



DELHI TECHNOLOGICAL UNIVERSITY

Name : Shrey
Roll Number : 2K19/MC/122
Subject : Database Management System Laboratory
Faculty : Prof. Aditya Kaushik

PRACTICAL - 5

AIM:

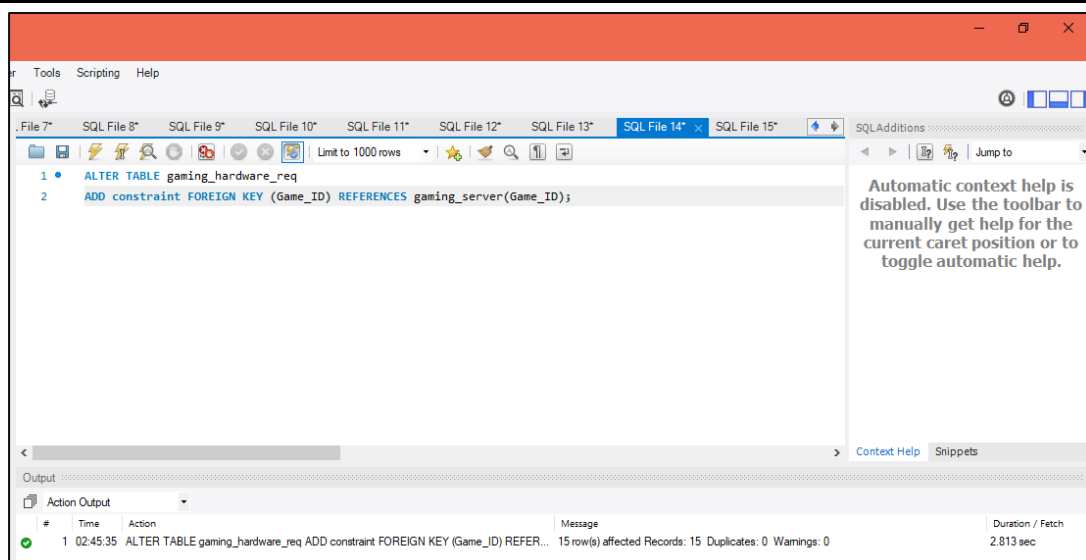
1. Implement foreign key constraint on a table.
2. Check the results if you try to delete or update the value in the original table.
3. Use ON CASCADE to make the desired changes.
4. Implement inner join, left and right outer joins.

CODE AND OUTPUT:

Command to implement foreign key constraint on a table:

```
ALTER TABLE gamingHardware_req  
ADD constraint FOREIGN KEY (Game_ID) REFERENCES gaming_server(Game_ID);
```

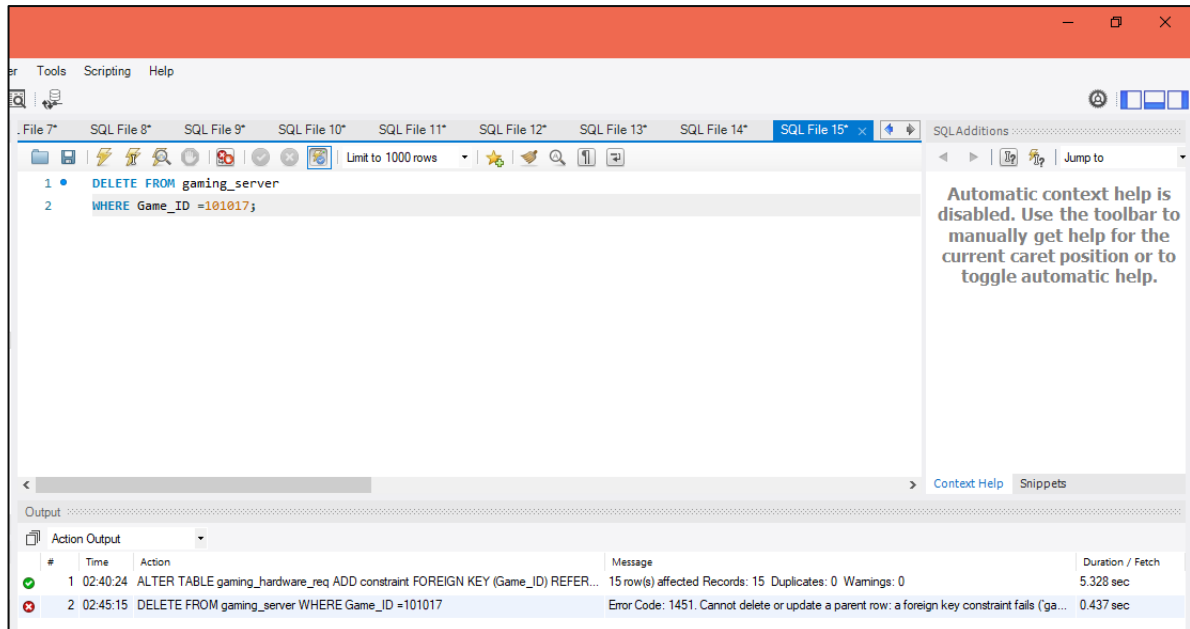
Output :



Command to delete values in original table after applying foreign key:

```
DELETE FROM gaming_server  
WHERE Game_ID =101017;
```

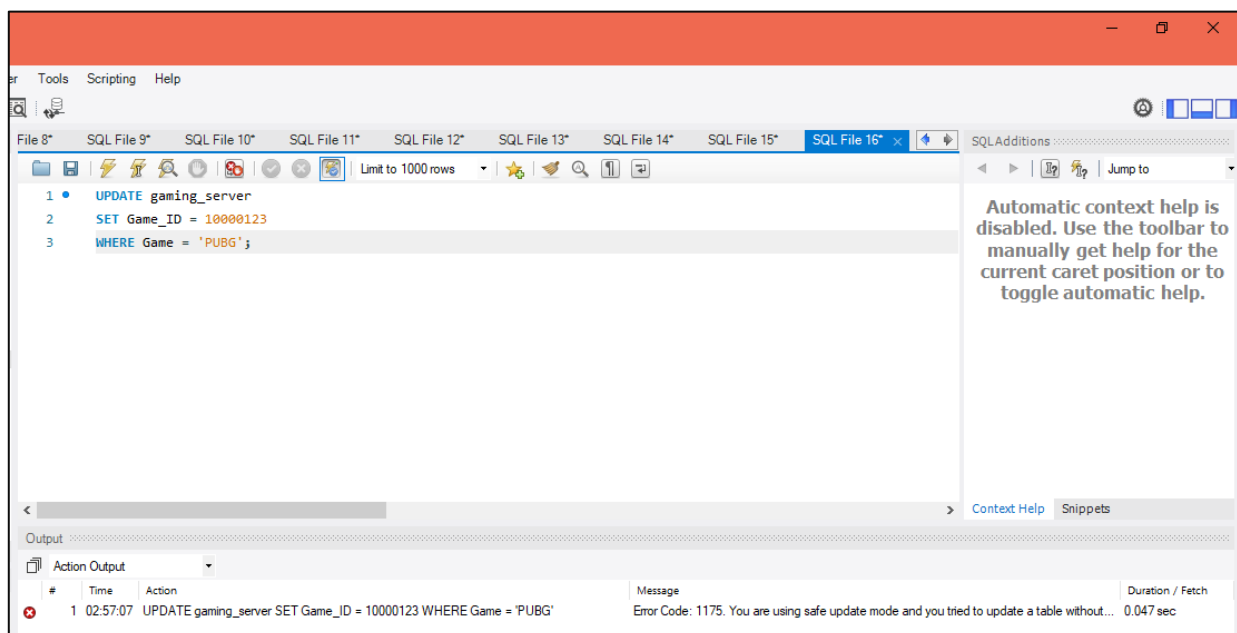
Output :



Command to update values in original table after applying foreign key:

```
UPDATE gaming_server  
SET Game_ID = 10000123  
WHERE Game = 'PUBG';
```

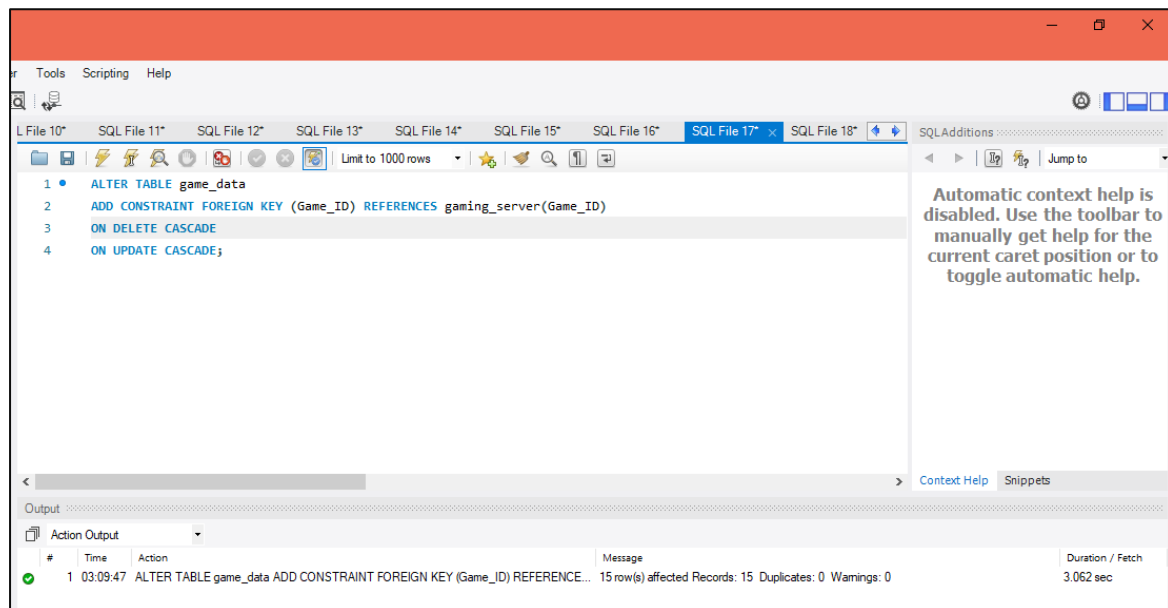
Output :



Command to implement foreign key constraint with ON CASCADE on a table:

```
ALTER TABLE game_data
ADD CONSTRAINT FOREIGN KEY (Game_ID) REFERENCES gaming_server(Game_ID)
ON DELETE CASCADE
ON UPDATE CASCADE;
```

Output :



Command to delete value table after applying foreign key with ON CASCADE:

```
DELETE FROM game_data
WHERE Game_ID =101017;
```

Output :

The screenshot shows the SQL Studio interface with a query editor containing the following SQL command:

```
1 • DELETE FROM game_data
2 WHERE Game_ID =101017;
```

The output pane at the bottom displays the execution results:

#	Time	Action	Message	Duration / Fetch
1	03:10:59	DELETE FROM game_data WHERE Game_ID =101017	1 row(s) affected	0.140 sec

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Command to use INNER JOIN:

```
SELECT *
FROM game_users
INNER JOIN gaming_server
ON game_users.game = gaming_server.Game;
```

Output :

The screenshot shows the SQL Studio interface with a query editor containing the following SQL command:

```
1 • SELECT *
2 FROM game_users
3 INNER JOIN gaming_server
4 ON game_users.game = gaming_server.Game;
```

The output pane displays the results in a grid format:

game	total_users	asian_users	american_users	europaean_users	other_regions	Game	Game_ID	username	Platform
BugCrowd	1000090	950000	25000	8600	16490	BugCrowd	101011	evilguy01	Origin
Fortnite	92000230	6520000	42744615	213273075	213273075	Fortnite	101012	lucifer	Steam
Cyberpunk	10005000	6520000	982000	1000000	1503000	Cyberpunk	101014	eZIO	Epic Games
PUBG	95100000	60000000	6581000	14259500	14259500	PUBG	101017	uchihaMadara	Tencent

The output pane also shows the execution details:

#	Time	Action	Message	Duration / Fetch
1	03:17:50	SELECT * FROM game_users INNER JOIN gaming_server ON game_users.game = gam...	4 row(s) returned	0.063 sec / 0.000 sec

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Command to use LEFT OUTER JOIN:

```
SELECT *
FROM game_users
LEFT JOIN gaming_server
ON game_users.game = gaming_server.Game;
```

Output :

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

game	total_users	asian_users	american_users	europaean_users	other_regions	Game	Game_ID	username	Platform
BugCrowd	1000090	950000	25000	8600	16490	BugCrowd	101011	evilguy01	Origin
Fortnite	92000230	6520000	42744615	213273075	213273075	Fortnite	101012	lucifer	Steam
Cyberpunk	10005000	6520000	982000	1000000	1503000	Cyberpunk	101014	eZIO	Epic Games
PUBG	95100000	60000000	6581000	14259500	14259500	PUBG	101017	uchihaMadara	Tencent

Result 2 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	03:17:50	SELECT * FROM game_users INNER JOIN gaming_server ON game_users game = gam...	4 row(s) returned	0.063 sec / 0.000 sec
2	03:21:27	SELECT * FROM game_users LEFT JOIN gaming_server ON game_users game = gamin...	4 row(s) returned	0.000 sec / 0.000 sec

Command to use RIGHT OUTER JOIN:

```
SELECT *
FROM game_users
RIGHT JOIN gaming_server
ON game_users.game = gaming_server.Game;
```

Output :

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

game	total_users	asian_users	american_users	europaean_users	other_regions	Game	Game_ID	username	Platform	server_location
BugCrowd	1000090	950000	25000	8600	16490	BugCrowd	101011	evilguy01	Origin	Asia
Fortnite	92000230	6520000	42744615	213273075	213273075	Fortnite	101012	lucifer	Steam	Europe
Assasins Creed	10005000	6520000	982000	1000000	1503000	Assasins Creed	101013	swift_run	Ubisoft	East Asia
Cyberpunk	10005000	6520000	982000	1000000	1503000	Cyberpunk	101014	eZIO	Epic Games	West Asia
doombag	10005000	6520000	982000	1000000	1503000	doombag	101015	runner101	Ubisoft	North America
Eternal War	10005000	6520000	982000	1000000	1503000	Eternal War	101016	droath	Steam	South America

Result 3 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	03:17:50	SELECT * FROM game_users INNER JOIN gaming_server ON game_users game = gaming_server.Gam...	4 row(s) returned	0.063 sec / 0.000 sec
2	03:21:27	SELECT * FROM game_users LEFT JOIN gaming_server ON game_users game = gaming_server.Game ...	4 row(s) returned	0.000 sec / 0.000 sec
3	03:22:41	SELECT * FROM game_users RIGHT JOIN gaming_server ON game_users game = gaming_server.Gam...	15 row(s) returned	0.000 sec / 0.000 sec