

# OracleFlix

*An Oracle PL/SQL RDBMS project by Matthew Crabtree, June 2021*

## Sections 1 & 2: Working with DDL statements, creating & managing constraints

```
1 create table actors(  
2 actor_id number(10,0) constraint actor_id_pk primary key,  
3 stage_name varchar2(40) constraint stage_name_nn not null,  
4 first_name varchar2(25) constraint first_name_nn not null,  
5 last_name varchar2(25) constraint last_name_nn not null,  
6 birth_date date constraint birth_date_nn not null  
7 );
```

The screenshot displays the Oracle APEX SQL Workshop interface. The left sidebar shows the 'Object Browser' with a list of tables, including 'ACTORS', 'ANIMALS', 'COPY\_COPY\_F\_STAFFS', 'COPY\_D\_CDS', 'COPY\_D\_CLIENTS', 'COPY\_D\_EVENTS', 'COPY\_D\_SONGS', 'COPY\_F\_FOOD\_ITEMS', 'COPY\_F\_PROMOTIONAL\_MENUS', 'COPY\_F\_STAFFS', 'COUNTRIES', 'CRABTREE\_TABLE', 'CUSTOMERS', 'DAY\_SECOND', 'DEPARTMENTS', 'D\_CDS', 'D\_CLIENTS', 'D\_EVENTS', 'D\_JOB\_ASSIGNMENTS', and 'D\_PACKAGES'. The main area shows the 'ACTORS' table structure with columns: 'ACTOR\_ID' (NUMBER(10,0), Primary Key), 'STAGE\_NAME' (VARCHAR2(40)), 'FIRST\_NAME' (VARCHAR2(25)), 'LAST\_NAME' (VARCHAR2(25)), and 'BIRTH\_DATE' (DATE). The interface includes tabs for 'Table', 'Data', 'Indexes', 'Model', 'Constraints', 'Grants', 'Statistics', 'UI Defaults', 'Triggers', 'Dependencies', 'SQL', and 'REST'. The bottom status bar shows the user 'gb\_a122\_sql\_s67', the application 'gb\_a122\_sql\_s67', and the version 'Application Express 19.1.0.00.15'.

Column Name	Data Type	Nullable	Default	Primary Key
ACTOR_ID	NUMBER(10,0)	No	-	1
STAGE_NAME	VARCHAR2(40)	No	-	-
FIRST_NAME	VARCHAR2(25)	No	-	-
LAST_NAME	VARCHAR2(25)	No	-	-
BIRTH_DATE	DATE	No	-	-

```

1 create table movies(
2 title_id number(10,0) constraint title_id_pk primary key,
3 title varchar2(60) constraint title_nn not null,
4 description varchar2(400) constraint description_nn not null,
5 rating varchar2(4) constraint rating_chk check (rating in ('g', 'pg', 'r', 'pg13')),
6 category varchar2(20) constraint category_chk check (category in ('drama', 'comedy', 'action', 'child', 'scifi', 'documentary')),
7 release_date date constraint release_date_nn not null
8 );

```

Object Browser

https://iacademy.oracle.com/ords/f?p=4500:1001:1019284733258:::

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

Object Browser Schema GB\_A122\_SQL\_S67

Tables

MOVIES

Column Name	Data Type	Nullable	Default	Primary Key
TITLE_ID	NUMBER(10,0)	No	-	1
TITLE	VARCHAR2(60)	No	-	-
DESCRIPTION	VARCHAR2(400)	No	-	-
RATING	VARCHAR2(4)	Yes	-	-
CATEGORY	VARCHAR2(20)	Yes	-	-
RELEASE_DATE	DATE	No	-	-

Download

Copyright © 1999, 2019, Oracle. All rights reserved. Application Express 19.1.0.00.15

```

1  create table star_billings(
2  actor_id number(10,0) constraint actor_id_fk references actors(actor_id),
3  title_id number(10,0) constraint title_id_fk references movies(title_id),
4  comments varchar2(40),
5  constraint actor_id_title_id_pk primary key (actor_id, title_id)
6  );

```

Object Browser

https://iaacademy.oracle.com/ords/f?p=4500:1001:1019284733258:::

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

Object Browser Schema GB\_A122\_SQL\_S67

Tables

MEDIA  
MGR\_HISTORY  
MOVIES  
O\_DEPARTMENTS  
O\_EMPLOYEES  
O\_JOB\_DESCRIPTION  
REGIONS  
RENTAL\_HISTORY  
REP\_EMAIL  
SAL\_HISTORY  
SEQ\_D\_SONGS  
SPECIAL\_SAL  
**STAR\_BILLINGS**  
TIME  
TIME\_YTM  
WF\_COUNTRIES  
WF\_CURRENCIES  
WF\_LANGUAGES  
WF\_SPOKEN\_LANGUAGES  
WF\_WORLD\_REGIONS

**STAR\_BILLINGS**

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL REST

Add Column Modify Column Rename Column Drop Column Rename Copy Drop Truncate Create Lookup Table

Column Name	Data Type	Nullable	Default	Primary Key
ACTOR_ID	NUMBER(10,0)	No	-	1
TITLE_ID	NUMBER(10,0)	No	-	2
COMMENTS	VARCHAR2(40)	Yes	-	-

Download

gb\_a122\_sql\_s67 gb\_a122\_sql\_s67 en

Copyright © 1999, 2019, Oracle. All rights reserved. Application Express 19.1.0.00.15

```

1  create table media(
2  media_id number(10,0) constraint media_id_pk primary key,
3  format varchar2(3) constraint media_format_nn not null,
4  title_id number(10,0) constraint title_id_nn not null ,
5  constraint media_title_id_fk foreign key(title_id) references movies(title_id)
6  );

```

Object Browser

https://academy.oracle.com/ords/f?p=4500:1001:1019284733258:::

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

Object Browser Schema GB\_A122\_SQL\_S67

Tables

GRADUATE\_CANDIDATE  
HTMLDB\_PLAN\_TABLE  
JOBS  
JOB\_GRADES  
JOB\_HISTORY  
LESSON7\_EMP  
LOCATIONS  
MANAGER\_COPY\_D\_CDS  
**MEDIA**  
MGR\_HISTORY  
MOVIES  
O\_DEPARTMENTS  
O\_EMPLOYEES  
O\_JOB\_DESCRIPTION  
REGIONS  
RENTAL\_HISTORY  
REP\_EMAIL  
SAL\_HISTORY  
SEQ\_D\_SONGS  
SPECIAL\_SAL

**MEDIA**

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL REST

Add Column Modify Column Rename Column Drop Column Rename Copy Drop Truncate Create Lookup Table

Column Name	Data Type	Nullable	Default	Primary Key
MEDIA_ID	NUMBER(10,0)	No	-	1
FORMAT	VARCHAR2(3)	No	-	-
TITLE_ID	NUMBER(10,0)	No	-	-

Download

gb\_a122\_sql\_s67 gb\_a122\_sql\_s67 en

Copyright © 1999, 2019, Oracle. All rights reserved. Application Express 19.1.0.00.15

```

1 create table customers(
2 customer_id number(10,0) constraint customers_customer_id_pk primary key,
3 last_name varchar2(25) constraint customers_last_name_nn not null,
4 first_name varchar2(25) constraint customers_first_name_nn not null,
5 home_phone varchar2(12) constraint customers_home_phone_nn not null,
6 address varchar2(100) constraint customers_address_nn not null,
7 city varchar2(30) constraint customers_city_nn not null,
8 state varchar2(2) constraint customers_state_nn not null,
9 email varchar2(25),
10 cell_phone varchar2(12)
11 );

```

Object Browser

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

Schema GB\_A122\_SQL\_S67

Object Browser

Tables

ACTORS  
ANIMALS  
COPY\_COPY\_F\_STAFFS  
COPY\_D\_CDS  
COPY\_D\_CLIENTS  
COPY\_D\_EVENTS  
COPY\_D\_SONGS  
COPY\_F\_FOOD\_ITEMS  
COPY\_F\_PROMOTIONAL\_MENUS  
COPY\_F\_STAFFS  
COUNTRIES  
CRABTREE\_TABLE  
**CUSTOMERS**  
DAY\_SECOND  
DEPARTMENTS  
D\_CDS  
D\_CLIENTS  
D\_EVENTS  
D\_JOB\_ASSIGNMENTS  
D\_PACKAGES

**CUSTOMERS**

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL REST

Add Column Modify Column Rename Column Drop Column Rename Copy Drop Truncate Create Lookup Table

Column Name	Data Type	Nullable	Default	Primary Key
CUSTOMER_ID	NUMBER(10,0)	No	-	1
LAST_NAME	VARCHAR2(25)	No	-	-
FIRST_NAME	VARCHAR2(25)	No	-	-
HOME_PHONE	VARCHAR2(12)	No	-	-
ADDRESS	VARCHAR2(100)	No	-	-
CITY	VARCHAR2(30)	No	-	-
STATE	VARCHAR2(2)	No	-	-
EMAIL	VARCHAR2(25)	Yes	-	-
CELL_PHONE	VARCHAR2(12)	Yes	-	-

Download

gb\_a122\_sql\_s67 gb\_a122\_sql\_s67 en Copyright © 1999, 2019, Oracle. All rights reserved. Application Express 19.1.0.00.15

```

1 create table rental_history(
2 media_id number(10,0) constraint media_id_fk references media(media_id),
3 rental_date date default sysdate,
4 customer_id number(10,0) constraint customer_id_nn not null,
5 return_date date,
6 constraint cust_id_cust_id_fk foreign key(customer_id) references customers(customer_id),
7 constraint media_id_rental_date_pk primary key (media_id, rental_date)
8 );

```

Object Browser

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

Schema: GB\_A122\_SQL\_S67

Tables

RENTAL\_HISTORY

Table	Data	Indexes	Model	Constraints	Grants	Statistics	UI Defaults	Triggers	Dependencies	SQL	REST
<a href="#">Add Column</a> <a href="#">Modify Column</a> <a href="#">Rename Column</a> <a href="#">Drop Column</a> <a href="#">Rename</a> <a href="#">Copy</a> <a href="#">Drop</a> <a href="#">Truncate</a> <a href="#">Create Lookup Table</a>											
Column Name	Data Type	Nullable	Default	Primary Key							
MEDIA_ID	NUMBER(10,0)	No	-	1							
RENTAL_DATE	DATE	No	sysdate	2							
CUSTOMER_ID	NUMBER(10,0)	No	-	-							
RETURN_DATE	DATE	Yes	-	-							

[Download](#)

gb\_a122\_sql\_s67 gb\_a122\_sql\_s67 en Copyright © 1999, 2019, Oracle. All rights reserved. Application Express 19.1.0.00.15

## Section 3: Creating and managing views

```
1 create view title_unavail("movie title", "id") as
2 select movies.title, media.media_id
3 from rental_history
4 inner join media on rental_history.media_id = media.media_id inner join movies on media.title_id = movies.title_id
5 where rental_history.return_date is null
6 with read only;
```

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes tabs for Object Browser, App Builder, SQL Workshop (selected), Team Development, and App Gallery. The URL bar shows a connection to the Oracle database. The left sidebar displays the Object Browser with a list of views, including EMP\_DETAILS\_VIEW, READ\_COPY\_D\_CDS, TITLE\_UNAVAIL (highlighted), VIEW\_COPY\_D\_SONGS, VIEW\_D\_EVENTS\_PKGS, and VIEW\_D\_SONGS. The main area shows the details for the view TITLE\_UNAVAIL, with tabs for View, Code, Data, Grants, UI Defaults, Dependencies, SQL, and REST. The View tab is active, showing a table with columns: movie title (VARCHAR2(60), No), and id (NUMBER(10,0), No). The bottom status bar indicates the user is logged in as gb\_a122\_sql\_s67, the schema is gb\_a122\_sql\_s67, and the application is Application Express 19.1.0.00.15.

Object Browser

Views

EMP\_DETAILS\_VIEW  
READ\_COPY\_D\_CDS  
**TITLE\_UNAVAIL**  
VIEW\_COPY\_D\_SONGS  
VIEW\_D\_EVENTS\_PKGS  
VIEW\_D\_SONGS

**TITLE\_UNAVAIL**

View Code Data Grants UI Defaults Dependencies SQL REST

Compile Drop

Column Name	Data Type	Nullable
movie title	VARCHAR2(60)	No
id	NUMBER(10,0)	No

gb\_a122\_sql\_s67 gb\_a122\_sql\_s67 en Copyright © 1999, 2019, Oracle. All rights reserved. Application Express 19.1.0.00.15

## Section 4: Working with Sequences (Indexes and Synonyms)

```
1 create sequence customer_id_sequence start with 101;
2 create sequence title_id_sequence start with 1;
3 create sequence media_id_sequence start with 92;
4 create sequence actor_id_sequence start with 1001;
```

[illegible]







## Section 5: Populating tables with data

```
1 insert into movies(title_id, title, description, rating, category, release_date)
2 values(title_id_sequence.nextval, 'the godfather', 'Crime Drama', 'r', 'drama', to_date('24 march 1972', 'DD Month YYYY'));
3
4 insert into movies(title_id, title, description, rating, category, release_date)
5 values(title_id_sequence.nextval, 'the shawshank redemption', 'Two imprisoned men bond over a number of years, finding solace and
6 eventual redemption through acts of common decency.', 'r', 'drama', to_date('14 october 1994', 'DD Month YYYY'));
7
8 insert into movies(title_id, title, description, rating, category, release_date)
9 values(title_id_sequence.nextval, 'raging bull', 'The life of boxer Jake LaMotta, whose violence and temper that led him to the
10 top in the ring destroyed his life outside of it.', 'r', 'drama', to_date('19 december 1980', 'DD Month YYYY'));
11
12 insert into movies(title_id, title, description, rating, category, release_date)
13 values(title_id_sequence.nextval, 'casablanca', 'A cynical expatriate American cafe owner struggles to decide whether or not to
14 help his former lover and her fugitive husband escape the Nazis in French Morocco.', 'pg', 'drama', to_date('23 january 1943',
15 'DD Month YYYY'));
16
17 insert into movies(title_id, title, description, rating, category, release_date)
18 values(title_id_sequence.nextval, 'citizen kane', 'Following the death of publishing tycoon Charles Foster Kane, reporters scramble
19 to uncover the meaning of his final utterance; Rosebud.', 'pg', 'drama', to_date('5 september 1941', 'DD Month YYYY'));
20
21 insert into movies(title_id, title, description, rating, category, release_date)
22 values(title_id_sequence.nextval, '12 angry men', 'A jury holdout attempts to prevent a miscarriage of justice by forcing his colleagues
23 to reconsider the evidence.', 'pg', 'drama', to_date('10 april 1957', 'DD Month YYYY'));
```

The screenshot shows the Oracle APEX SQL Workshop interface. The left sidebar displays a list of tables, with 'MOVIES' selected. The main area shows the 'MOVIES' table data in a grid format. The table has columns: TITLE\_ID, TITLE, DESCRIPTION, RATING, CATEGORY, and RELEASE\_DATE. The data is as follows:

EDIT	TITLE_ID	TITLE	DESCRIPTION	RATING	CATEGORY	RELEASE_DATE
	1	the godfather	Crime Drama	r	drama	24-Mar-1972
	2	the shawshank redemption	Two imprisoned men bond over a number of years, finding solace and eventual redemption through acts of common decency.	r	drama	14-Oct-1994
	3	raging bull	The life of boxer Jake LaMotta, whose violence and temper that led him to the top in the ring destroyed his life outside of it.	r	drama	19-Dec-1980
	4	casablanca	A cynical expatriate American cafe owner struggles to decide whether or not to help his former lover and her fugitive husband escape the Nazis in French Morocco.	pg	drama	23-Jan-1943
	5	citizen kane	Following the death of publishing tycoon Charles Foster Kane, reporters scramble to uncover the meaning of his final utterance; Rosebud.	pg	drama	05-Sep-1941
	6	12 angry men	A jury holdout attempts to prevent a miscarriage of justice by forcing his colleagues to reconsider the evidence.	pg	drama	10-Apr-1957

At the bottom of the table, there is a 'Download' link. The footer of the interface shows the copyright information: 'Copyright © 1999, 2019, Oracle. All rights reserved.' and the application version: 'Application Express 19.1.0.00.15'.

```

1  insert into actors(actor_id, stage_name, first_name, last_name, birth_date)
2  values(actor_id_sequence.nextval, 'marlon', 'marlon', 'brando', to_date('3 april 1924','D
   D Month YYYY'));
3
4  insert into actors(actor_id, stage_name, first_name, last_name, birth_date)
5  values(actor_id_sequence.nextval, 'tim', 'timothy', 'robbins', to_date('16 October 1958','D
   D Month YYYY'));
6
7  insert into actors(actor_id, stage_name, first_name, last_name, birth_date)
8  values(actor_id_sequence.nextval, 'robert', 'robert', 'de niro', to_date('17 august 1943',
   'DD Month YYYY'));
9
10 insert into actors(actor_id, stage_name, first_name, last_name, birth_date)
11 values(actor_id_sequence.nextval, 'humphrey', 'humphrey', 'bogart', to_date('25 december 18
   99','DD Month YYYY'));
12
13 insert into actors(actor_id, stage_name, first_name, last_name, birth_date)
14 values(actor_id_sequence.nextval, 'orson', 'george', 'welles', to_date('6 may 1915','DD Mon
   th YYYY'));
15
16 insert into actors(actor_id, stage_name, first_name, last_name, birth_date)
17 values(actor_id_sequence.nextval, 'henry', 'henry', 'fonda', to_date('16 may 1905','DD Mont
   h YYYY'));

```

Object Browser

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

Schema: GB\_A122\_SQL\_S67

Object Browser

Tables

ACTORS

ANIMALS

COPY\_COPY\_F\_STAFFS

COPY\_D\_CDS

COPY\_D\_CLIENTS

COPY\_D\_EVENTS

COPY\_D\_SONGS

COPY\_F\_FOOD\_ITEMS

COPY\_F\_PROMOTIONAL\_MENU

COPY\_F\_STAFFS

COUNTRIES

CRABTREE\_TABLE

CUSTOMERS

DAY\_SECOND

DEPARTMENTS

D\_CDS

D\_CLIENTS

D\_EVENTS

D\_JOB\_ASSIGNMENTS

D\_PACKAGES

D\_PARTNERS

ACTORS

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL REST

Query Count Rows Insert Row

Data

EDIT	ACTOR_ID	STAGE_NAME	FIRST_NAME	LAST_NAME	BIRTH_DATE
	1001	marlon	marlon	brando	03-Apr-1924
	1002	tim	timothy	robbins	16-Oct-1958
	1003	robert	robert	de niro	17-Aug-1943
	1004	humphrey	humphrey	bogart	25-Dec-1899
	1005	orson	george	welles	06-May-1915
	1006	henry	henry	fonda	16-May-1905

Download

row(s) 1 - 6 of 6

gb\_a122\_sql\_s67 gb\_a122\_sql\_s67 en

Copyright © 1999, 2019, Oracle. All rights reserved.

Application Express 19.1.0.00.15

```

1 insert into star_billings(actor_id, title_id, comments)
2 values(1001, 1, 'Vito Corleone is a mafia boss');
3
4 insert into star_billings(actor_id, title_id, comments)
5 values(1002, 2, 'sentenced to two life sentences')
6
7 insert into star_billings(actor_id, title_id, comments)
8 values(1003, 3, 'Jake LaMotta was an American boxer')
9
10 insert into star_billings(actor_id, title_id, comments)
11 values(1004, 4, 'Rick Blaine owns a club in Casablanca')
12
13 insert into star_billings(actor_id, title_id, comments)
14 values(1005, 5, 'Charles Kanes last word was "Rosebud"')
15
16 insert into star_billings(actor_id, title_id, comments)
17 values(1006, 6, 'Juror 8, justice-seeking architect')

```

Object Browser

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

Schema GB\_A122\_SQL\_S67

Object Browser

Tables

MANAGER\_CUMT\_D\_CUS

MEDIA

MGR\_HISTORY

MOVIES

O\_DEPARTMENTS

O\_EMPLOYEES

O\_JOB\_DESCRIPTION

REGIONS

RENTAL\_HISTORY

REP\_EMAIL

SAL\_HISTORY

SEQ\_D\_SONGS

SPECIAL\_SAL

**STAR\_BILLINGS**

TIME

TIME\_YTM

WF\_COUNTRIES

WF\_CURRENCIES

WF\_LANGUAGES

WF\_SPOKEN\_LANGUAGES

WF\_WORLD\_REGIONS

STAR\_BILLINGS

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL REST

Query Count Rows Insert Row

Data

EDIT	ACTOR_ID	TITLE_ID	COMMENTS
	1001	1	Vito Corleone is a mafia boss
	1002	2	sentenced to two life sentences
	1003	3	Jake LaMotta was an American boxer
	1004	4	Rick Blaine owns a club in Casablanca
	1005	5	Charles Kanes last word was "Rosebud"
	1006	6	Juror 8, justice-seeking architect

Download

row(s) 1 - 6 of 6

gb\_a122\_sql\_s67 gb\_a122\_sql\_s67 en

Copyright © 1999, 2019, Oracle. All rights reserved.

Application Express 19.1.0.00.15

```
1  insert into media(media_id, format , title_id)
2  values(media_id_sequence.nextval,'dvd',1);
3
4  insert into media(media_id, format , title_id)
5  values(media_id_sequence.nextval,'BR',1);
6
7  insert into media(media_id, format , title_id)
8  values(media_id_sequence.nextval,'dvd',2);
9
10 insert into media(media_id, format , title_id)
11 values(media_id_sequence.nextval,'BR',2);
12
13 insert into media(media_id, format , title_id)
14 values(media_id_sequence.nextval,'dvd',3);
15
16 insert into media(media_id, format , title_id)
17 values(media_id_sequence.nextval,'BR',3);
18
19 insert into media(media_id, format , title_id)
20 values(media_id_sequence.nextval,'dvd',4);
21
22 insert into media(media_id, format , title_id)
23 values(media_id_sequence.nextval,'BR',4);
24
25 insert into media(media_id, format , title_id)
26 values(media_id_sequence.nextval,'dvd',5);
27
28 insert into media(media_id, format , title_id)
29 values(media_id_sequence.nextval,'BR',5);
30
31 insert into media(media_id, format , title_id)
32 values(media_id_sequence.nextval,'dvd',6);
33
34 insert into media(media_id, format , title_id)
35 values(media_id_sequence.nextval,'BR',6);
```

Object Browser

https://iaacademy.oracle.com/ords/f?p=4500:1001:1019284733258:::...

ORACLE APEXApp BuilderSQL WorkshopTeam DevelopmentApp Gallery

SearchUserHelpGB\_A122\_SQL\_S67

Object BrowserSchemaGB\_A122\_SQL\_S67

Tables

Search

F\_GLOBAL\_LOCATIONS  
F\_ORDERS  
F\_ORDER\_LINES  
F\_PROMOTIONAL\_MENUS  
F\_REGULAR\_MENUS  
F\_SHIFTS  
F\_SHIFT\_ASSIGNMENTS  
F\_STAFFS  
GRADUATE\_CANDIDATE  
HTMLDB\_PLAN\_TABLE  
JOBS  
JOB\_GRADES  
JOB\_HISTORY  
LESSON7\_EMP  
LOCATIONS  
MANAGER\_COPY\_D\_CDS  
MEDIA  
MGR\_HISTORY  
MOVIES  
O\_DEPARTMENTS  
O\_EMPLOYEES  
O\_JOB\_DESCRIPTION  
REGIONS  
RENTAL\_HISTORY  
REP\_EMAIL

MEDIA

TableDataIndexesModelConstraintsGrantsStatisticsUI DefaultsTriggersDependenciesSQLREST

QueryCount RowsInsert Row

Data

EDIT	MEDIA_ID	FORMAT	TITLE_ID
	92	BR	1
	93	dvd	2
	94	BR	2
	95	dvd	3
	96	BR	3
	97	dvd	4
	98	BR	4
	99	dvd	5
	100	BR	5
	101	dvd	6
	102	BR	6
	103	dvd	1

Download

gb\_a122\_sql\_s67gb\_a122\_sql\_s67en

Copyright © 1999, 2019, Oracle. All rights reserved.

Application Express 19.1.0.00.15

```

1 insert into customers(customer_id, last_name, first_name, home_phone, address, city, state, email, cell_phone)
2 values(customer_id_sequence.nextval,'jack', 'alan', '01415689854', '12 coulter avenue', 'glasgow', 'uk', 'alan@email.com', '07458985621');
3
4 insert into customers(customer_id, last_name, first_name, home_phone, address, city, state, email, cell_phone)
5 values(customer_id_sequence.nextval,'fee', 'helen', '01415325689', '32 darmuir crescent', 'glasgow', 'uk', 'helen@email.com', '07458985621');
6
7 insert into customers(customer_id, last_name, first_name, home_phone, address, city, state, email, cell_phone)
8 values(customer_id_sequence.nextval,'crabtree', 'matthew', '01412547895', '176 allison street', 'glasgow', 'uk', 'matt@email.com', '07584896523');
9
10 insert into customers(customer_id, last_name, first_name, home_phone, address, city, state, email, cell_phone)
11 values(customer_id_sequence.nextval,'patrick', 'michael', '01415248978', '65 thompson road', 'glasgow', 'uk', 'michael@email.com', '074584521698');
12
13 insert into customers(customer_id, last_name, first_name, home_phone, address, city, state, email, cell_phone)
14 values(customer_id_sequence.nextval,'james', 'robert', '01415489542', '76 timpson avenue', 'glasgow', 'uk', 'robert@email.com', '07457895123');
15
16 insert into customers(customer_id, last_name, first_name, home_phone, address, city, state, email, cell_phone)
17 values(customer_id_sequence.nextval,'peterson', 'chris', '01415490541', '84 honeycomb mews', 'glasgow', 'uk', 'chris@email.com', '07457974068');
18
19 insert into customers(customer_id, last_name, first_name, home_phone, address, city, state, email, cell_phone)
20 values(customer_id_sequence.nextval,'michaels', 'janet', '01415491540', '85 juniper place', 'glasgow', 'uk', 'janet@email.com', '07458053013');

```

Object Browser

https://iacademy.oracle.com/ords/f?p=4500:1001:1019284733258:::

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

Object Browser Schema GB\_A122\_SQL\_S67

Tables

COPY\_D\_CDS  
COPY\_D\_CLIENTS  
COPY\_D\_EVENTS  
COPY\_D\_SONGS  
COPY\_F\_FOOD\_ITEMS  
COPY\_F\_PROMOTIONAL\_MENUS  
COPY\_F\_STAFFS  
COUNTRIES  
CRABTREE\_TABLE  
**CUSTOMERS**  
DAY\_SECOND  
DEPARTMENTS  
D\_CDS  
D\_CLIENTS  
D\_EVENTS  
D\_JOB\_ASSIGNMENTS  
D\_PACKAGES  
D\_PARTNERS  
D\_PLAY\_LIST\_ITEMS  
D\_SONGS  
D\_THEMES  
D\_TRACK\_LISTINGS  
D\_TYPES  
D\_VENUES  
EMPLOYEES

**CUSTOMERS**

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL REST

Query Count Rows Insert Row

Data

EDIT	CUSTOMER_ID	LAST_NAME	FIRST_NAME	HOME_PHONE	ADDRESS	CITY	STATE	EMAIL	CELL_PHONE
	101	jack	alan	01415689854	12 coulter avenue	glasgow	uk	alan@email.com	07458985621
	102	fee	helen	01415325689	32 darmuir crescent	glasgow	uk	helen@email.com	07458985621
	103	crabtree	matthew	01412547895	176 allison street	glasgow	uk	matt@email.com	07584896523
	104	patrick	michael	01415248978	65 thompson road	glasgow	uk	michael@email.com	074584521698
	105	james	robert	01415489542	76 timpson avenue	glasgow	uk	robert@email.com	07457895123
	106	peterson	chris	01415490541	84 honeycomb mews	glasgow	uk	chris@email.com	07457974068
	107	michaels	janet	01415491540	85 juniper place	glasgow	uk	janet@email.com	07458053013

Download

row(s) 1 - 7 of 7

gb\_a122\_sql\_s67 gb\_a122\_sql\_s67 en

Copyright © 1999, 2019, Oracle. All rights reserved.

Application Express 19.1.0.00.15



```

1 insert into rental_history(media_id, rental_date, customer_id, return_date)
2 values(94, to_date('18 august 2020', 'DD Month YYYY'), 101, to_date('22 august 2020', 'DD Month YYYY'));
3
4 insert into rental_history(media_id, rental_date, customer_id, return_date)
5 values(95, to_date('19 august 2020', 'DD Month YYYY'), 102, to_date('23 august 2020', 'DD Month YYYY'));
6
7 insert into rental_history(media_id, rental_date, customer_id, return_date)
8 values(96, to_date('20 august 2020', 'DD Month YYYY'), 103, to_date('24 august 2020', 'DD Month YYYY'));
9
10 insert into rental_history(media_id, rental_date, customer_id, return_date)
11 values(97, to_date('21 august 2020', 'DD Month YYYY'), 104, to_date('25 august 2020', 'DD Month YYYY'));
12
13 insert into rental_history(media_id, rental_date, customer_id, return_date)
14 values(98, to_date('22 august 2020', 'DD Month YYYY'), 105, to_date('26 august 2020', 'DD Month YYYY'));
15
16 insert into rental_history(media_id, rental_date, customer_id, return_date)
17 values(99, to_date('23 august 2020', 'DD Month YYYY'), 106, to_date('27 august 2020', 'DD Month YYYY'));

```

Object Browser

ORACLE APEX | App Builder | SQL Workshop | Team Development | App Gallery

Schema: GB\_A122\_SQL\_S67

Tables

RENTAL\_HISTORY

Table | Data | Indexes | Model | Constraints | Grants | Statistics | UI Defaults | Triggers | Dependencies | SQL | REST

Query | Count Rows | Insert Row

Data

EDIT	MEDIA_ID	RENTAL_DATE	CUSTOMER_ID	RETURN_DATE
	94	18-Aug-2020	101	22-Aug-2020
	95	19-Aug-2020	102	23-Aug-2020
	96	20-Aug-2020	103	24-Aug-2020
	97	21-Aug-2020	104	25-Aug-2020
	98	22-Aug-2020	105	26-Aug-2020
	99	23-Aug-2020	106	27-Aug-2020

Download

row(s) 1 - 6 of 6

gb\_a122\_sql\_s67 | gb\_a122\_sql\_s67 | en

Copyright © 1999, 2019, Oracle. All rights reserved. Application Express 19.1.0.00.15

## Section 6: Index creation

```
1 create index customer_last_name_index
2 on customers(last_name);
```

The screenshot displays the Oracle APEX Object Browser interface. On the left, a list of indexes is shown, with **CUSTOMER\_LAST\_NAME\_INDEX** selected. The main panel displays the details for this index, including its name, type, owner, table, and columns.

**Object Details**

Property	Value
Index Name	CUSTOMER_LAST_NAME_INDEX
Index Type	NORMAL
Table Owner	GB_A122_SQL_S67
Table Name	CUSTOMERS
Table Type	TABLE
Uniqueness	NONUNIQUE
Compression	DISABLED
Prefix Length	-
Tablespace Name	IACADEMY_5782
Status	VALID
Last Analyzed	06/09/2021 01:28:02 PM

**Index Columns**

Column Name	Column Expression	Column Position
LAST_NAME	-	1

Copyright © 1999, 2019, Oracle. All rights reserved. Application Express 19.1.0.00.15

Section 7: Synonym creation

```
1 create synonym tu for title_unavail;
```

Object Browser

← → ↺ ⌂ 🔒 https://academy.oracle.com/ords/f?p=4500:1001:1019284733258::::: ☆ >> ≡

ORACLE APEX App Builder SQL Workshop Team Development App Gallery 🔍 👤 ? GB\_A122\_SQL\_S67

Object Browser Schema GB\_A122\_SQL\_S67 ?

Synonyms

🔍 📄

DJ\_TRACKS\_SYN

TU

TU

+

Object Details

Drop

Synonym Owner	Synonym Name	Object Owner	Object Name	Object Type	Status
GB_A122_SQL_S67	TU	GB_A122_SQL_S67	TITLE_UNAVAIL	VIEW	VALID

🔍 gb\_a122\_sql\_s67 📄 gb\_a122\_sql\_s67 🌐 en

Copyright © 1999, 2019, Oracle. All rights reserved.

Application Express 19.1.0.00.15