MyITLab® grader

Apply 2A and 2B skills from these Objectives:

1 Open and Save an Existing Database
2 Create Table Relationships
3 Sort Records in a Table
4 Create a Query in Design View
5 Create a New Query from an Existing Query
6 Sort Query Results
7 Specify Criteria in a Query
8 Specify Numeric Criteria in a Query
9 Use Compound Criteria in a Query
10 Create a Query Based on More Than One Table
11 Use Wildcards in a Query
12 Create Calculated Fields in a Query
13 Calculate Statistics and Group Data in a Query
14 Create a Crosstab Query
15 Create a Parameter Query

Mastering Access Project 2G Student Scholarships

In the following Mastering Access project, you will assist Kim Ngo, Director of Academic Scholarships, in using her database to answer questions about scholarships awarded to students. Your completed database objects will look similar to Figure 2.59.

PROJECT FILES

For Project 2G, you will need the following file:

a02G_Student_Scholarships

You will save your database as:

Lastname_Firstname_2G_Student_Scholarships

PROJECT RESULTS

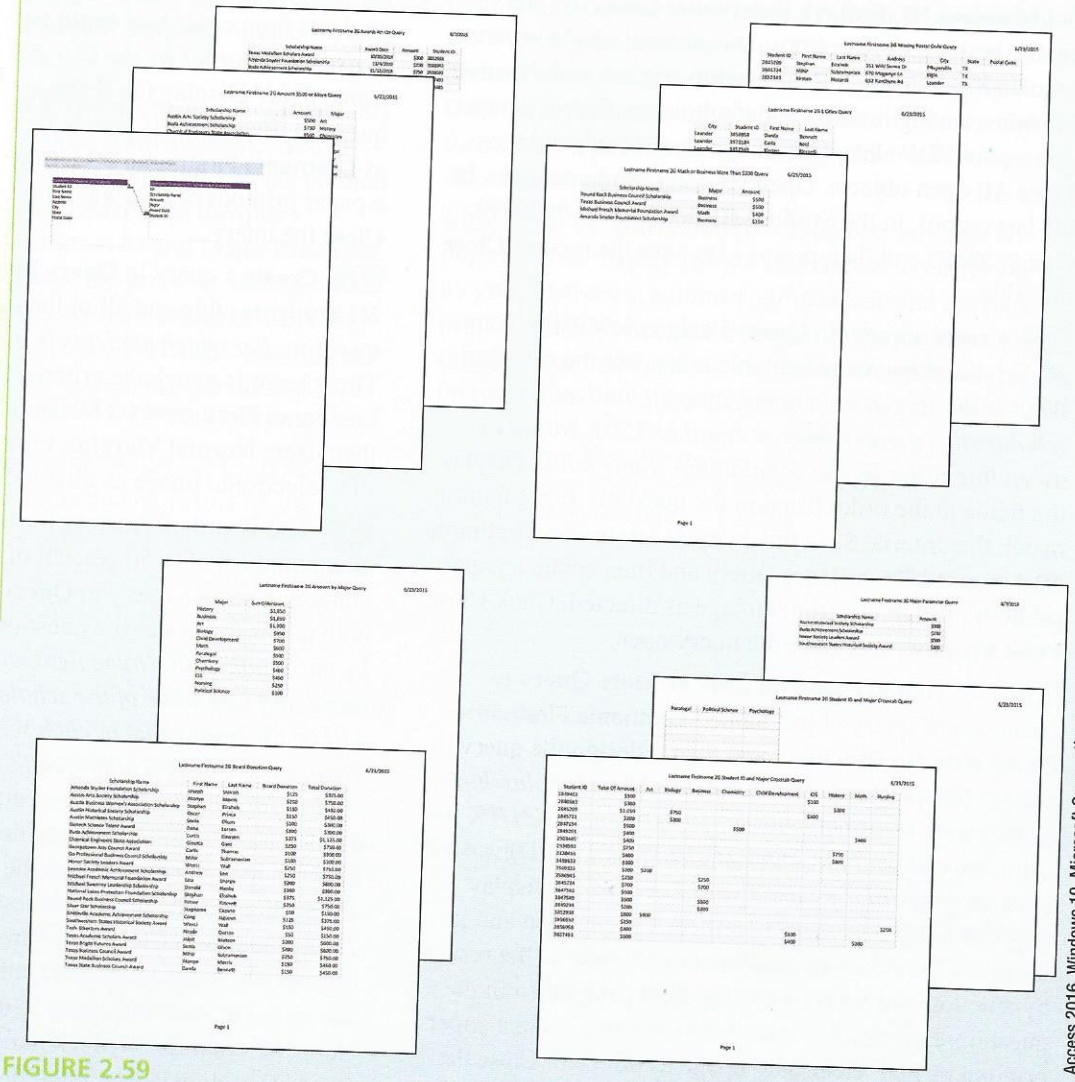

FIGURE 2.59

Access 2016, Windows 10, Microsoft Corporation

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Mastering Access Project 2G Student Scholarships (continued)

1 **Start** Access. From your student data files, open **a02G_Student_Scholarships**. Save the database in your **Access Chapter 2** folder as **Lastname_Firstname_2G_Student_Scholarships** and then enable the content. In the **Navigation Pane**, **Rename** each table by adding **Lastname Firstname** to the beginning of the table name. Increase the width of the **Navigation Pane** so that all object names display fully.

2 Open both tables to examine the fields and data, and then **Close** both tables. Create a *one-to-many* relationship between your **2G Students** table and your **2G Scholarships Awarded** table using the common field **Student ID**. **Enforce Referential Integrity**, and enable both cascade options. *One* student can have *many* scholarships. Create a **Relationship Report** with **Normal Margins**, saving it with the default name. Create a paper printout or PDF electronic image as directed, and then **Close All** open objects. Open your **2G Students** table. In the last record, in the **Student ID** field, select **9999999**, type **2839403** and then press ↓ to save the record. **Close** the table.

3 **Create** a query in **Query Design** view using your **2G Scholarships Awarded** table to answer the question, *What is the scholarship name, amount, and major for scholarships greater than or equal to $500, sorted in ascending order by the Scholarship Name field?* Display the fields in the order listed in the question. Eight records match the criteria. **Save** the query as **Lastname Firstname 2G Amount $500 or More Query** and then create a paper printout or PDF electronic image as directed. Click **Close Print Preview**, and leave the query open.

4 Use your **2G Amount $500 or More Query** to create a new query object named **Lastname Firstname 2G Awards 4th Qtr Query** and then redesign the query to answer the question, *Which scholarships (Scholarship Name) were awarded between 10/1/19 and 12/31/19, for what amount, and for which student (Student ID), sorted in ascending order by the Award Date field?* Display only the fields necessary to answer the question and in the order listed in the question. Do not restrict the results by amount, and sort only by the field designated in the question. Five records match the criteria. Create a paper printout or PDF electronic image as directed. **Close** the query, saving the design changes.

5 **Create** a query in **Query Design** view using your **2G Scholarships Awarded** table to answer the question, *Which scholarships (Scholarship Name) were awarded for either Math or Business majors for amounts of more than $200, sorted in descending order by the Amount field?* Display the fields in the order listed in the question. Four records match the criteria. (Hint: If six records display, switch to Design view and combine the majors on one criteria line using OR.) **Save** the query as **Lastname Firstname 2G Math or Business More Than $200 Query** and then create a paper printout or PDF electronic image as directed. **Close** the query.

6 **Create** a query in **Query Design** view using your **2G Students** table to answer the question, *What is the city, student ID, first name, and last name of students from cities that begin with the letter L, sorted in ascending order by the City field and by the Last Name field?* Display the fields in the order listed in the question. Five records match the criteria. **Save** the query as **Lastname Firstname 2G L Cities Query** and then create a paper printout or PDF electronic image as directed. **Close** the query.

7 **Create** a query in **Query Design** view using your **2G Students** table and all of the fields to answer the question, *For which students is the Postal Code missing?* Three records match the criteria. **Save** the query as **Lastname Firstname 2G Missing Postal Code Query** and then using **Normal Margins**, create a paper printout or PDF electronic image as directed. **Close** the query.

8 The Board of Trustees for the college will donate an amount equal to 50 percent of each scholarship amount. **Create** a query in **Query Design** view using both tables to answer the question, *In ascending order by the Scholarship Name field, and including the first name and last name of the scholarship recipient, what will be the total value of each scholarship if the Board of Trustees donates an additional 50 percent of each award paid to students?* (Hint: First calculate the amount of the donation, naming the new field **Board Donation**, and then run the query to be sure the correct results display. Then calculate the total donation, naming the new field **Total Donation**.) Change the property settings of the appropriate fields to display with a **Format** of **Currency** and with **Decimal Places** set to **0**. For the **Scholarship Name** of **Amanda Snyder Foundation Scholarship**, the *Board Donation* is *$125*, and the *Total Donation* is *$375*. Apply **Best Fit** to all of the columns, **Save** the query as **Lastname Firstname 2G Board Donation Query** and then

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Mastering Access Project 2G Student Scholarships (continued)

using **Landscape** orientation, create a paper printout or PDF electronic image as directed. **Close** the query.

9 **Create** a query in **Query Design** view using your **2G Scholarships Awarded** table and the **Sum** aggregate function to answer the question, *For each major, what is the total scholarship amount, sorted in descending order by the Amount field?* Display the fields in the order listed in the question. Change the property settings of the **Amount** field to display with a **Format** of **Currency** and with **Decimal Places** set to **0**. For the **Major** of **History**, the total scholarship amount is *$1,850*. Apply **Best Fit** to all of the columns. **Save** the query as **Lastname Firstname 2G Amount by Major Query** and then create a paper printout or PDF electronic image as directed. **Close** the query.

10 By using the **Query Wizard**, create a crosstab query based on your **2G Scholarships Awarded** table. Select **Student ID** as the row headings and **Major** as the column headings. **Sum** the **Amount** field. Name the query **Lastname Firstname 2G Student ID and Major Crosstab Query** In **Design** view, change the property settings of the last two fields to display with a **Format** of **Currency** and with **Decimal Places** set to **0**. This query answers the question, *What are the total scholarship amounts paid by each student ID and by each major?* Apply **Best Fit** to all of the columns, and then **Save** the query. Using **Landscape** orientation, create a paper printout or PDF electronic image as directed—two pages result. **Close** the query.

11 **Create** a query in **Query Design** view using your **2G Scholarships Awarded** table that prompts you to enter the **Major** of the student, and then answers the question, *What is the scholarship name and amount for a major, sorted in ascending order by the Scholarship Name field?* Display the fields in the order listed in the question. **Run** the query, entering **history** when prompted for criteria. Four records match the criteria. Hide the **Major** field from the results, and then **Run** the query again, entering **history** when prompted for criteria. **Save** the query as **Lastname Firstname 2G Major Parameter Query** and then create a paper printout or PDF electronic image as directed. **Close** the query.

12 Open the **Navigation Pane**, and be sure that all object names display fully. **Close Access**. As directed by your instructor, submit your database and the paper printout or PDF electronic images of the ten objects—relationship report and nine queries, one of which prints on two pages—that are the results of this project.

1. Lastname_Firstname_2G_Student_Scholarships	Database file
2. Relationships for Lastname_Firstname_2G_Student_Scholarships Relationships	Report
3. Lastname Firstname 2G Amount $500 or More Query	Query
4. Lastname Firstname 2G Awards 4th Qtr Query	Query
5. Lastname Firstname 2G Math OR Business Over $200 Query	Query
6. Lastname Firstname 2G L Cities Query	Query
7. Lastname Firstname 2G Missing Postal Code Query	Query
8. Lastname Firstname 2G Board Donation Query	Query
9. Lastname Firstname 2G Amount by Major Query	Query
10. Lastname Firstname 2G Student ID and Major Crosstab Query	Query (2 pages)
11. Lastname Firstname 2G Major Parameter Query (using History)	Query

END | You have completed Project 2G