Weekly challenge 4

LATEST SUBMISSION GRADE

100%

1. Question 1

In the following spreadsheet, the column labels in row 1 are called what?

	Α	В	С	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



Criteria



Attributes



Characteristics



Descriptors

Correct

The column labels in row 1 are attributes that refer to the data in the column. An attribute is a characteristic or quality of data used to label a column in a table.

2. Question 2
In the following spreadsheet, where can you find all of the attributes—also known as the observation—of Fayetteville?

	Α	В	С	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



Row 6



Column B



Cell B7



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.Question 3In the following spreadsheet, what feature was used to alphabetize the city names in column B?

	Α	В	С	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



Randomize range



Organize range



Name range



Sort 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. Question 4
To find the average population of the cities in this spreadsheet, what is the correct AVERAGE function syntax?

	Α	В	С	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. Question 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.

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

1

2

3

4

SELECT



FROM

employee





RunReset

What employee has the job title of Sales Manager?



Margaret Park



Nancy Edwards



Andrew Adams



Michael Mitchell

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. Question 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.

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

1

2

3

4

5

6

SELECT



FROM

invoice

Where

customer_id = 54





RunReset

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



1033 N Park Ave



110 Raeburn Pl



230 Elgin St



801 W 4th St

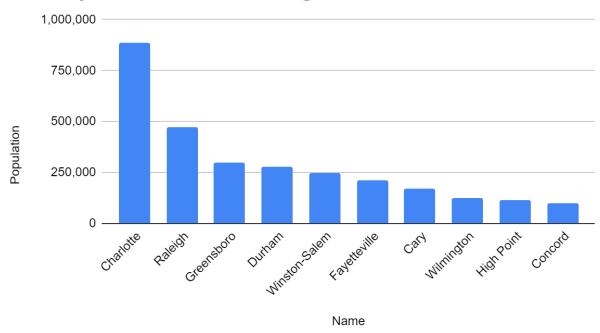
Correct

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. Question 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?

The Populations of the 10 Largest North Carolina Cities





A pie chart



A line chart



A scatter chart



A column, or bar, chart

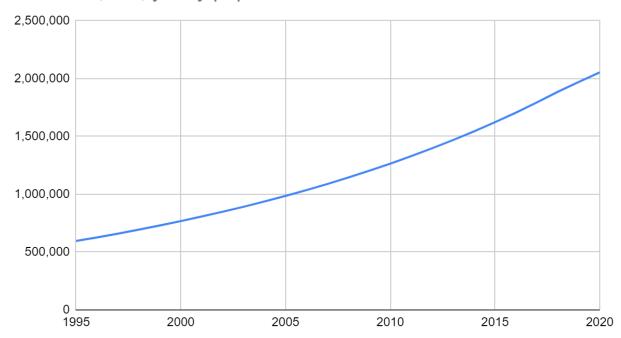
Correct

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. Question 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.

Charlotte, NC, yearly population increase 1995-2020





True



False

Correct

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