



ANDRES
MARTINEZ
GUTIERREZ

2018 - 2

DATABASE ADMINISTRATION ADVANCED

AGENDA

- ④ Importing data from excel / csv
- ④ Sequences
- ④ Analytics Functions
- ④ Indexes

Importing data

http://www.oracle.com/webfolder/technetwork/tutorials/obe/db/sqldev/r30/SQLdev3.0_Import_Export/sqldev3.0_import_export.htm

<http://bit.ly/2MH03wT>



```
1 CREATE TABLE AGENCIES (
2     country varchar2(255),
3     resort_name varchar2(255),
4     number_of_days integer,
5     travel_method varchar2(255),
6     price decimal(10,2),
7     date_of_issue date,
8     month varchar2(255),
9     holiday_id varchar2(255)
10 );
```

Connections

Oracle11g

Tables (Filtered)

AGENC...

AQ\$_IN...

AQ\$_IN...

AQ\$_Q...

AQ\$_Q...

AQ\$_SC...

CUSTO...

DEF\$_A...

DEF\$_A...

DEF\$_C...

DEF\$_D...

DEF\$_D...

DEF\$_E...

DEF\$_L...

DEF\$_C...

DEF\$_P...

DEF\$_P...

HELP

LOGMN...

LOGMN...

LOGMN...

Action Bar: Actions...

	COLUMN_NAME	DATA_TYPE
1	COUNTRY	VARCHAR2(25)

Actions...:

- Edit...
- Open
- Import Data...**
- Import Using Oracle Loader for Hadoop...
- Export...
- Table
- Column
- Constraint
- Index
- Privileges
- Statistics
- Storage
- Trigger
- Spatial
- Enable REST Service...
- Use as Template...
- Quick DDL

Data Import Wizard - Step 1 of 5

Data Preview

Source: Local File

File: /Users/andresmartinez/Desktop/agencies.csv

Path of file

File Format

Header After Skip

Format: CSV

Encoding: UTF8

Delimiter:,

Skip Rows: 0

Preview Row Limit: 100

Line Terminator: standard: CR LF, CR or LF

Left Enclosure:"

Right Enclosure:"

File Contents

Country	Resort N...	No of Da...	Travel M...	Price	Date of i...	Month	Holiday ID
Australia	Great Ba...	32	Plane	750	12/16/16	December	I990AUS
Australia	Perth	28	Plane	985	6/21/16	June	AUS112J
Chile	Santiago	21	Plane	1259	1/20/17	January	CH266H
England	London	3	Train	69	10/10/16	October	I456UK
England	Bognor	1	Coach	12	1/19/17	January	BG726H
France	Lyon	14	Plane	399	2/17/17	February	A7995FR
France	Paris – E...	5	Train	269	2/27/16	February	TH789FR
France	Paris – E...	3	Train	125	1/27/17	January	TH788FR
France	Nice	7	Plane	289	3/17/16	March	I7897FR
France	Toulouse	7	Train	256	1/6/17	January	SG7637L
France	Nimes	7	Plane	287	7/16/16	July	FR5625J
Germany	Black Fo...	4	Coach	69	6/25/16	June	A111G
Germany	Berlin	7	Coach	289	7/13/16	July	BR6736G
Peru	Lima	21	Plane	975	2/1/16	February	PG7836G
Saudi Ar...	Riyadh	14	Plane	995	10/2/16	October	KSA8987
Spain	Barcelona	4	Train	219	3/14/16	March	I6675SP
Spain	Nerja	6	Plane	198	3/10/16	March	TH990ESP
Spain	Malaga	16	Plane	234	11/29/16	November	A776ESP
Spain	Seville	14	Plane	288	8/21/16	August	NM9876Y

If you don't see the Preview, something is not right with the file.

Help < Back Next > Finish Cancel

Data Import Wizard - Step 1 of 5

Data Preview

Source: Local File

File: /Users/andresmartinez/Desktop/agencies.csv

Path of file

File Format

Header After Skip

Format: CSV

Encoding: UTF8

Delimiter:,

Skip Rows: 0

Preview Row Limit: 100

Line Terminator: standard: CR LF, CR or LF

Left Enclosure:"

Right Enclosure:"

File Contents

Country	Resort N...	No of Da...	Travel M...	Price	Date of i...	Month	Holiday ID
Australia	Great Ba...	32	Plane	750	12/16/16	December	I990AUS
Australia	Perth	28	Plane	985	6/21/16	June	AUS112J
Chile	Santiago	21	Plane	1259	1/20/17	January	CH266H
England	London	3	Train	69	10/10/16	October	I456UK
England	Bognor	1	Coach	12	1/19/17	January	BG726H
France	Lyon	14	Plane	399	2/17/17	February	A7995FR
France	Paris – E...	5	Train	269	2/27/16	February	TH789FR
France	Paris – E...	3	Train	125	1/27/17	January	TH788FR
France	Nice	7	Plane	289	3/17/16	March	I7897FR
France	Toulouse	7	Train	256	1/6/17	January	SG7637L
France	Nimes	7	Plane	287	7/16/16	July	FR5625J
Germany	Black Fo...	4	Coach	69	6/25/16	June	A111G
Germany	Berlin	7	Coach	289	7/13/16	July	BR6736G
Peru	Lima	21	Plane	975	2/1/16	February	PG7836G
Saudi Ar...	Riyadh	14	Plane	995	10/2/16	October	KSA8987
Spain	Barcelona	4	Train	219	3/14/16	March	I6675SP
Spain	Nerja	6	Plane	198	3/10/16	March	TH990ESP
Spain	Malaga	16	Plane	234	11/29/16	November	A776ESP
Spain	Seville	14	Plane	288	8/21/16	August	NM9876Y

If you don't see the Preview, something is not right with the file.

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Data Import Wizard - Step 2 of 4

Import Method

[Data Preview](#)[Import Method](#)[Column Definition](#)[Finish](#)

Specify the method for importing data. For Staging External Table method, an external table will be created as a staging table for importing the Target Table. For other import methods, data is imported directly into the table.

Import Method: **Insert** Send Create Script to SQL WorksheetTable Name: **AGENCIES** Import Row Limit: **100**

File Contents

Country	Resort N...	No of Da...	Travel M...	Price	Date of i...	Month	Holiday ID
Australia	Great Ba...	32	Plane	750	12/16/16	December	I990AUS
Australia	Perth	28	Plane	985	6/21/16	June	AUS112J
Chile	Santiago	21	Plane	1259	1/20/17	January	CH266H
England	London	3	Train	69	10/10/16	October	I456UK
England	Bognor	1	Coach	12	1/19/17	January	BG726H
France	Lyon	14	Plane	399	2/17/17	February	A7995FR
France	Paris – E...	5	Train	269	2/27/16	February	TH789FR
France	Paris – E...	3	Train	125	1/27/17	January	TH788FR
France	Nice	7	Plane	289	3/17/16	March	I7897FR
France	Toulouse	7	Train	256	1/6/17	January	SG7637L
France	Nimes	7	Plane	287	7/16/16	July	FR5625J
Germany	Black Fo...	4	Coach	69	6/25/16	June	A111G
Germany	Berlin	7	Coach	289	7/13/16	July	BR6736G
Peru	Lima	21	Plane	975	2/1/16	February	PG7836G
Saudi Ar...	Riyadh	14	Plane	995	10/2/16	October	KSA8987
Spain	Barcelona	4	Train	219	3/14/16	March	I6675SP
Spain	Nerja	6	Plane	198	3/10/16	March	TH990ESP
Spain	Malaga	16	Plane	234	11/29/16	November	A776ESP
Spain	Seville	14	Plane	288	8/21/16	August	NM9876Y
Spain	Seville	10	Plane	199	3/22/16	March	TH8956SP
Spain	Barcelona	8	Plane	177	9/1/16	Septemb...	AJ9836L
Spain	Barcelona	7	Coach	199	6/10/16	June	GG9836P
Spain	Malaga	14	Plane	301	6/19/16	June	PL8726P
Spain	Barcelona	4	Train	219	9/11/16	Septemb...	I6675SP
Spain	Seville	14	Train	299	7/13/16	July	SV767HH
Spain	Madrid	8	Plane	277	2/3/17	February	WE6735L

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Choose Columns

-  Data Preview
-  Import Method
-  **Choose Column**
-  Column Definition
-  Finish

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

Available Columns

**Check you've selected all the columns
Needed from the file.**

**Also, order them in the corresponding
order of the columns of your table**

Selected Columns

Country
Resort Name
No of Days
Travel Method
Price
Date of issue
Month
Holiday ID

**File Contents**

Country	Resort N...	No of Da...	Travel M...	Price	Date of i...	Month	Holiday ID
Australia	Great Ba...	32	Plane	750	12/16/16	December	I990AUS
Australia	Perth	28	Plane	985	6/21/16	June	AUS112J
Chile	Santiago	21	Plane	1250	1/20/17	January	CHI200J

Help**< Back****Next >****Finish****Cancel**

Column Definition

Data Preview
 Import Method
 Choose Columns
Column Definition
 Finish

For each column in the Source Data Columns list on the left, select a Target Table column on the right.

Match By **Name** ▾

Source Data Columns

- Country
- Resort Name
- No of Days
- Travel Method
- Price
- Date of issue
- Month
- Holiday ID

Make sure that the red icon doesn't appear here.

Select each column of the CSV file And target it to one column in the right side.

Make sure that the type of the column is the right one.

For dates, check also the format.

Status

Source columns mapped to the same target table column
COUNTRY: Country, Resort Name, No of Days, Travel Method, Date of issue, Holiday ID

Target Table Columns

Name	COUNTRY
Data Type	VARCHAR2
Size/Precision	255
<input checked="" type="checkbox"/> Nullable?	Default
Comment	

Data

Australia
Australia
Chile
England
England
France
France
France
France
France
Germany
Germany
Peru
Saudi Arabia
Spain
Spain
Spain
Spain

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Next >

Finish

Cancel

Help

Column Definition

- [Data Preview](#)
- [Import Method](#)
- [Choose Columns](#)
- Column Definition**
- [Finish](#)

For each column in the Source Data Columns list on the left, select a Target Table column on the right.

Match By **Name** ▾

Source Data Columns

- ! Country
- Resort Name
- No of Days
- Travel Method
- Price
- ⚠ Date of issue**
- Month
- ! Holiday ID

Target Table Columns

Name **DATE_OF_ISSUE**

Data Type **DATE**

Format

Nullable?

Comment

- DD/MM/RR
- DD-MON-RR
- RRRR-MM-DD
- RR-MM-DD
- RRRR-MON-DD
- RR-MON-DD
- YYYY-MM-DD

Data

- ⚠ 12/16/16
- ⚠ 6/21/16
- ⚠ 1/20/17
- ⚠ 10/10/16
- ⚠ 1/19/17
- ⚠ 2/17/17
- ⚠ 2/27/16
- ⚠ 1/27/17
- ⚠ 3/17/16
- ⚠ 1/6/17
- ⚠ 7/16/16
- ⚠ 6/25/16
- ⚠ 7/13/16
- ⚠ 2/1/16
- ⚠ 10/2/16
- ⚠ 3/14/16
- ⚠ 3/10/16
- ⚠ 11/29/16
- ⚠ 8/21/16

Status

Data is not compatible with column definition or is not available
for a not nullable column
A format is not specified.

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Finish

Cancel

Help

Data Import Wizard - Step 4 of 5

Column Definition

For each column in the Source Data Columns list on the left, select a Target Table column on the right.

Match By **Name**

Source Data Columns

- Country
- Resort Name
- No of Days
- Travel Method
- Price
- Date of issue**
- Month
- Holiday ID

Target Table Columns

Name	DATE_OF_ISSUE
Data Type	DATE
Format	MM/DD/YY
<input checked="" type="checkbox"/> Nullable?	Default
Comment	

Data

- 12/16/16
- 6/21/16
- 1/20/17
- 10/10/16
- 1/19/17
- 2/17/17
- 2/27/16
- 1/27/17
- 3/17/16
- 1/6/17
- 7/16/16
- 6/25/16
- 7/13/16
- 2/1/16
- 10/2/16
- 3/14/16
- 3/10/16
- 11/29/16
- 8/21/16

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Data Import Wizard - Step 4 of 5

Column Definition

For each column in the Source Data Columns list on the left, select a Target Table column on the right.

Match By **Name**

Source Data Columns

- Country
- Resort Name
- No of Days
- Travel Method
- Price
- Date of issue**
- Month
- Holiday ID

Target Table Columns

Name	DATE_OF_ISSUE
Data Type	DATE
Format	MM/DD/YY
<input checked="" type="checkbox"/> Nullable?	Default
Comment	

Data

- 12/16/16
- 6/21/16
- 1/20/17
- 10/10/16
- 1/19/17
- 2/17/17
- 2/27/16
- 1/27/17
- 3/17/16
- 1/6/17
- 7/16/16
- 6/25/16
- 7/13/16
- 2/1/16
- 10/2/16
- 3/14/16
- 3/10/16
- 11/29/16
- 8/21/16

Status

Help < Back Next > Finish Cancel

Data Import Wizard - Step 4 of 5

Column Definition

For each column in the Source Data Columns list on the left, select a Target Table column on the right.

Match By **Name**

Source Data Columns

- Country
- Resort Name
- No of Days
- Travel Method
- Price
- Date of issue**
- Month
- Holiday ID

Target Table Columns

Name	DATE_OF_ISSUE
Data Type	DATE
Format	MM/DD/YY
<input checked="" type="checkbox"/> Nullable?	Default
Comment	

Data

- 12/16/16
- 6/21/16
- 1/20/17
- 10/10/16
- 1/19/17
- 2/17/17
- 2/27/16
- 1/27/17
- 3/17/16
- 1/6/17
- 7/16/16
- 6/25/16
- 7/13/16
- 2/1/16
- 10/2/16
- 3/14/16
- 3/10/16
- 11/29/16
- 8/21/16

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Oracle11g AGENCIES

Columns Data Model Constraints Grants Statistics Triggers Flashback Dependencies Details Partitions Indexes SQL

Sort.. Filter:

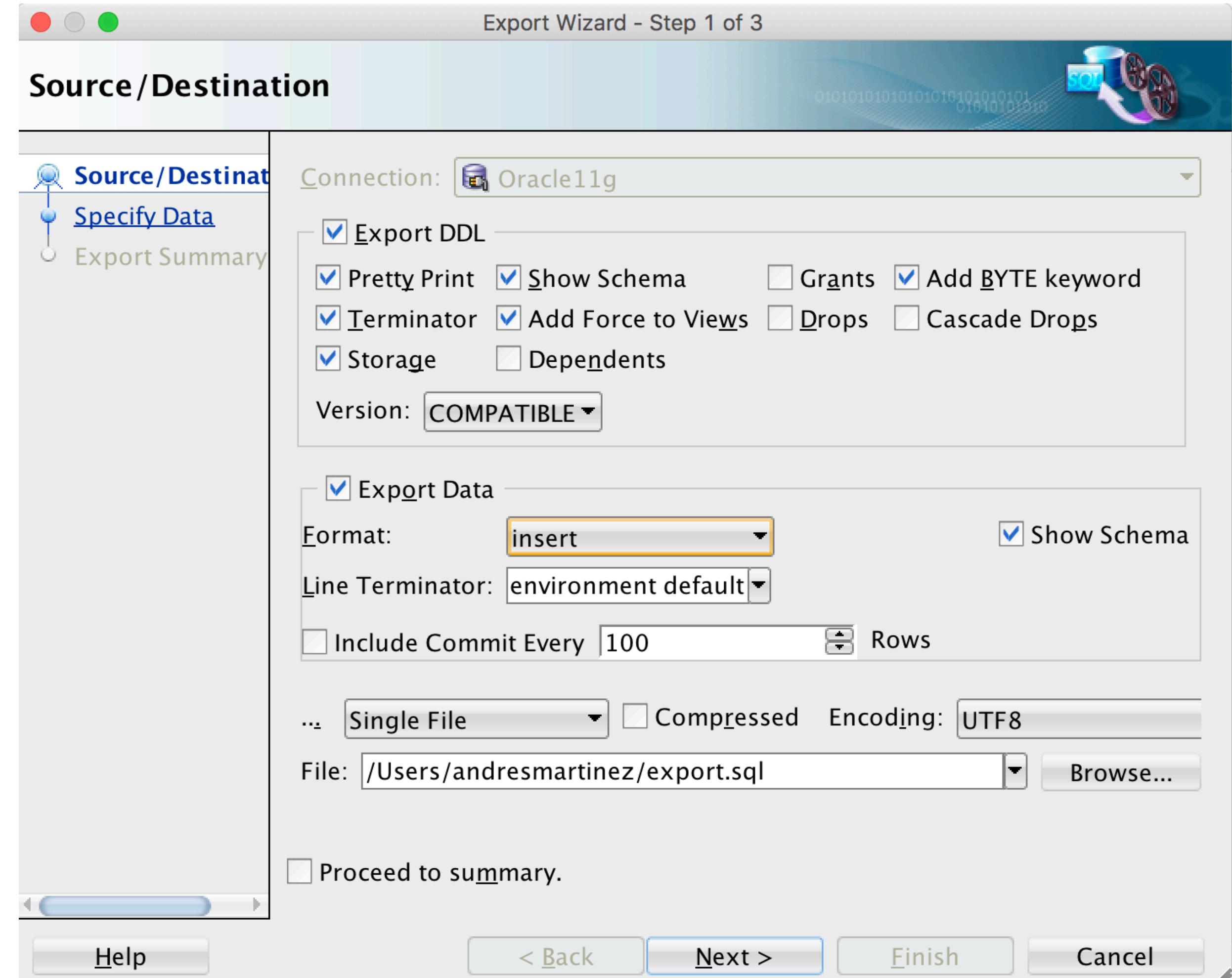
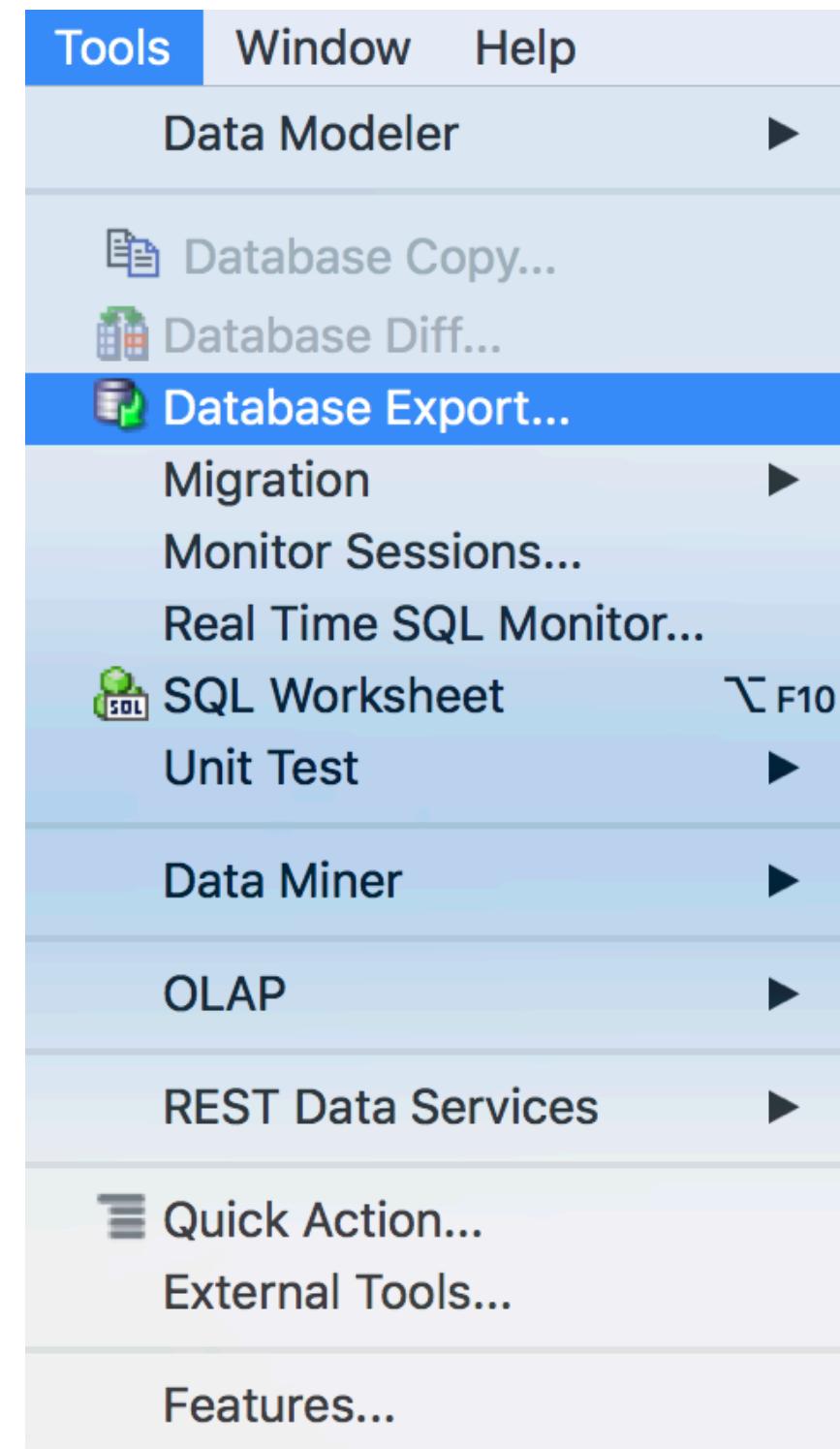
	COUNTRY	RESORT_NAME	NUMBER_OF_DAYS	TRAVEL_METHOD	PRICE	DATE_OF_ISSUE	MONTH	HOLIDAY_ID
1	Australia	Great Barrier Reef		32 Plane	750	16/12/16	December	I990AUS
2	Australia	Perth		28 Plane	985	21/06/16	June	AUS112J
3	Chile	Santiago		21 Plane	1259	20/01/17	January	CH266H
4	England	London		3 Train	69	10/10/16	October	I456UK
5	England	Bognor		1 Coach	12	19/01/17	January	BG726H
6	France	Lyon		14 Plane	399	17/02/17	February	A7995FR
7	France	Paris – Euro Disney		5 Train	269	27/02/16	February	TH789FR
8	France	Paris – Euro Disney		3 Train	125	27/01/17	January	TH788FR
9	France	Nice		7 Plane	289	17/03/16	March	I7897FR
10	France	Toulouse		7 Train	256	06/01/17	January	SG7637L
11	France	Nimes		7 Plane	287	16/07/16	July	FR5625J
12	Germany	Black Forest		4 Coach	69	25/06/16	June	A111G
13	Germany	Berlin		7 Coach	289	13/07/16	July	BR6736G
14	Peru	Lima		21 Plane	975	01/02/16	February	PG7836G
15	Saudi Arabia	Riyadh		14 Plane	995	02/10/16	October	KSA8987
16	Spain	Barcelona		4 Train	219	14/03/16	March	I6675SP
17	Spain	Nerja		6 Plane	198	10/03/16	March	TH990ESP
18	Spain	Malaga		16 Plane	234	29/11/16	November	A776ESP
19	Spain	Seville		14 Plane	288	21/08/16	August	NM9876Y
20	Spain	Seville		10 Plane	199	22/03/16	March	TH8956SP
21	Spain	Barcelona		8 Plane	177	01/09/16	September	AJ9836L
22	Spain	Barcelona		7 Coach	199	10/06/16	June	GG9836P
23	Spain	Malaga		14 Plane	301	19/06/16	June	PL8726P
24	Spain	Barcelona		4 Train	219	11/09/16	September	I6675SP
25	Spain	Seville		14 Train	299	13/07/16	July	SV767HH
26	Spain	Madrid		8 Plane	277	03/02/17	February	WE6735L
27	Spain	Granada		10 Plane	345	21/12/16	December	GR7878G
28	Trinidad	Port of Spain		14 Plane	885	11/09/16	September	TT67624G
29	China	Sanya Yalong		5 Train	320	28/09/16	September	Y8J4E0
30	China	Lijiang		43 Train	213	18/02/17	February	L5X2Q8
31	Russia	Radisson		41 Plane	702	19/02/17	February	K6A2P2
32	Germany	Frankfurt		13 Plane	1079	24/11/16	November	P406S6
33	Australia	Perth		34 Train	193	29/11/16	November	M1N1C4
34	Turkey	Rixos		28 Plane	1028	22/11/16	November	R9Z6P3
35	Spain	Barcelona		33 Coach	140	16/12/16	December	C3G2V5
36	Mexico	Cozumel		8 Train	173	26/10/16	October	G8S4Q2
37	Russia	The artic		20 Plane	985	19/04/16	April	G7A8S5
38	Australia	Great Barrier Reef		37 Plane	1225	14/11/16	November	P804G9
39	Spain	Seville		21 Plane	570	27/02/17	February	C408N2
40	France	Nimes		5 Train	261	12/03/16	March	P8W5D9
41	Spain	Granada		8 Plane	511	15/03/16	March	K5E2J6
42	France	Nimes		8 Train	169	05/03/16	March	Y1K8H7
43	USA	Mohonk		9 Coach	141	16/10/16	October	C7Q0R3
44	Turkey	Orka		41 Coach	112	07/05/16	May	W0D9E4
45	Australia	Likuliku Lagoon Resort		41 Coach	134	18/07/16	July	C0Z7D1
46	Mexico	Hotel Riu		5 Coach	148	23/05/16	May	E701J6
47	France	Lyon		11 Plane	467	30/06/16	June	A9N5Y6
48	Italy	Cenobio		15 Plane	1277	01/08/16	August	Z8E8X8

Exporting data

http://www.oracle.com/webfolder/technetwork/tutorials/obe/db/sqldev/r30/SQLdev3.0_Import_Export/sqldev3.0_import_export.htm

Exporting data

- There are two ways of exporting data:
 1. From the table
 2. From the tools
- You can export to multiple formats: PDF, XML, HTML, JSON, CSV.



Specify Data



- [Source/Destination](#)
- Specify Data**
- [Export Summary](#)

Database Object	Columns	Object Where
SYSTEM.AGENCIES	*	

You can pick which columns you want to export. An star * means you want to export the data of all the columns.

In the third column you can add multiple WHERE clauses to filter the data desired.

Global Where:

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[Finish](#)

[Cancel](#)

Export Wizard - Step 2 of 3

Specify

Data Where

Global Where:

Object Where: COUNTRY = 'Australia' AND NUMBER_OF_DAYS < 20

AND

Refresh

Sample data:

COUNTRY	RESORT_NAME	NUMBER_OF_DAYS	TRAVEL_METHOD
Australia	Great Barrier Reef	17	Coach
Australia	Great Barrier Reef	8	Plane
Australia	Great Barrier Reef	12	Coach
Australia	Great Barrier Reef	17	Train
Australia	The Brando	9	Coach
Australia	Likuliku Lagoon Resort	16	Plane
Australia	Perth	5	Train
Australia	Likuliku Lagoon Resort	14	Train
Australia	Southern Ocean Lodge	17	Coach
Australia	Likuliku Lagoon Resort	19	Coach
Australia	Likuliku Lagoon Resort	11	Coach
Australia	Southern Ocean Lodge	17	Plane

Help

OK

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Finish

Cancel

Export Summary



[Source/Destination](#)

[Specify Data](#)

Export Summary

- Export Summary
 - Connections
 - Source: Oracle11g
 - Target Options
 - Single File: /Users/andresmartinez/export.sql
 - Encoding: UTF8
 - DDL Options
 - Storage
 - Terminator
 - Pretty Print
 - Add BYTE keyword
 - Add Force to Views
 - Show Schema
 - Drops
 - Cascade Drops
 - Grants
 - Dependents
 - Version: COMPATIBLE
- DDL Objects
 - Tables
 - Indexes
 - Triggers
- Data Options

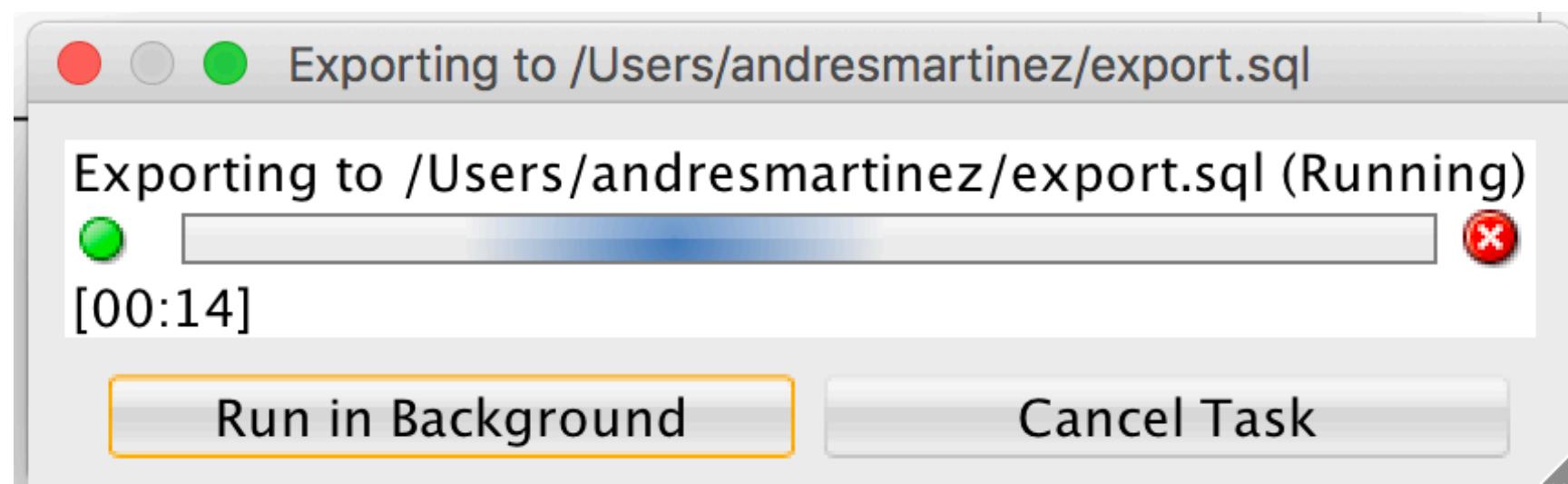
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[Cancel](#)



Oracle11g AGENCIES export.sql

SQL Worksheet History

Worksheet Query Builder

```
-- File created - Monday-September-17-2018
-- DDL for Table AGENCIES

CREATE TABLE "SYSTEM"."AGENCIES"
(
  "COUNTRY" VARCHAR2(255 BYTE),
  "RESORT_NAME" VARCHAR2(255 BYTE),
  "NUMBER_OF_DAYS" NUMBER(*,0),
  "TRAVEL_METHOD" VARCHAR2(255 BYTE),
  "PRICE" NUMBER(10,2),
  "DATE_OF_ISSUE" DATE,
  "MONTH" VARCHAR2(255 BYTE),
  "HOLIDAY_ID" VARCHAR2(255 BYTE)
) PCTFREE 10 PCTUSED 40 INITTRANS 1 MAXTRANS 255 NOCOMPRESS LOGGING
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
REM INSERTING into SYSTEM.AGENCIES
SET DEFINE OFF;
Insert into SYSTEM.AGENCIES (COUNTRY,RESORT_NAME,NUMBER_OF_DAYS,TRAVEL_METHOD,PRICE,DATE_OF_ISSUE,MONTH,HOLIDAY_ID) values ('Australia','Great Barrier Reef','17','Coach','136',to_date('12/12/16','DD/MM/RR'),'December','V0F1S6');
Insert into SYSTEM.AGENCIES (COUNTRY,RESORT_NAME,NUMBER_OF_DAYS,TRAVEL_METHOD,PRICE,DATE_OF_ISSUE,MONTH,HOLIDAY_ID) values ('Australia','Great Barrier Reef','8','Plane','348',to_date('12/12/16','DD/MM/RR'),'December','G9K7U3');
Insert into SYSTEM.AGENCIES (COUNTRY,RESORT_NAME,NUMBER_OF_DAYS,TRAVEL_METHOD,PRICE,DATE_OF_ISSUE,MONTH,HOLIDAY_ID) values ('Australia','Great Barrier Reef','12','Coach','104',to_date('30/10/16','DD/MM/RR'),'October','G0B3R8');
Insert into SYSTEM.AGENCIES (COUNTRY,RESORT_NAME,NUMBER_OF_DAYS,TRAVEL_METHOD,PRICE,DATE_OF_ISSUE,MONTH,HOLIDAY_ID) values ('Australia','Great Barrier Reef','17','Train','137',to_date('26/06/16','DD/MM/RR'),'June','R4Z6H3');
Insert into SYSTEM.AGENCIES (COUNTRY,RESORT_NAME,NUMBER_OF_DAYS,TRAVEL_METHOD,PRICE,DATE_OF_ISSUE,MONTH,HOLIDAY_ID) values ('Australia','The Brando','9','Coach','141',to_date('04/11/16','DD/MM/RR'),'November','I0R0B0');
Insert into SYSTEM.AGENCIES (COUNTRY,RESORT_NAME,NUMBER_OF_DAYS,TRAVEL_METHOD,PRICE,DATE_OF_ISSUE,MONTH,HOLIDAY_ID) values ('Australia','Likuliku Lagoon Resort','16','Plane','941',to_date('31/10/16','DD/MM/RR'),'October','E1E8Q8');
Insert into SYSTEM.AGENCIES (COUNTRY,RESORT_NAME,NUMBER_OF_DAYS,TRAVEL_METHOD,PRICE,DATE_OF_ISSUE,MONTH,HOLIDAY_ID) values ('Australia','Perth','5','Train','183',to_date('24/06/16','DD/MM/RR'),'June','Y6I803');
Insert into SYSTEM.AGENCIES (COUNTRY,RESORT_NAME,NUMBER_OF_DAYS,TRAVEL_METHOD,PRICE,DATE_OF_ISSUE,MONTH,HOLIDAY_ID) values ('Australia','Likuliku Lagoon Resort','14','Train','213',to_date('05/06/16','DD/MM/RR'),'June','U4H2C6');
Insert into SYSTEM.AGENCIES (COUNTRY,RESORT_NAME,NUMBER_OF_DAYS,TRAVEL_METHOD,PRICE,DATE_OF_ISSUE,MONTH,HOLIDAY_ID) values ('Australia','Southern Ocean Lodge','17','Coach','105',to_date('18/09/16','DD/MM/RR'),'September','Z0X5F1');
Insert into SYSTEM.AGENCIES (COUNTRY,RESORT_NAME,NUMBER_OF_DAYS,TRAVEL_METHOD,PRICE,DATE_OF_ISSUE,MONTH,HOLIDAY_ID) values ('Australia','Likuliku Lagoon Resort','19','Coach','111',to_date('04/09/16','DD/MM/RR'),'September','D6NE');
Insert into SYSTEM.AGENCIES (COUNTRY,RESORT_NAME,NUMBER_OF_DAYS,TRAVEL_METHOD,PRICE,DATE_OF_ISSUE,MONTH,HOLIDAY_ID) values ('Australia','Likuliku Lagoon Resort','11','Coach','117',to_date('03/05/16','DD/MM/RR'),'May','T7A7G3');
Insert into SYSTEM.AGENCIES (COUNTRY,RESORT_NAME,NUMBER_OF_DAYS,TRAVEL_METHOD,PRICE,DATE_OF_ISSUE,MONTH,HOLIDAY_ID) values ('Australia','Southern Ocean Lodge','17','Plane','346',to_date('06/01/17','DD/MM/RR'),'January','K5Q9T5')
```

The screenshot shows the Oracle SQL Developer interface. On the left, there's a sidebar with 'Connections' expanded, showing 'Oracle11g'. Under 'Tables (Filtered)', 'ACENCIAS' is selected. A context menu is open over this table, with 'Export...' highlighted in blue. Other options in the menu include 'Edit...', 'Open', 'Import Data...', 'Import Using Oracle Loader for Hadoop...', and 'CU'.

Export Wizard - Step 1 of 2

Source/Destination

[Source/Destination](#)

[Export Summary](#)

Connection: [Oracle11g](#)

Export Data

Format: pdf

Title: Agencies

Subject:

Keywords:

... Single File Compressed Encoding: UTF8

File: /Users/andresmartinez/export.pdf

Proceed to summary.

Export Wizard - Step 2 of 2

Export Summary

Source/Destination

Export Summary

- Export Summary
 - Connections
 - Source: Oracle11g
 - Target Options
 - Single File: /Users/andresmartinez/Desktop/export.pdf
 - Encoding: UTF8
 - Data Options
 - Format: PDF
 - Data Objects
 - Tables
 - AGENCIES

Help < Back Next > Finish Cancel

export.pdf

Open with Preview

COUNTRY	RESORT_NAME	NUMBER_OF_DAYS	TRAVEL_METHOD	PRICE
Australia	Great Barrier Reef	32	Plane	750
Australia	Perth	28	Plane	985
Chile	Santiago	21	Plane	1259
England	London	3	Train	69
England	Bognor	1	Coach	12
France	Lyon	14	Plane	399
France	Paris - Euro Disney	5	Train	269
France	Paris - Euro Disney	3	Train	125
France	Nice	7	Plane	289
France	Toulouse	7	Train	256
France	Nimes	7	Plane	287
Germany	Black Forest	4	Coach	69
Germany	Berlin	7	Coach	289
Peru	Lima	21	Plane	975
Saudi Arabia	Riyadh	14	Plane	995
Spain	Barcelona	4	Train	219
Spain	Nerja	6	Plane	198
Spain	Malaga	16	Plane	234
Spain	Seville	14	Plane	288
Spain	Seville	10	Plane	199
Spain	Barcelona	8	Plane	177
Spain	Barcelona	7	Coach	199
Spain	Malaga	14	Plane	301
Spain	Barcelona	4	Train	219
Spain	Seville	14	Train	299
Spain	Madrid	8	Plane	277
Spain	Granada	10	Plane	345
Trinidad	Port of Spain	14	Plane	885
China	Sanya Yalong	5	Train	320
China	Lijiang	43	Train	213
Russia	Radisson	41	Plane	702
Germany	Frankfurt	13	Plane	1079
Australia	Perth	34	Train	193
Turkey	Rixos	28	Plane	1028
Spain	Barcelona	33	Coach	140
Mexico	Cozumel	8	Train	173
Russia	The artic	20	Plane	985
Australia	Great Barrier Reef	37	Plane	1225
Spain	Seville	21	Plane	570
France	Nimes	5	Train	261
Spain	Granada	8	Plane	511
France	Nimes	8	Train	169
USA	Mohonk	9	Coach	141
Turkey	Orka	41	Coach	112
Australia	Likuliku Lagoon Resort	41	Coach	134
Mexico	Hotel Riu	5	Coach	148
France	Lyon	11	Plane	467
Italy	Cenobio	15	Plane	1277
USA	Omni Amelia	26	Train	307

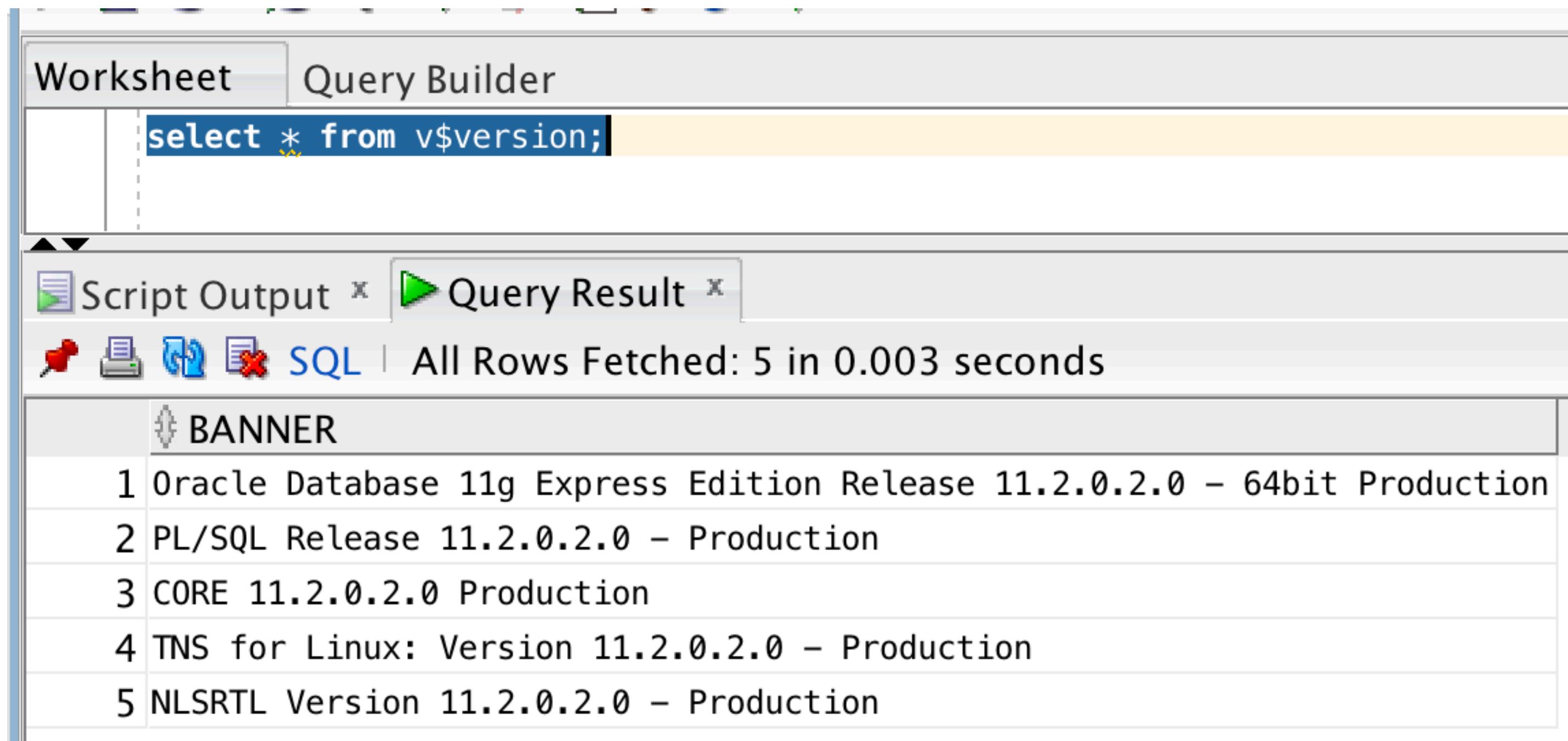
Sequences

https://docs.oracle.com/database/121/SQLRF/statements_6017.htm#SQLRF01314

<https://oracle-base.com/articles/12c/identity-columns-in-oracle-12cr1>

https://docs.oracle.com/database/121/SQLRF/statements_7002.htm#SQLRF01402

Check Oracle's version



The screenshot shows the Oracle SQL Developer interface. In the top-left corner, there are two tabs: "Worksheet" and "Query Builder". The "Worksheet" tab is active. Below the tabs, a code editor displays the SQL query:

```
select * from v$version;
```

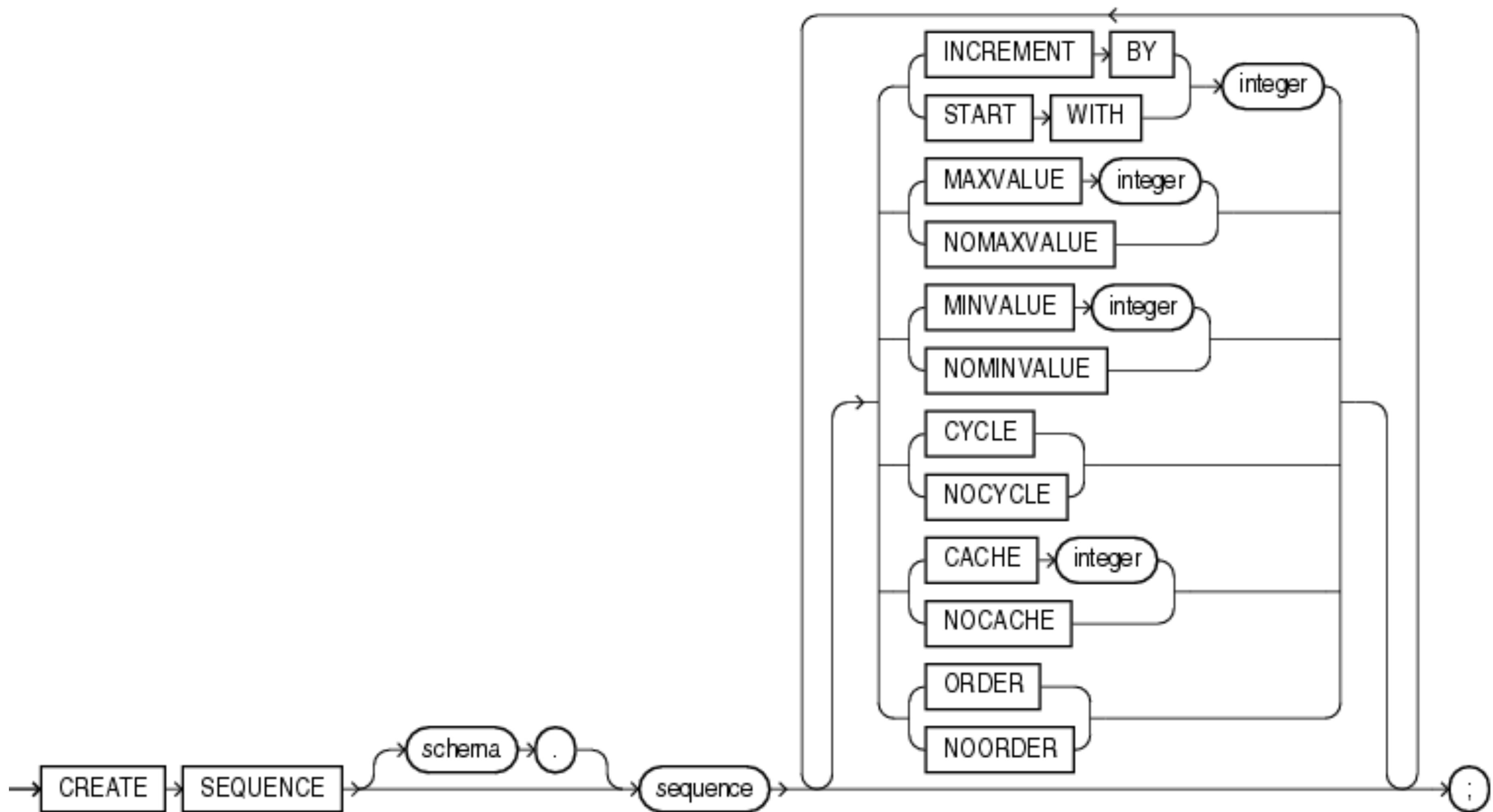
Below the code editor, there are two tabs: "Script Output" and "Query Result". The "Query Result" tab is active. It shows the results of the executed query:

	BANNER
1	Oracle Database 11g Express Edition Release 11.2.0.2.0 - 64bit Production
2	PL/SQL Release 11.2.0.2.0 - Production
3	CORE 11.2.0.2.0 Production
4	TNS for Linux: Version 11.2.0.2.0 - Production
5	NLSRTL Version 11.2.0.2.0 - Production

At the bottom of the "Query Result" tab, it says "All Rows Fetched: 5 in 0.003 seconds".

Sequences (Oracle Object)

- Object to generate unique integers
- Sequences to automatically generate primary key values
- **ALWAYS INCREMENTED
INDEPENDENT OF THE RESULT OF
THE TRANSACTION (COMMITTING OR
ROLLBACK)**
- Same sequence can be used for one or multiple tables



Sequences (Oracle Object)

- **CURRVAL**: Current Value
- **NEXTVAL**: Increment the sequence

Creating sequences:

- Without options will create an ascending sequence that starts with 1 and increases by 1 with no upper limit.

Sequences (Oracle Object)

- Specifying only **INCREMENT BY -1** creates a descending sequence that starts with -1 and decreases with no lower limit.
 - **CREATE SEQUENCE** own schema
 - **CREATE ANY SEQUENCE** another user's schema
- **DROP SEQUENCE - ALTER SEQUENCE**



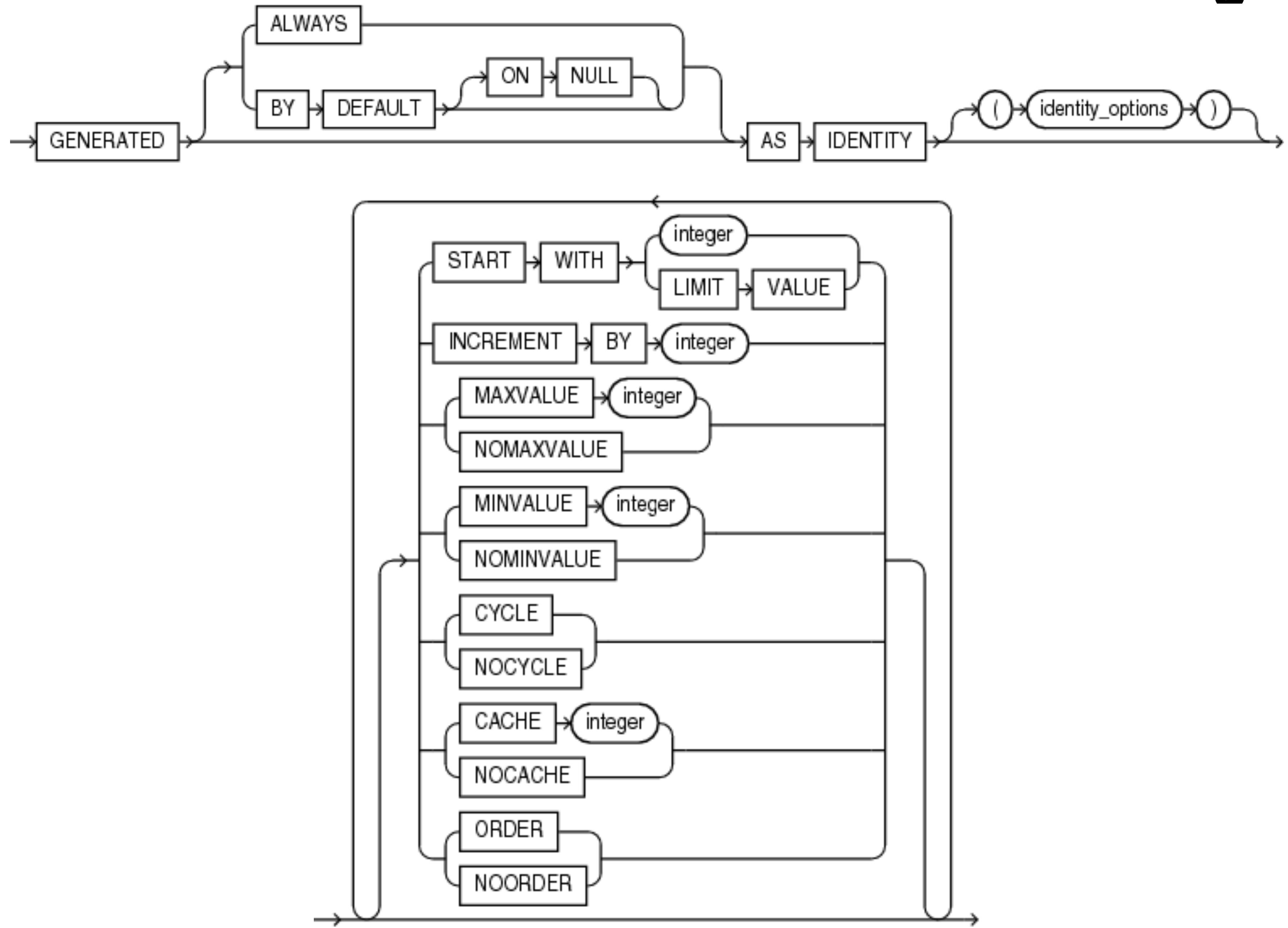
```
1 CREATE SEQUENCE agencies_seq  
2     START WITH 500  
3     INCREMENT BY 2  
4     NOCYCLE;  
5  
6 SELECT AGENCIES_SEQ.CURRVAL FROM DUAL;  
7 SELECT AGENCIES_SEQ.NEXTVAL FROM DUAL;
```

Sequences (Identity column)

- Only Oracle version >= 12c



```
1 CREATE TABLE IDENTITY_TEST_TAB (
2     id NUMBER GENERATED ALWAYS AS IDENTITY,
3     description VARCHAR2(255)
4 );
```



Sequences (Identity Column)

- **GENERATED ALWAYS:**

- Oracle always generates a value for the identity column.
- Attempt to insert a value into the identity column will cause an error.

Sequences (Identity Column)

- **GENERATED BY DEFAULT:**

- Oracle generates a value for the identity column if you provide no value.
- If you provide a value, Oracle will insert that value into the identity column. For this option, **Oracle will issue an error** if you insert a NULL value into the identity column.

Sequences (Identity Column)

- **GENERATED BY DEFAULT ON NULL:**
 - Oracle generates a value for the identity column if you provide a NULL value or no value at all.

Sequences (Identity Column)

- Some examples can be found in:
 - [http://www.oracletutorial.com/
oracle-basics/oracle-identity-
column/](http://www.oracletutorial.com/oracle-basics/oracle-identity-column/)

Thank you!