

Slide 1: Using Wildcards in SQL

# Using Wildcards in SQL

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**Sadie St. Lawrence, MSA**  
*Data Scientist, VSP*

**UCDAVIS**  
**EXTENSION**

Slide 2: Learning Objectives

## Learning Objectives

Explain the concept of wildcards  
Advantages and disadvantages  
Usefulness

Describe how to use the LIKE operator with wildcards

Write appropriate syntax when using wildcards

Slide 3: What Are Wildcards?

## What Are Wildcards?

Special character used to match parts of a value

Search pattern made from literal text, wildcard character, or a combination

Uses LIKE as an operator (though technically a predicate)

Slide 4: What Are Wildcards?

## What Are Wildcards?

Can only be used with strings

Cannot be used for non-text datatypes

Helpful for data scientists as they explore string variables

## Slide 5: Using % Wildcards

## Using % Wildcards

Wildcard	Action
'%Pizza'	Grabs anything ending with the word pizza
'Pizza%'	Grabs anything after the word pizza
'%Pizza%'	Grabs anything before and after the word pizza

## Slide 6: Using % Wildcards

## Using % Wildcards

Wildcard	Action
'S%E'	Grabs anything that starts with "S" and ends with "E" (Like Sadie)
't%@gmail.com'	Grabs gmail addresses that start with "t" (hoping to find Tom)

Slide 7: Using % Wildcards

## Using % Wildcards

% wildcard will not match NULLs

NULL represents no value in a column

## Slide 8: Underscore (\_) Wildcard

## Underscore (\_) Wildcard

Matches a single character

Is not supported by DB2

```
WHERE size LIKE '__ pizza'
```

Output:

10 inch pizza

15 inch pizza



## Slide 9: Underscore (\_) Wildcard

## Underscore (\_) Wildcard

These produce the same results

```
WHERE size LIKE '__ pizza'
```

Output:

10 inch pizza

15 inch pizza

```
WHERE size LIKE '%pizza'
```

Output:

10 inch pizza

15 inch pizza

8 inch pizza

Slide 10: Bracket [ ] Wildcard

## Bracket [ ] Wildcard

Used to specify a set of characters in a specific location

Does not work with all DBMS

Does **not** work with **SQLite**

Slide 11: Downsides of Wildcards

## Downsides of Wildcards

Takes longer to run

Better to use another operator (if possible):  
=, <, >, and etc.

Statements with wildcards will take longer  
to run if used at the end of search patterns

Placement of wildcards is important