9.3.1 Find the Number of Stations

When you sent your initial findings to W. Avy yesterday, you were a little nervous to hear his reaction—which is only natural when the stakes are so high! But to your delight and relief, W. Avy is ecstatic. His text reads, "This is great! It's clear from your analysis that Oahu is a great location for the new surf shop. We're almost ready to switch out our suit and ties for some sandals! My only question is, how many stations are being used to collect this information? Is it possible that we don't have enough data collection stations for this information to be valid?"

Thankfully, you know you can run a query on the SQLite database to find this information quickly. You respond, "Glad the analysis is helping you with your decision-making! Great question about the number of stations. Let me do some quick queries and find out for us." And, with that, you get back to work.

We need to write a query to get the number of stations in our dataset. We'll use our session that we created earlier to query our database.

Begin by adding the starting point for our query, which is the following line:

```
session.query()
```

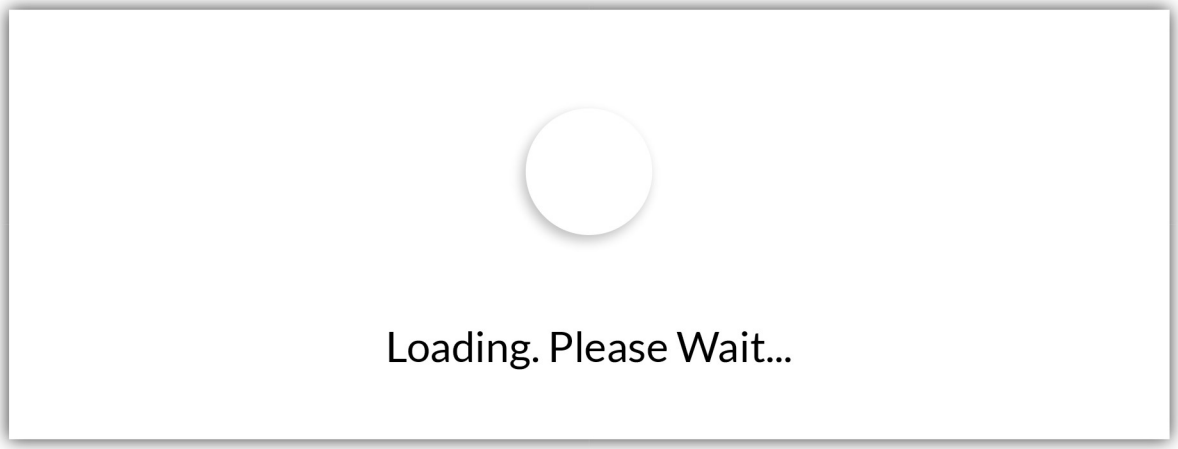
Continuing with our query, we'll use `func.count`, which essentially counts a given dataset we are interested in. In this case, we want to count the total number of stations. We can do this by referencing `Station.station`, which will give us the number of stations. Add the query parameters to your code, like this:

```
session.query(func.count(Station.station))
```

Now we need to add the `.all()` function to the end of this query so that our results are returned as a list. Your final query should look like the following:

```
session.query(func.count(Station.station)).all()
```

Run the query.



Now we know there are 9 stations from which precipitation data is being collected. However, in order to truly answer W. Avy's question, we don't just need to know the number of stations; we need to know how active the

stations are as well. That is, we want to figure out which stations tend to have the most precipitation recordings. Let's figure that out next.