

LAB4. RETAIL SALES ANALYTICS PART-I

IMPORTING THE STORE, SALES AND FEATURE TABLE

STEP 1: Choose the feature excel sheet file from the local disk and click next.

Data Import Wizard - Step 1 of 5

Data Preview

Data Preview

Source: Local File

File: D:\WOSQL\Documents\Features data set.csv

File Format

☒ Header After Skip Skip Rows: 0

Format: csv ☒ Preview Row Limit: 100

Encoding: Cp1252

Delimiter: ; Line Terminator: standard: CR LF, CR or LF

Left Enclosure: " Right Enclosure: "

File Contents

Store	Date	Temperature	Fuel_Price	MarkDown1	MarkDown2	MarkDown3	MarkDown4	MarkDown5	CPI	Unemploye
1	5/2/2010	42.31	2.572						211.0963582	8.106
1	12/2/2010	38.51	2.548						211.2421698	8.106
1	19-02-2010	39.93	2.514						211.2891429	8.106
1	26-02-2010	46.63	2.561						211.3196429	8.106
1	5/3/2010	46.5	2.625						211.3501429	8.106
1	12/3/2010	57.79	2.667						211.3806429	8.106
1	19-03-2010	54.58	2.72						211.215635	8.106
1	26-03-2010	51.45	2.732						211.0180424	8.106
1	2/4/2010	62.27	2.719						210.8204499	7.808
1	9/4/2010	65.86	2.77						210.6228574	7.808

STEP 2: Give the name of the table and click next.

Data Import Wizard - Step 2 of 4

Import Method

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: Insert

☐ Send Create Script to SQL Worksheet

Table Name: feature

☐ Import Row Limit: 100

File Contents

Store	Date	Temperature	Fuel_Price	MarkDown1	MarkDown2	MarkDown3	MarkDown4	MarkDown5	CPI	Unemploye
1	5/2/2010	42.31	2.572						211.0963582	8.106
1	12/2/2010	38.51	2.548						211.2421698	8.106
1	19-02-2010	39.93	2.514						211.2891429	8.106
1	26-02-2010	46.63	2.561						211.3196429	8.106
1	5/3/2010	46.5	2.625						211.3501429	8.106
1	12/3/2010	57.79	2.667						211.3806429	8.106
1	19-03-2010	54.58	2.72						211.215635	8.106
1	26-03-2010	51.45	2.732						211.0180424	8.106
1	2/4/2010	62.27	2.719						210.8204499	7.808
1	9/4/2010	65.86	2.77						210.6228574	7.808
1	16-04-2010	66.32	2.808						210.4887	7.808
1	23-04-2010	64.84	2.795						210.4391228	7.808
1	30-04-2010	67.41	2.78						210.3895456	7.808
1	7/5/2010	72.55	2.835						210.3399684	7.808
1	14-05-2010	74.78	2.854						210.3374261	7.808
1	21-05-2010	76.44	2.826						210.6170934	7.808
1	28-05-2010	80.44	2.759						210.8967606	7.808

STEP 3: Select the column to import the data set and arrange them in the order we want.

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

- Store
- Date
- Temperature
- Fuel_Price
- MarkDown1
- MarkDown2
- MarkDown3
- MarkDown4
- MarkDown5
- CPI
- Unemployment
- IsHoliday

Selected Columns

File Contents

	Store	Date	Temperature	Fuel_Price	MarkDown1	MarkDown2	MarkDown3	MarkDown4	MarkDown5	CPI	Unemployment	IsHoliday
1		24-09-2010	80.94	2.624						211.5972246	7.787	
1		1/10/2010	71.89	2.603						211.6719895	7.838	
1		8/10/2010	63.93	2.633						211.7467544	7.838	

Navigation: Back, Next >, Finish, Cancel

STEP 4: For each column on left,define the column details of the database table that will be created to import the data into.

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

- Store
- Date
- Temperature
- Fuel_Price
- MarkDown1
- MarkDown2
- MarkDown3
- MarkDown4
- MarkDown5
- CPI
- Unemployment
- IsHoliday**

Target Table Columns

Name: IsHoliday

Data Type: VARCHAR2

Size/Precision: 26

☒ Nullable? Default:

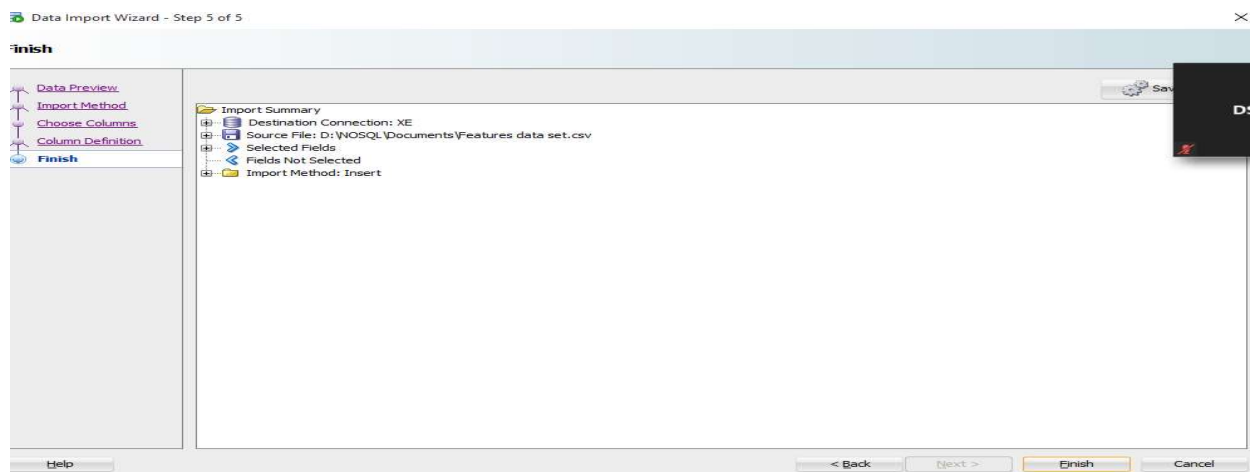
Comment:

Data

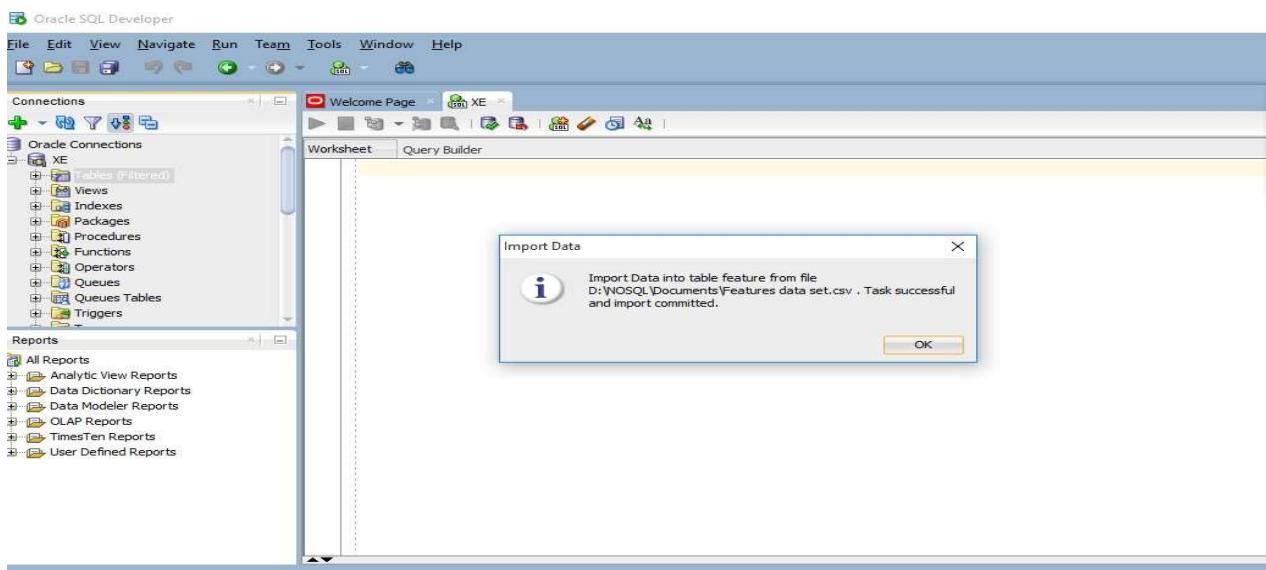
FALSE
TRUE
FALSE
FALSE
FALSE
FALSE
FALSE
FALSE
FALSE
FALSE
FALSE
FAI SF

Help < Back Next > Finish Cancel

STEP 5: It will show the connection ,source file and click finish.



STEP 6: Once the data is imported it will be show the notification like task successful and imported committed.



Similarly we can import **sales and store file** in a sql developer.

Question2: Create tables from Excel files. Relate the tables via primary key and foreign key wherever required.

SQL> alter table sales add primary

key(sales_id); Table altered.

SQL>desc sales;

Name	Null?	Type

SALES_ID	NOT NULL	NUMBER(38)
STORE		NUMBER(38)
DEPT		NUMBER(38)
F_DATE		VARCHAR2(26)
WEEKLY_SALES		NUMBER(38,2)
ISHOLIDAY		VARCHAR2(26)

SQL> alter table store add foreign key(store_id) references

sales(sales_id); Table altered.

SQL>desc store;

Name	Null?	Type

STORE_ID		NUMBER(38)
TYPE		VARCHAR2(26)
STORE_SIZE		NUMBER(38)

Question3: Write atleast 2 queries to explore each table by using WHERE and ORDERBY

SQL> select store_size from store where type='A' order by store_sizeasc;

STORE_SIZE

39690

39910

151315

152513

155078

155083

158114

184109

196321

200898

202307

STORE_SIZE

202505

203007

203742

203750

203819

205863

206302

22 rows selected.

SQL> select store_id from store where type='B' order by store_size;

STORE_ID

5

3

16

7

17

29

35

12

23

45

22

STORE_ID

18

15

10

25

21

17 rows selected.

**SQL> select dept, sales_date from sales where dept=21 and isholiday='TRUE'
order by weekly_sales;**

DEPT SALES_DAT

21 11-DEC-30

21 12-SEP-07

21 12-FEB-10

21 12-FEB-10

21 10-DEC-31

21 11-DEC-30

21 11-FEB-11

21 12-SEP-07

21 11-NOV-25

21 11-FEB-11

21 10-FEB-12

DEPT SALES_DAT

21 11-SEP-09

21 11-SEP-09

21 10-SEP-10

21 10-DEC-31

21 10-NOV-26

21 10-FEB-12

21 10-NOV-26

21 10-SEP-10

21 11-NOV-25

21 10-DEC-31

21 11-FEB-11

DEPT SALES_DAT

21 11-DEC-30

21 12-FEB-10

21 10-FEB-12

21 10-SEP-10

21 10-DEC-31

21 11-DEC-30

21 11-SEP-09

21 10-DEC-31

21 11-FEB-11

21 11-DEC-30

21 11-NOV-25

DEPT SALES_DAT

21 12-SEP-07

21 10-NOV-26

21 11-SEP-09

21 11-NOV-25

21 10-NOV-26

21 12-SEP-07

21 12-FEB-10

21 10-SEP-10

21 12-SEP-07

21 11-SEP-09

21 10-FEB-12

DEPT SALES_DAT

21 11-DEC-30

21 12-SEP-07

21 11-DEC-30

21 10-DEC-31

21 10-SEP-10

21 12-FEB-10

21 10-DEC-31

21 11-SEP-09

21 11-SEP-09

21 12-FEB-10

21 11-DEC-30

DEPT SALES_DAT

21 11-FEB-11

21 10-DEC-31

21 12-SEP-07

21 12-SEP-07

21 10-FEB-12

21 12-FEB-10

21 12-FEB-10

21 10-SEP-10

21 10-NOV-26

21 11-FEB-11

21 11-FEB-11

DEPT SALES_DAT

21 10-SEP-10

21 11-FEB-11

21 12-FEB-10

21 12-FEB-10

21 11-DEC-30

21 10-NOV-26

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21 10-DEC-31

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DEPT SALES_DAT

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DEPT SALES_DAT

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21 10-FEB-12

21 10-SEP-10

21 11-NOV-25

21 10-DEC-31

21 10-NOV-26

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21 10-SEP-10

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21 11-NOV-25

DEPT SALES_DAT

21 11-NOV-25

21 12-SEP-07

21 10-DEC-31

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21 10-DEC-31

21 10-NOV-26

21 11-SEP-09

21 10-DEC-31

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21 10-DEC-31

DEPT SALES_DAT

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21 10-NOV-26

21 10-FEB-12

21 12-FEB-10

21 12-SEP-07

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21 12-FEB-10

21 10-SEP-10

21 10-DEC-31

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21 12-SEP-07

DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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21 12-SEP-07

21 10-NOV-26

21 12-FEB-10

21 10-NOV-26

21 12-SEP-07

21 10-DEC-31

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21 10-SEP-10

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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DEPT SALES_DAT

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21 11-NOV-25

21 12-FEB-10

21 11-NOV-25

21 10-NOV-26

21 10-FEB-12

21 10-NOV-26

21 11-NOV-25

450 rows selected.

SQL> select store_id, dept, weekly_sales from sales where sales_id between 20 and 30 order by weekly_sales desc;

STORE_ID DEPT WEEKLY_SALES

1 1 17688.76

1 1 17508.41

1 1 17150.84

1 1 16333.14

1 1 16328.72

1 1 16216.27

1	1	15793.87
1	1	15740.13
1	1	15536.4
1	1	15381.82
1	1	15360.45

11 rows selected.

SQL> select store_id, unemployment, temperature from feature_data where store_id=2 and unemployment<7 order by temperature;

STORE_ID UNEMPLOYMENT TEMPERATURE

2	6.237	39.12
2	6.237	40.98
2	6.17	41.56
2	6.237	46.08
2	6.237	47.42
2	6.17	47.69
2	6.237	48.16
2	6.237	48.92
2	6.237	50.54
2	6.237	51.12
2	6.237	51.33

STORE_ID UNEMPLOYMENT TEMPERATURE

2	6.17	52.64
2	6.17	52.72

2	6.237	54.75
2	6.17	55.14
2	6.237	55.14
2	6.237	56.08
2	6.17	56.4
2	6.17	58.06
2	6.112	58.13
2	6.112	58.3
2	6.237	59.97

STORE_ID UNEMPLOYMENT TEMPERATURE

2	6.17	60.97
2	6.112	61.23
2	6.17	61.9
2	6.17	64.19
2	6.891	65.69
2	6.112	67.05
2	6.891	67.2
2	6.17	68.08
2	6.891	68.08
2	6.891	68.43
2	6.17	69.79

STORE_ID UNEMPLOYMENT TEMPERATURE

2	6.17	70.27
2	6.565	71.09

2	6.891	71.27
2	6.891	73.87
2	6.565	75.88
2	6.891	76.73
2	6.565	76.91
2	6.891	78.19
2	6.891	78.38
2	6.891	78.69
2	6.565	79.45

STORE_ID UNEMPLOYMENT TEMPERATURE

2	6.565	80.17
2	6.891	80.56
2	6.891	81.04
2	6.565	82.64
2	6.565	83.23
2	6.565	84.2
2	6.565	84.79
2	6.891	86.32
2	6.565	86.37
2	6.565	87.65
2	6.565	88.55

STORE_ID UNEMPLOYMENT TEMPERATURE

2	6.565	90.22
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56 rows selected.