DATABASE ACTIVITY using Microsoft Access

Name

A **database** is a collection of records usually in table format.

Each record is the same as each in a table.

Each field is the same as each in a table.

STEP 1: Modify a database and use SEARCH

1. Open the Students database file from the T drive.
2. If the table of information is not showing, double click on the Student Data table to open it.

Add a new record

1. On the status bar at the bottom left, hover across each icon until you find New Blank Record. Click on New Blank Record and add in the information for yourself (you can choose either Y or N on registered).

Delete a record

1. Glen Goldy is no longer a student here so we need to delete his record. Find the Glen Goldy record and click in the little square at the beginning of the Glen Goldy row. This should highlight the entire row.
2. Now press the DELETE key to delete the record. You will be asked to confirm the delete.

Modify a record

1. Using the SEARCH box on the bottom status bar will help your modifications go faster.
2. We need to change Zippy’s birthday from the 27th to the 17th. In the SEARCH box type zippy. This will bring you to Zippy’s record.
3. Click on the 27 and change it to 17. Press ENTER to accept the change.

Modify another record

1. We need to change Barney Barnes’ registered status from N to Y. In the SEARCH box type Barnes.
2. This will take you to Barney Barnes record. Click on the N in the registered field and change it to a Y. Press ENTER to accept the change.

STEP 2: Sort the database

The database is currently sorted in alphabetic order by last name. I want to change the view of the database so it is sorted by age with the youngest at the top.

1. At the top of your table, click the little arrow next to the field title “Age”.
2. Select Sort Smallest to Largest and click OK.
3. Your table should now be sorted by age.

Which student is now at the top of the table?

1. Now, resort the table back to alphabetical by last name.

Which student is now at the top of the table?

STEP 3: Completing a Query

A query is something that answers a question. Basically a query will pull data that you ask for out of the database. Some queries simply return requested fields. Other queries only return data that meet specified criteria.

No Criteria Query

I want to see a list of just the student names and their favorite color.

1. Click the Create ribbon tab to display the Create ribbon.
2. Click Query Design.
3. The Show Table window should come up and the Student Data table should be highlighted.
4. Click Add then click Close.
5. A small table with all of the field names should be showing in the top section of your screen.

We are going to double click on the fields we want to use for this query IN THE ORDER that we would like to use them.

1. Double click on Last Name.
2. Double click on First Name.
3. Double click on Favorite Color.

As you double click on these items, they should appear in the table on the bottom section of your screen.

Run the Query

1. On the Query Tools Design ribbon, click Run.
2. A list of students with their favorite color should be showing.

Save the Query

1. Save this query by RIGHT CLICKING on the Query 1 tab at the top of the list.
2. Select Save.
3. Name the Query “Favorite Color” and click OK.

Look at the list. What is Dottie Dobson’s favorite color?

Close the Query

You may now close this query by right clicking on the Favorite Color tab at the top of the list and selecting Close. Notice that the query is listed on the left hand side if you need to return to it.

PRACTICE - Complete a Query on your own

Using similar steps to the query you just completed, now you are going to complete a query that lists just the Last Name, First Name, and Age.

When completed, save the query as “Age” and then close the query.

1 Criteria Queries

I need a list of all of the students who are not registered. To do this we need to run a query that has a criteria set.

1. Click the Create ribbon tab to display the Create ribbon.
2. Click Query Design.
3. The Show Table window should come up and the Student Data table should be highlighted.
4. Click Add then click Close.
5. A small table with all of the field names should be showing in the top section of your screen.

We are going to double click on the fields we want to use for this query IN THE ORDER that we would like to use them.

1. Double click on Last Name.
2. Double click on First Name.
3. Double click on Registered?
4. On the table in the bottom half of your screen, locate the Registered? Column. Click your cursor in the Criteria row of the Registered column.
5. Type “N” (the quotation marks tell Access to find what is between the quotation marks).
6. Click Run.
7. You should now see a list of students who are not registered.

Who are the last two students on the list

Save this query as Not Registered and then Close it.

PRACTICE - Complete 1 Criteria Queries on your own

Using these same steps, complete the following 1 criteria queries:

1. Just girls (include Last Name, First Name, and Gender). Save this query as “Girls”.
2. Birthdays in the month of May (include Last Name, First Name, and Birth Month). Save this query as “May Birthdays”.

How many students have birthdays in May?

Who is at the top of the list?

1. Just students whose favorite color is Red (include Last Name, First Name, and Favorite Color). Save this query as “Red”.

How many students have the favorite color of Red?

Who is at the bottom of the list?

2 Criteria Queries

Now let’s try some queries that have two criteria.

1. Just boys whose favorite color is green (include Last Name, First Name, Gender, and Favorite Color). Save this query as “Green Boys”

How many boys have the favorite color of green?

List the boys first names here:

1. Just students whose Birth Month is November and whose Birth Day is before the 15th (<15) (include Last Name, First Name, Birth Month, and Birth Day)

List the students and their birthdays here: