Weekly challenge 4

Latest Submission Grade 100%

1. In row 1 of the following spreadsheet, the words rank, name, population, and county are called what? **1 / 1 point**

	A	B	C	D
1	**Rank**	**Name**	**Population**	**County**
2	1	Charlotte	885,708	Mecklenburg
3	2	Raleigh	474,069	Wake (seat), Durham
4	3	Greensboro	296,710	Guilford
5	4	Durham	278,993	Durham (seat), Wake, Orange
6	5	Winston-Salem	247,945	Forsyth
7	6	Fayetteville	211,657	Cumberland
8	7	Cary	170,282	Wake, Chatham
9	8	Wilmington	123,784	New Hanover
10	9	High Point	112,791	Guilford, Randolph, Davidson, Forsyth
11	10	Concord	96,341	Cabarrus

- (●) Attributes
- ( ) Characteristics
- ( ) Descriptors
- ( ) Criteria

Correct
These words are attributes, referring to the information in the columns below. An attribute is a characteristic or quality of data used to label a column in a table.

2. In the following spreadsheet, where can you find all of the attributes -- also known as the observation -- of Fayetteville? **1 / 1 point**

	A	B	C	D
1	**Rank**	**Name**	**Population**	**County**
2	1	Charlotte	885,708	Mecklenburg
3	2	Raleigh	474,069	Wake (seat), Durham
4	3	Greensboro	296,710	Guilford
5	4	Durham	278,993	Durham (seat), Wake, Orange
6	5	Winston-Salem	247,945	Forsyth
7	6	Fayetteville	211,657	Cumberland
8	7	Cary	170,282	Wake, Chatham
9	8	Wilmington	123,784	New Hanover
10	9	High Point	112,791	Guilford, Randolph, Davidson, Forsyth
11	10	Concord	96,341	Cabarrus

- ○ Cell B7
- ○ Row 6
- ○ Column B
- ◉ Row 7

Correct
The observation for Fayetteville is in row 7. An observation is all of the attributes for something contained in a row of a data table.

3. In the following spreadsheet, what feature was used to alphabetize the city names in column B? **1 / 1 point**

	A	B	C	D
1	**Rank**	**Name**	**Population**	**County**
2	7	Cary	170,282	Wake, Chatham
3	1	Charlotte	885,708	Mecklenburg
4	10	Concord	96,341	Cabarrus

5	4	Durham	278,993	Durham (seat), Wake, Orange
6	6	Fayetteville	211,657	Cumberland
7	3	Greensboro	296,710	Guilford
8	9	High Point	112,791	Guilford, Randolph, Davidson, Forsyth
9	2	Raleigh	474,069	Wake (seat), Durham
10	8	Wilmington	123,784	New Hanover
11	5	Winston-Salem	247,945	Forsyth

- (●) Sort range
- ( ) Randomize range
- ( ) Organize range
- ( ) Name range

Correct
Sort range was used to alphabetize the city names in column B. Sorting a range of data from A to Z helps data analysts organize and find data more quickly.

4. To find the average population of the cities in this spreadsheet, what is the correct AVERAGE function syntax? **1 / 1 point**

	A	B	C	D
1	**Rank**	**Name**	**Population**	**County**
2	1	Charlotte	885,708	Mecklenburg
3	2	Raleigh	474,069	Wake (seat), Durham
4	3	Greensboro	296,710	Guilford
5	4	Durham	278,993	Durham (seat), Wake, Orange
6	5	Winston-Salem	247,945	Forsyth
7	6	Fayetteville	211,657	Cumberland
8	7	Cary	170,282	Wake, Chatham

9	8	Wilmington	123,784	New Hanover
10	9	High Point	112,791	Guilford, Randolph, Davidson, Forsyth
11	10	Concord	96,341	Cabarrus

- ○ AVERAGE(C2-C11)
- ◉ =AVERAGE(C2:C11)
- ○ =AVERAGE(C2-C11)
- ○ AVERAGE(C2:C11)

Correct
The correct AVERAGE function syntax is =AVERAGE(C2:C11). AVERAGE returns an average of values from a selected range. C2:C11 is the specified range.

5. You are working with a database table named *employee* that contains data about employees. You want to review all the columns in the table. **1 / 1point**

You write the SQL query below. Add a FROM clause that will retrieve the data from the *employee* table.

```
1  SELECT
2  *
3  FROM
4  employee
```

Run

Reset

What employee has the job title of Sales Manager?

- ○ Margaret Park
- ◉ Nancy Edwards
- ○ Michael Mitchell
- ○ Andrew Adams

Correct

The clause `FROM employee` will retrieve the data from the *employee* table. The complete query is `SELECT * FROM employee`. The FROM clause specifies which database table to select data from. The employee Nancy Edwards has the job title of Sales Manager.

6. You are working with a database table that contains invoice data. The *customer_id* column lists the ID number for each customer. You are interested in invoice data for the customer with ID number 54. **1 / 1point**

You write the SQL query below. Add a WHERE clause that will return only data about the customer with ID number 54.

```
1   SELECT
2   *
3   FROM
4   invoice
5   WHERE
6   customer_id = 54;
```

Run

Reset

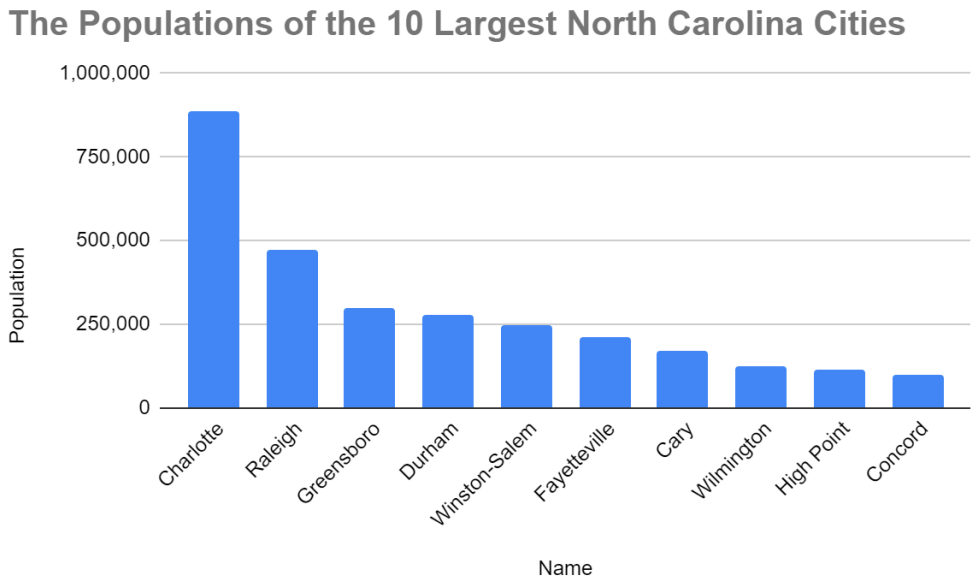
What is the billing address for the customer with ID number 54?

- ○ 1033 N Park Ave
- ○ 230 Elgin St
- ○ 801 W 4th St
- ◉ 110 Raeburn Pl

Correct

The clause `WHERE customer_id = 54` will return only data about the customer with ID number 54. The complete query is `SELECT * FROM invoice WHERE customer_id = 54`. The WHERE clause filters results that meet certain conditions. The WHERE clause includes the name of the column, an equals sign, and the value(s) in the column to include. The billing address for the customer with ID number 54 is 110 Raeburn Pl.

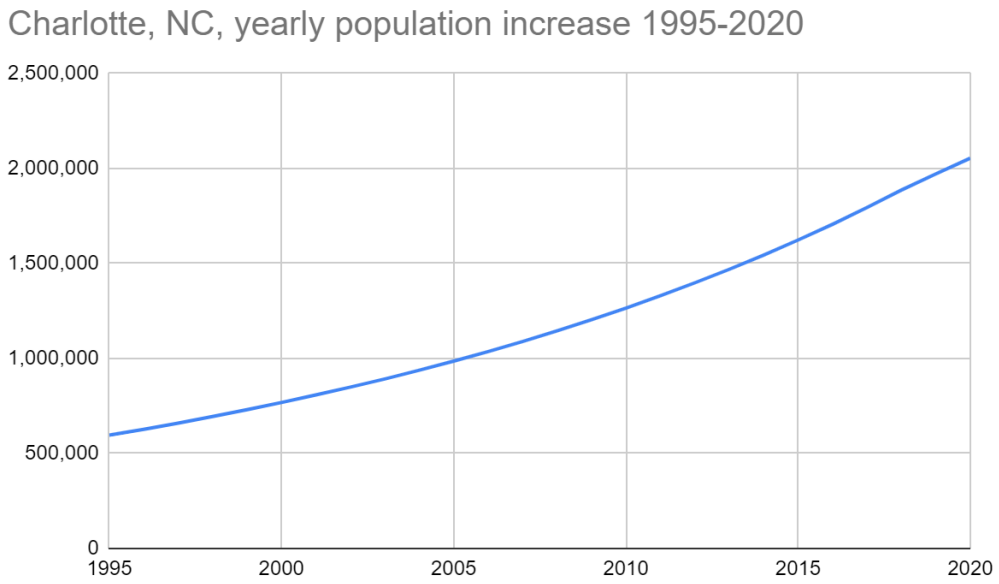
7. A data analyst creates the following visualization to clearly demonstrate how much more populous Charlotte is than the next-largest North Carolina city, Raleigh. What type of chart is it? **1 / 1 point**



- ○ A pie chart
- ○ A line chart
- ◉ A column, or bar, chart
- ○ A scatter chart

Correct
The chart is a column chart. A column chart is effective at demonstrating the differences between several items in a specific range of values.

8. A data analyst wants to demonstrate how the population in Charlotte has increased over time. They create this data visualization. This is an example of an area chart. **1 / 1 point**



- ○ True
- ◉ False

Correct

This is a line chart. Line charts are effective for illustrating trends and patterns, such as how population changes over time.