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SQL Programming – Level 2   Programming Project 08

DCL & Views

Reminder: read the Project Guidelines document for instructions on how to format and submit your assignments. Be sure to include the results of your SQL commands.

Under your own account (in your own schema)
- List the book(id, title, and cost) and author(id, name) info for all books in the collection that cost less than $40..

SELECT book.ID, book.TITLE, book.COST, author.ID, author.NAME
FROM book, author, writtenby
WHERE book.ID = writtenby.bookID
AND author.ID = writtenby.authorID
AND book.COST < 40

```
Worksheet      Query Builder

  SELECT book.ID, book.TITLE, book.COST, author.ID aID, author.NAME
  FROM book, author, writtenby
  WHERE book.ID = writtenby.bookID
  AND author.ID = writtenby.authorID
  AND book.COST < 40;
```

Script Output ×   Query Result ×

SQL | All Rows Fetched: 42 in 0.024 seconds

|	ID	TITLE	COST	AID	NAME
1	20011	The Dumas Club	23.95	10013	Arturo Perez-Reverte
2	20012	The Negotiator	19.95	10025	Frederick Forsyth
3	20013	Icon	26.95	10025	Frederick Forsyth
4	20014	The Fist of God	12.95	10025	Frederick Forsyth
5	20015	The Fourth Protocol	14.95	10025	Frederick Forsyth
6	20016	The Dogs of War	14.95	10025	Frederick Forsyth
7	20021	Inca Gold	24	10012	Clive Cussler
8	20022	Shock Wave	24	10012	Clive Cussler

- Create a view, named LOANABLE, based on the previous select.

CREATE VIEW LOANABLE

AS SELECT book.ID, book.TITLE, book.COST, author.ID aID, author.NAME

FROM book, author, writtenby

WHERE book.ID = writtenby.bookID

AND author.ID = writtenby.authorID

AND book.COST < 40;

```
CREATE VIEW LOANABLE
AS SELECT book.ID, book.TITLE, book.COST, author.ID aID, author.NAME
FROM book, author, writtenby
WHERE book.ID = writtenby.bookID
AND author.ID = writtenby.authorID
AND book.COST < 40;
```

Script Output ×   Query Result ×

Task completed in 0.095 seconds

View LOANABLE created.
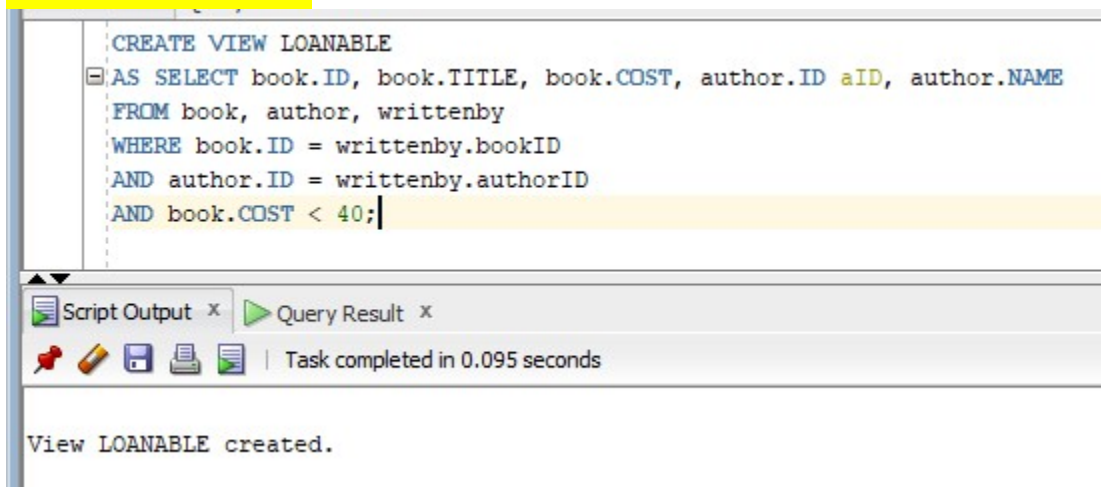
- Give the user: PRINCE permission to read this view.

GRANT SELECT ON sqls5147.LOANABLE TO PRINCE;

```
GRANT SELECT ON sqls5147.LOANABLE TO PRINCE;
```

Script Output ×

Task completed in 0.077 seconds

Grant succeeded.
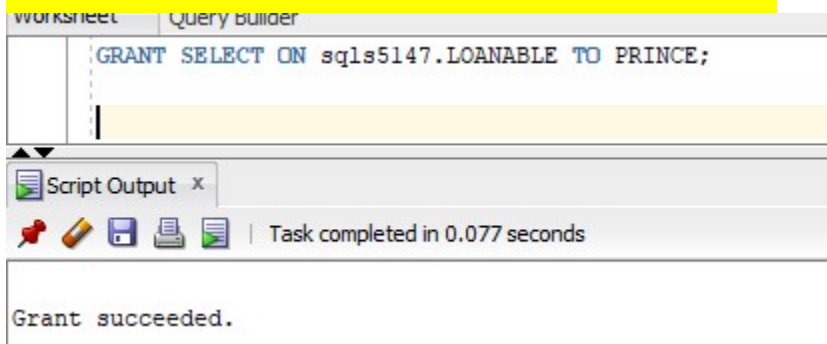
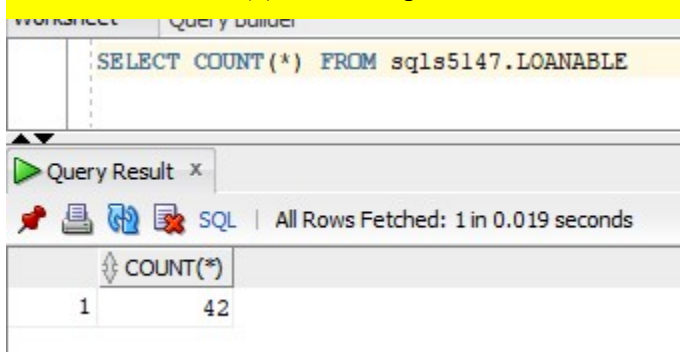*Login in as PRINCE/HARRY and do the following*

- Issue a show user (to demonstrate that you're in the right account)
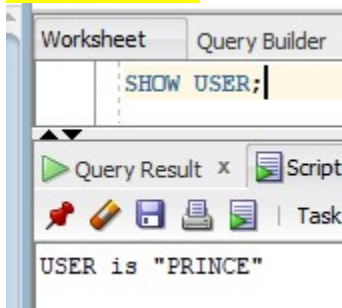
SHOW USER;

- Using the LOANABLE view (from your schema), how many books are there in the collection?

SELECT COUNT(*) FROM sqls5147.LOANABLE;

- Using the LOANABLE view, list the title, author and cost for the least expensive book(s) in the collection.

SELECT TITLE, NAME, COST FROM sqls5147.LOANABLE
WHERE COST IN (SELECT MIN(COST) FROM sqls5147.LOANABLE)

```
SELECT TITLE, NAME, COST FROM sqls5147.LOANABLE
WHERE COST IN (SELECT MIN(COST) FROM sqls5147.LOANABLE)
```

Script Output ×   Query Result ×

SQL | All Rows Fetched: 5 in 0.02 seconds

	TITLE	NAME	COST
1	Foundation	Isaac Asimov	6.95
2	Foundation and Empire	Isaac Asimov	6.95
3	Second Foundation	Isaac Asimov	6.95
4	The Andromeda Strain	Michael Crichton	6.95
5	Airframe	Michael Crichton	6.95

- Using the LOANABLE view, list the book(id, title, and cost) and author(id, name) info for all books in the collection, that cost less than $10.

SELECT ID, TITLE, COST, aID, NAME
FROM sqls5147.LOANABLE
WHERE COST < 10

```
SELECT ID, TITLE, COST, aID, NAME
FROM sqls5147.LOANABLE
WHERE COST < 10
```

Script Output ×   Query Result ×

SQL | All Rows Fetched: 5 in 0.061 seconds

|	ID	TITLE	COST	AID	NAME
1	20026	Foundation	6.95	10019	Isaac Asimov
2	20027	Foundation and Empire	6.95	10019	Isaac Asimov
3	20028	Second Foundation	6.95	10019	Isaac Asimov
4	20034	The Andromeda Strain	6.95	10020	Michael Crichton
5	20036	Airframe	6.95	10020	Michael Crichton

Under your own account (in your own schema)

- Issue a show user (to demonstrate that you're in the right account)
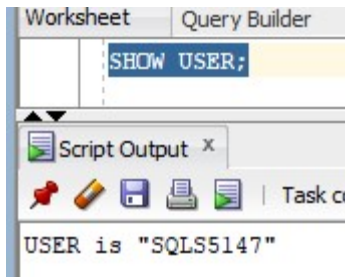
SHOW USER;

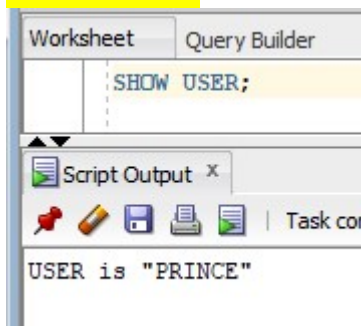- Revoke the privileges that you previous granted to PRINCE

REVOKE SELECT ON sqls5147.LOANABLE FROM PRINCE;
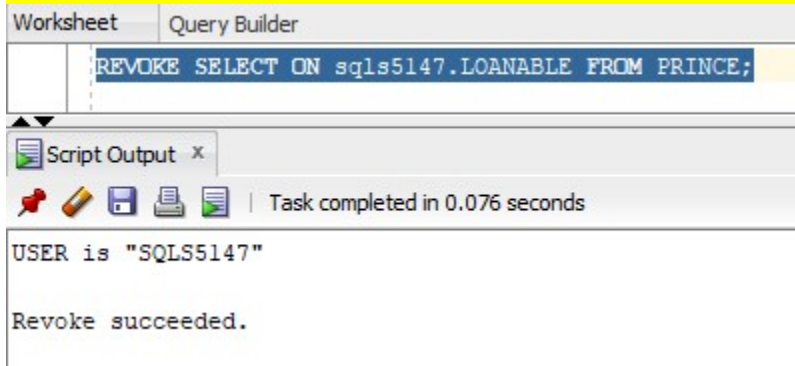
Under the PRINCE/HARRY account

- Issue a show user (to demonstrate that you're in the right account)

SHOW USER;

- Using the LOANABLE view (from your schema), how many books are there in the collection?

SELECT COUNT(*) FROM sqls5147.LOANABLE;

Worksheet | Query Builder

```
SELECT COUNT(*) FROM sqls5147.LOANABLE;
```

Script Output ✕ | Query Result ✕

SQL | Executing:SELECT COUNT(*) FROM sqls5147.LOANABLE in 0 seconds

ORA-00942: table or view does not exist
00942. 00000 - "table or view does not exist"
*Cause:
*Action:
Error at Line: 1 Column: 31