

Filename: comptia-itfunc0u61-6-2-1-querying_a_database

Show Name: CompTIA IT Fundamentals (Exam FC0-U61)

Topic Name: Databases

Episode Name: Querying a Database

Show Description: In this episode, Ronnie and Don explain how to communicate with a database using SQL queries. They then give multiple examples of adding, retrieving and modifying data in a SQL database.

Querying a Database

- How do we talk to a database?
 - Direct/manual access
 - Not typical
 - Can lead to corruption
 - Programmatic access
 - Very common
 - Via an API or protocol stack
 - User interface/utility access
 - Useful for R&D
 - Does not scale well
 - Query/report builders
 - Useful for repetitious queries
- What commands do we use with a database?
 - Data manipulation language (DML)
 - Data definition language (DDL)

Create a table

```
CREATE TABLE USStates (  
    state_name nvarchar(50),  
    state_abr nchar(2)  
)
```

Insert data into the table

```
INSERT INTO USStates (state_name, state_abr)  
VALUES  
    ('Florida', 'FL'),  
    ('Georgia', 'GA'),  
    ('Alabama', 'AL')
```

View data in the table

```
SELECT * FROM USStates ORDER BY state_name;  
SELECT state_name FROM USStates WHERE state_abr = 'FL'
```

Change data in the table

```
INSERT INTO USStates (state_name, state_abr) VALUES ('NewYork', 'NY');  
UPDATE USStates SET  
    state_name = 'New York'  
WHERE state_abr = 'NY';
```

Delete data from the table

```
DELETE FROM USStates WHERE state_abr = 'NY';
```

Delete the table

```
DROP TABLE USStates;
```

