



Access 2019 In Practice - Ch 2 Improve It 2-7

COURSE NAME CRN 80740 | CIS 078 Microsoft Access

Start Date:08/19/2112:00 AMUS/Pacific **Due Date:**09/19/2111:59 PMUS/Pacific **End Date:**09/19/2111:59 PMUS/Pacific

Improve It Project 2-7

Placer Hills Real Estate expanded the database created in the *Improve It Project 1-7*. To ensure consistency, the starting file is provided for you. For this project, you use *Design* view to edit properties in a table and integrate data integrity rules. You edit data records, create a relationship between the two tables, and enforce referential integrity constraints. Finally, you view how the table records will print using *Print Preview*.

[Student Learning Outcomes 2.1, 2.2, 2.3, 2.4, 2.6, 2.7]

File Needed: **PlacerHills-02.accdb** (Available from the Start File link.)

Completed Project File Name: **[First Name.Last Name]-PlacerHills-02.accdb**

Skills Covered in This Project

- Edit a table using *Design* view.
- Edit field properties in *Design* view.
- Create an input mask.
- Save a table.
- Create a foreign key.
- Create a 1:M relationship between tables.
- Enforce referential integrity.
- View a table in *Datasheet* view and expand related records.
- Preview table results for printing.

- ☐ Open the **PlacerHills-02** database file.
- ☐ The file will be renamed automatically to include your name. Change the project file name if directed to do so by your instructor, and save it.
- ☐ Enable the contents in the security warning.
- Open the **Agents** table in *Datasheet* view (Figure 2-95).
 - ☐ Look at the **DateHired** and **Phone** fields. The manager of the real estate office wants those to be formatted differently.

EmployeeNum	LastName	FirstName	DateHired	Phone
108	Bidou	Simon	Saturday, May 9, 2015 5306487689	
127	Weatherby	Kelly	Tuesday, November 10, 2015 9169873756	
133	Burgess	John	Friday, June 23, 2017 5302784699	
151	Chung	Rick	Tuesday, October 9, 2018 9168236940	
160	Johnstone	Jack	Friday, January 18, 2019 9165551679	
160	Duarte	Kallyn	Friday, February 15, 2019 9167441614	
169	Montoya	Gerardo	Thursday, March 21, 2019 9165345991	

Figure 2-95 *Datasheet* view of the **Agents** table

- ☐ Notice that both Jack Johnstone and Kallyn Duarte have the same value in the **EmployeeNum** field. If the employee number is supposed to be unique, something must not be set correctly with the primary key in this table.
 - ☐ Change Kallyn Duarte's **EmployeeNum** to be **168**, the correct value.
- Change to *Design* view to make needed corrections to the **Agents** table.
 - ☐ Notice that the table does not have a primary key. Although Access recommends that you assign a primary key in a table, Access lets you create a table without one.
 - ☐ Set the **EmployeeNum** as the primary key.
 - ☐ Set the **Format** property of the **DateHired** field to use *Short Date*.

- d. ☐ Create an input mask for the *Phone* field. Select the **Phone Number Input Mask**. Don't make any changes to the mask or placeholder character and select the **Without the symbols in the mask, like this** radio button. Complete the *Input Mask Wizard*.
 - e. ☐ Change all fields to be *Required*.
 - f. ☐ Save the table.
 - g. ☐ Switch to *Datasheet* view to ensure that the formatting shows as desired.
 - h. ☐ Adjust the field width of the *DateHired* field to **13** . Remember that you can select the column, right-click to open the context menu and then select **Field Width** to change the width to a specific size.
 - i. ☐ Adjust the field width of the *Phone* field to **16** .
 - j. ☐ Save and close the *Agents* table.
6. ☐ Open the *Listings* table in *Datasheet* view to help determine the type of relationship and the foreign key field. A one-to-many relationship exists between the *Agents* and *Listings* tables since an agent can list many different properties, but a property is listed by only one agent. The foreign key comes by taking the primary key field from the *1* table and adding it in as an additional field in the *M* table. In this case, the *EmployeeNum* should also be added into the *Listings* table. Notice that the *Listings* table has a field that stores the agent's name. However, it doesn't have the foreign key. To minimize redundant data, you will change the *Agent* field so that it will now store the agent's employee number instead of the agent's name. This requires changing the data values as well as field properties.
7. Edit the data values in the *Agent* field in the *Listings* table.
- a. ☐ Click the **arrow** to the right of the *Agent Field Name* and select **Sort A to Z**. Because the employee name values begin with the first name, the sort isn't alphabetical by last name. However, the sort makes it easier to change the data values since all the property listings by the same agent are grouped together.
 - b. ☐ Type **169** in the *Agent* field for *Gerardo Montoya*.
 - c. ☐ Change each of the six records for *Jack Johnstone* to have the value of **160** for the *Agent* field. After entering the first value, you can use copy and paste to enter the remaining values.
 - d. ☐ Continue changing the remaining records using the information in Table 2-35.

Table 2-35

Number of Records to Change	Agent Name	New Value for Agent Field
3	John Burgess	133
5	Kallyn Duarte	168
9	Kelly Weatherby	127
4	Rick Chung	151
4	Simon Bidou	103

- e. ☐ Remove the sort from the *Agent* field.
 - f. ☐ Save the table.
8. Switch to *Design* view in the *Listings* table to edit the properties of the foreign key.
- a. ☐ Select the **ListingAgent** field.
 - b. ☐ Change the field name to **ListingAgentNumber** . In this database, Placer Hills prefers that the foreign key have a unique name instead of choosing to use *FKEmployeeNum* as the name of the field.
 - c. ☐ Change the *Description* to read **Must match an EmployeeNum in the Agents table** .
 - d. ☐ Change the field size to **3** .
 - e. ☐ Save and close the table. Access warns you that the field size has been changed and that you may lose data. Your values meet this new size. Click **Yes**.
9. Create a one-to-many relationship between the *Agents* table and the *Listings* table.
- a. ☐ Open the *Relationships* window and add the two tables.
 - b. ☐ Enlarge the table objects, if needed, to see all of the fields.
 - c. ☐ Drag the **EmployeeNum** field from the *Agents* table on top of the **ListingAgentNumber** field in the *Listings* table as shown in Figure 2-96.
 - d. ☐ Select the correct choices to **Enforce Referential Integrity** and **Cascade Update Related Fields**.
 - e. ☐ Leave the *Cascade Delete Related Records* check box not selected. You do not want to delete property listing records just because an agent may leave the company. This enables you to keep a record of the listings.
 - f. ☐ Create the relationship.
 - g. ☐ Save the changes and close the *Relationships* window.
10. Open the *Agents* table in *Datasheet* view.

- a. ☐ Click to expand the records for Kelly Weatherby. There should be nine properties listed.
 - b. ☐ Close the *Agents* table.
11. Preview the data records in the *Listings* table for printing.
- a. ☐ Select the **Listings** table in the *Navigation Pane*.
 - b. ☐ Use *Print Preview* to show a preview of how the table will print.
 - c. ☐ Change the page to **Landscape** orientation.
 - d. ☐ Close the *Print Preview*.
12. ☐ Close the database.
13. ☐ Upload and save your project file.
14. ☐ Submit project for grading.
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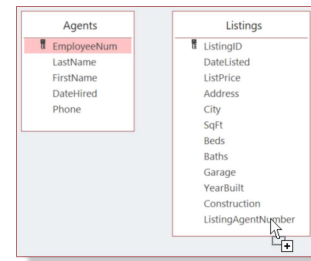


Figure 2-96 Drag the *EmployeeNum* to the *ListingAgentNumber* to create a relationship