

-- What happens when deleting one row affects the status of future deletions?

-- Domain: Guess the number of jelly beans in a jar. Closest one wins.

-- If a tie, earliest correct guess wins. You only get one guess!

-- Note: this is the same dataset as we used for the JDBC in-class exercise.

```
csc343h-diane> select * from Guesses;
```

number	name	guess
1	Cole	365
2	Avery	500
3	Sam	502
4	Madeleine	390
5	Cole	450
6	Michael	1000
7	Mackenzie	700
8	Mackenzie	701

(8 rows)

-- We have some kids who guessed twice, and some who didn't

```
csc343h-diane>
```

```
select * from Guesses where exists (  
select * from Guesses g2 where g2.number <> guesses.number  
and g2.name = guesses.name);
```

number	name	guess
1	Cole	365
5	Cole	450
7	Mackenzie	700
8	Mackenzie	701

(4 rows)

```
csc343h-diane>
```

```
select * from Guesses where not exists (  
select * from Guesses g2 where g2.number <> guesses.number  
and g2.name = guesses.name);
```

number	name	guess
2	Avery	500
3	Sam	502
4	Madeleine	390
6	Michael	1000

(4 rows)

-- Let's delete the ones who "cheated" by guessing twice.

```
csc343h-diane>
```

```
delete from Guesses where exists (  
select * from Guesses g2 where g2.number <> guesses.number  
and g2.name = guesses.name);
```

DELETE 4

```
csc343h-diane> select * from Guesses;
```

number	name	guess
2	Avery	500
3	Sam	502
4	Madeleine	390
6	Michael	1000

(4 rows)

```
-- Think about how this works.  
-- If the first Cole guess that was encountered was deleted,  
-- then when the second was encountered, it wouldn't look like  
-- a repeat!  
-- But the DBMS marks the rows to be deleted, and then goes back  
-- to delete them only afterwards. So both rows for Cole are  
-- properly deleted, and the same for Mackenzie.
```