	37	M	China
Failytail	Jo Heena	32	F	Korea
Skyblue	Kang Minji	38	F	Korea
Titanic	Bella	25	F	Canada
Mushroom	Jeff	27	M	America
Tiger	Endrew	28	M	America
Faker	Lee	25	M	Korea
Uzi	Zihao	23	M	China
TrotQueen	Song	32	F	Korea
ORACLE	Oracle	44	M	America

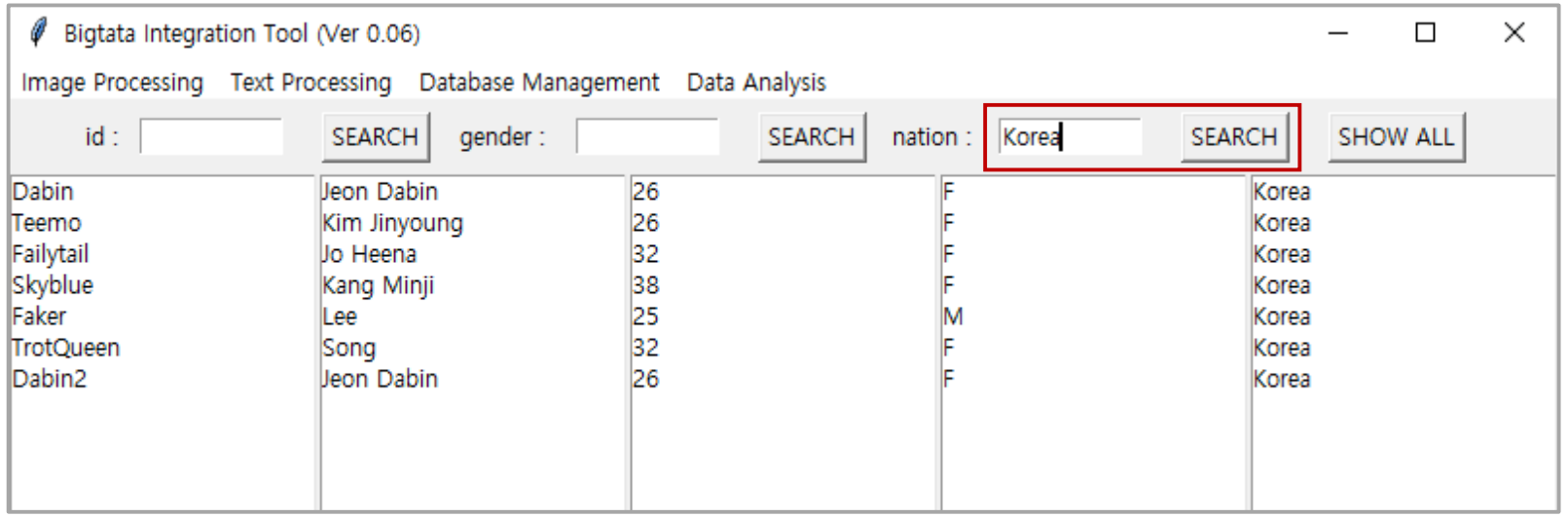
Fedora (MySQL)

```
mysql> select * from customerTBL;
+-----------+-------------+------+
| id        | name        | age  |
+-----------+-------------+------+
| Dabin     | Jeon Dabin  |   26 |
| MySQL     | Oracle      |   45 |
| MariaDB   | MariaDB     |   19 |
| PostgreSQL | PostgreSQL |   61 |
| SQL_Server | Microsoft  |   33 |
| DB2       | IBM         |   76 |
| Access    | Microsoft   |   37 |
| SQLite    | SQLite      |   22 |
| Teemo     | Kim Jinyoung |  26 |
| Bloomberg | Bloomberg   |   38 |
| PyCharm   | Python      |   36 |
| Anaconda  | Python      |   27 |
| Stella    | Jenifer     |   19 |
| Power     | Daniel Kim  |   29 |
| Happniess | Rora        |   27 |
| RedLover  | Jang Chen   |   37 |
| Failytail | Jo Heena    |   32 |
| Skyblue   | Kang Minji  |   38 |
| Titanic   | Bella       |   25 |
| Mushroom  | Jeff        |   27 |
| Tiger     | Endrew      |   28 |
| Faker     | Lee         |   25 |
| Uzi       | Zihao       |   23 |
| TrotQueen | Song        |   32 |
| ORACLE    | Oracle      |   44 |
| Dabin2    | Jeon Dabin  |   26 |
+-----------+-------------+------+
26 rows in set (0.00 sec)
```

USE DATABASE

" CustomerTBL "





Perform **SELECT** command easily

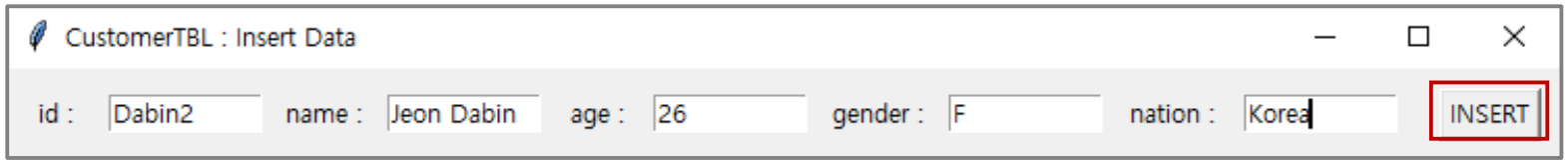
SQL command

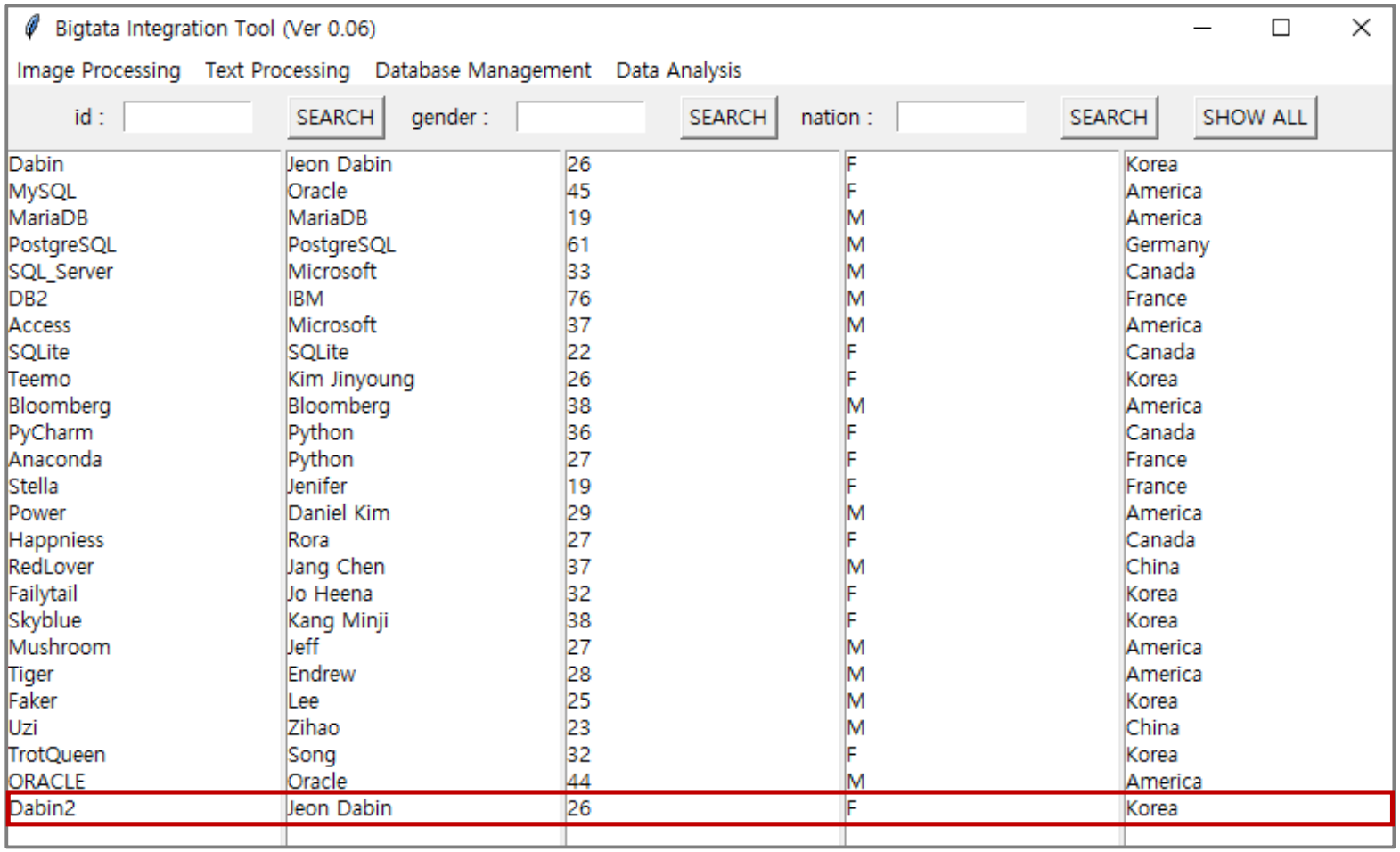
```
SELECT * FROM
customerTBL WHERE
gender = “F” ;
```

View the data that you searched legibly

USE DATABASE

" CustomerTBL "





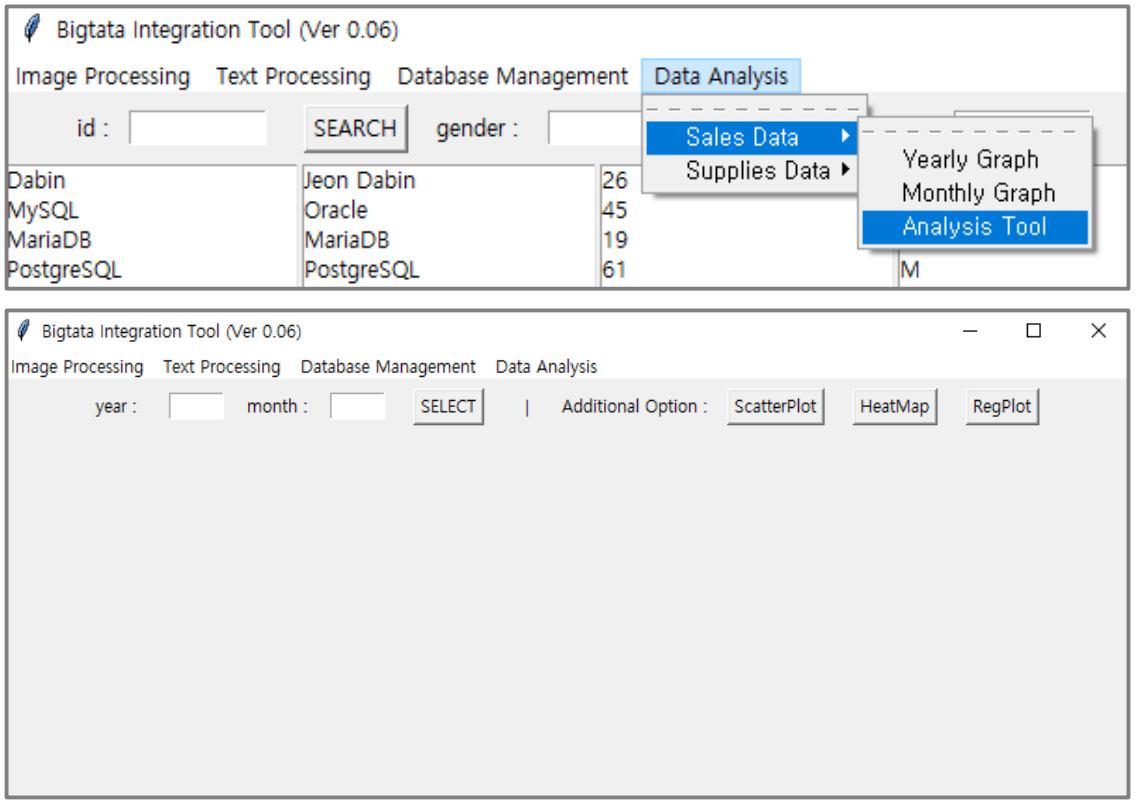
Dabin	Jeon Dabin	26	F	Korea
MySQL	Oracle	45	F	America
MariaDB	MariaDB	19	M	America
PostgreSQL	PostgreSQL	61	M	Germany
SQL_Server	Microsoft	33	M	Canada
DB2	IBM	76	M	France
Access	Microsoft	37	M	America
SQLite	SQLite	22	F	Canada
Teemo	Kim Jinyoung	26	F	Korea
Bloomberg	Bloomberg	38	M	America
PyCharm	Python	36	F	Canada
Anaconda	Python	27	F	France
Stella	Jenifer	19	F	France
Power	Daniel Kim	29	M	America
Happniess	Rora	27	F	Canada
RedLover	Jang Chen	37	M	China
Failytail	Jo Heena	32	F	Korea
Skyblue	Kang Minji	38	F	Korea
Mushroom	Jeff	27	M	America
Tiger	Endrew	28	M	America
Faker	Lee	25	M	Korea
Uzi	Zihao	23	M	China
TrotQueen	Song	32	F	Korea
ORACLE	Oracle	44	M	America
Dabin2	Jeon Dabin	26	F	Korea

Perform
INSERT ,DELETE
command easily

SQL command

```
INSERT INTO
customerTBL VALUES
(  “Dabin2”, “Jeon Dabin”,
26, “F”, “Korea”  ) ;
```

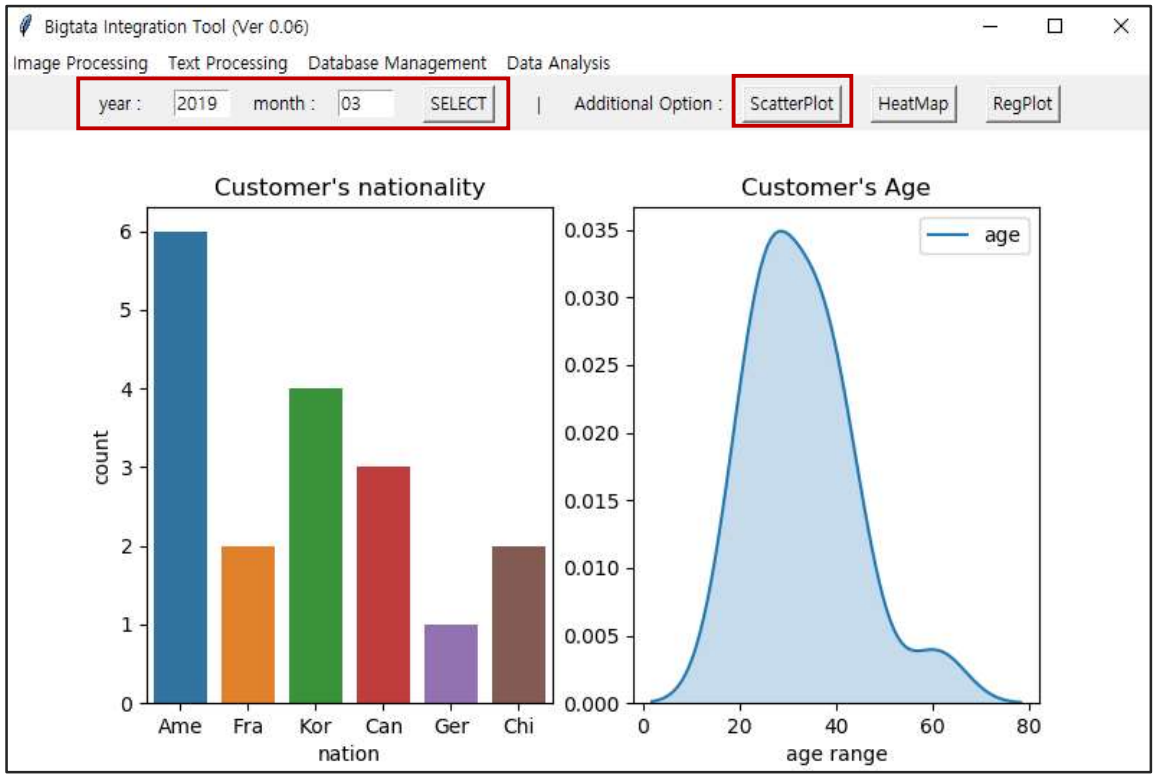
Data Analysis (DB table)

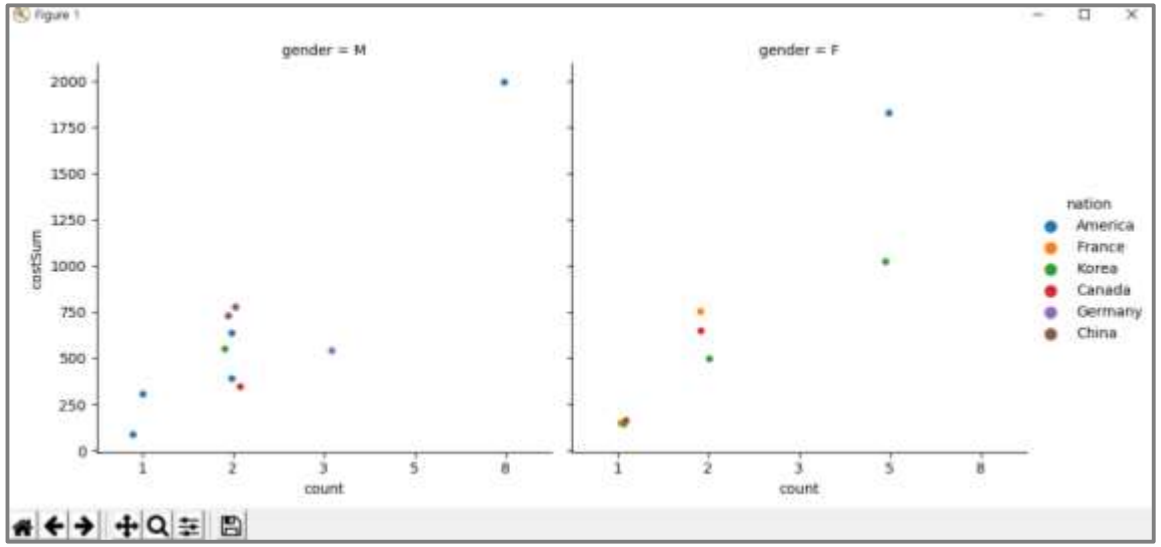


"The tool for analyzing data in the database"

We can check the results of the statistical analysis through various graphs.

Data Analysis (DB table)

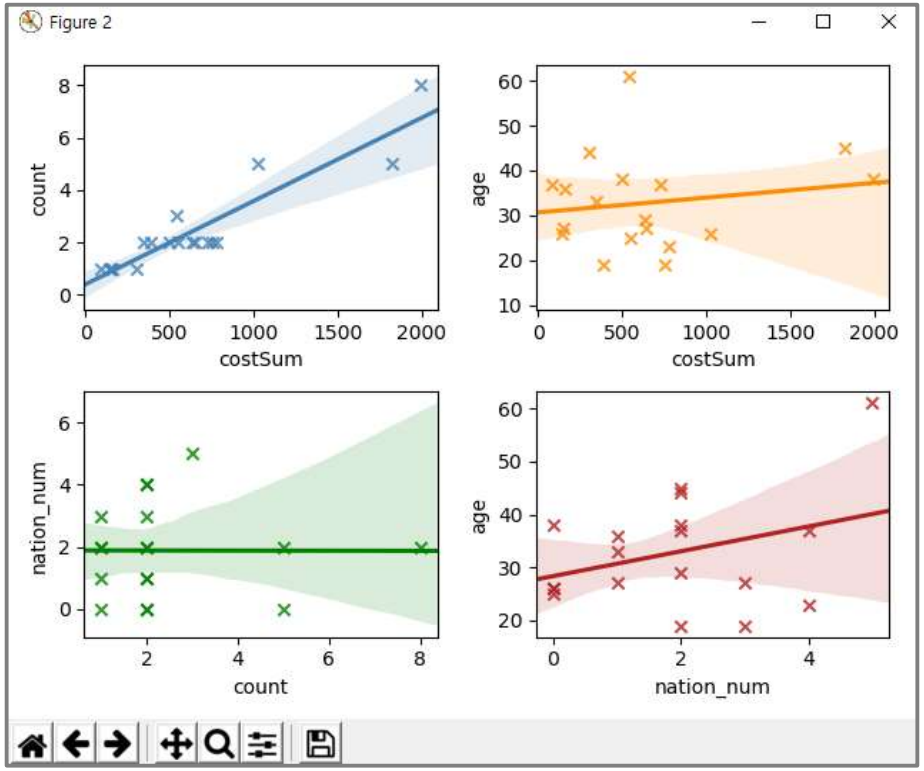


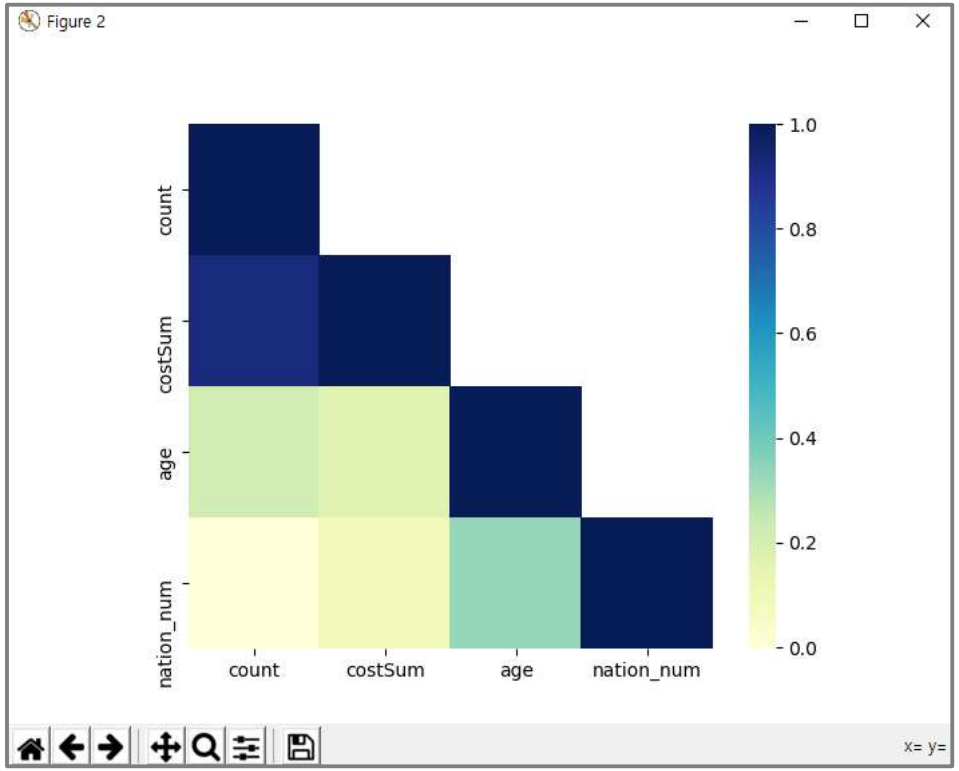


" Choose year and month that you to analysis "

In this window, you can see the count graph about nationality and age

Data Analysis (DB table)





" Detailed graph about year and month that you choose "

graphs that show the link between elements

INTEGRATION TOOL (Big Data)