SELECTing Your Data

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Overview

Querying the data

Selecting fields of interest

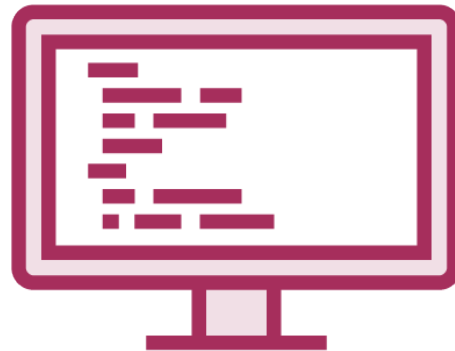**Retrieving distinct values**

Formatting considerations

How Do We Retrieve Information?

Database

Airline on-time performance data

Query

SQL is used to retrieve the relevant data

Results

What flights departed from a certain airport?

Formatting SQL Queries

Strive for consistent formatting

Emphasis on readability

Use UPPERCASE for SQL keywords

END FIRST CLIP

Keywords

Reserved words that tell SQL to do something

SELECT

SELECT allows us to retrieve data

Select the data of interest

Specify fields

```
> SELECT 2+2;

4
```

◄ SELECT can perform calculations without a table

SELECT Statement Framework

SELECT   FROM   ;

Specify columns of interest   **Where these columns are stored**   **SQL statements should be terminated**

`SELECT * FROM tablename`

The Wildcard

The asterisk (*) serves as a wildcard

Returns all columns from a given table

Demo

Selecting all columns

Using the wildcard

Use the wildcard sparingly when writing queries

Explicit Notation

Explicitly list specific columns of interest

Increases readability

Makes code easier to troubleshoot

END CLIP TWO

Specifying Fields

List each column after the SELECT keyword

Separate each column with a comma

```
SELECT first_name, last_name

  FROM person;
```

Querying Specific Fields

Code returns first name and last name for every record in person table

SELECT keyword specifies fields of interest

FROM specifies table where records are stored

Demo

Selecting specific columns

END CLIP THREE

Distinct values

Unique values in a database

Identifying Distinct Values

Class Roster

SELECT first_name
    FROM students;

first_name
Alec
Amy
Amy
Jason
Katie
Katie
Katie
Shannon

Distinct names

SELECT DISTINCT first_name
    FROM students;

first_name
Alec
Amy
Jason
Katie
Shannon

Demo

Select distinct values

Apply alias to columns

END CLIP FOUR

Summary

SELECT returns fields from the database

FROM prescribes the table to use

DISTINCT limits to unique values