# Transaction Control Language (DCL)

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- not every change you make to a database is saved automatically

## the COMMIT statement

- related to INSERT, DELETE, UPDATE
- will save the changes you've made
- will let other users have access to the modified version of the database

# Transaction Control Language

## DB administrator

| Customers | | | | |
|---|---|---|---|---|
| customer_id | first_name | last_name | email_address | number_of_complaints |
| 1 | John | McKinley | john.mackinley@365careers.com | 0 |
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## DB administrator

- Change the last name of the 4th customer from ‘Winnfield’ to ‘Johnson’

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SQL

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UPDATE customers
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## Problem:

## users

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  the clause that will let you make a step back

  - allows you to undo any changes you have made but don’t want to be saved permanently

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ROLLBACK;
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  - allows you to take a step back
  - the last change(s) made will not count

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## the COMMIT statement

- saves the transaction in the database
- changes cannot be undone

## the ROLLBACK clause

- allows you to take a step back
- the last change(s) made will not count
- reverts to the last non-committed state

# SQL Syntax

- DDL – Data Definition Language
- DML – Data Manipulation Language
- DCL – Data Control Language
- TCL – Transaction Control Language

# SQL Syntax

- **DDL – Data Definition Language**

  creation of data

- **DML – Data Manipulation Language**

  manipulation of data

- **DCL – Data Control Language**

  assignment and removal of permissions to use this data

- **TCL – Transaction Control Language**

  saving and restoring changes to a database

**Next:**

## Next:

More about Database Theory