Personal Insurance, Inc.

Shelly Cashman Access 2019 | Module 3: SAM Project 1a



Maintaining a Database

# GETTING STARTED

* Open the file **SC\_AC19\_3a\_*FirstLastName*\_1.accdb**, available for download from the SAM website.
* Save the file as **SC\_AC19\_3a\_*FirstLastName*\_2.accdb** by changing the “1” to a “2”.

If you do not see the .accdb file extension in the Save As dialog box, do not type it. The program will add the file extension for you automatically.

* Open the **\_GradingInfoTable** table and ensure that your first and last name is displayed as the first record in the table. If the table does not contain your name, delete the file and download a new copy from the SAM website.
* PROJECT STEPS

1. Personal Insurance, Inc. needs to update their database on a regular basis. For example, customers move, change coverage limits, and add and delete policies. In Query Design View, create an **Update** query based on the *Renters* table.
   1. Select the *PolicyNumber* and *PersonalProperty* fields from the *Renters* table.
   2. Add criteria to select only those records where the *PolicyNumber* field values **equal R11234**.
   3. Update the *PersonalProperty* field with **100,000** as the new field value.
   4. Save the query using **UpdatePersonalProperty** as the name, run it, and then close it. The query should update one record.
2. In Query Design View, create a **Make Table** query that selects all the fields from the *Homeowners* table in the same order that they are listed in the field list. Select all the fields individually for the design grid; do not use the (\*) asterisk.
   1. Add criteria to select only those records where the *PropertyDamage* field value is **greater than** **or equal to 750,000**.
   2. In the Make Table dialog box, assign the name **HighDamageAmts** to the new table.
   3. Save the query using **MakeHighDamageAmts** as the name, run it, and then close the query. The new *HighDamageAmts* table should contain five records.
3. In Query Design View, create a **Delete** query for the *Renters* table by performing the following tasks:
   1. Select the *PersonalProperty* field from the *Renters* table.
   2. Add criteria to delete only those records where the *PersonalProperty* field values **equal 45,000**.
   3. Save the query using **DeletePersonalProperty** as the name, run it, and then close it. The query should delete one record.
4. Customers who reside in West Virginia should be appended to the *MidAtlantic* table. In Query Design View, create an **Append** query for the *Customers* table.
   1. Select all the fields from the *Customers* table in the same order that they are listed in the field list. Select all the fields individually for the design grid; do not use the (\*) asterisk.
   2. Add the criteria **WV** to the *State* field.
   3. Select **MidAtlantic** as the destination table in the Append dialog box.
   4. Save the query using **AppendMidAtlantic** as the name, run it, and then close it. The query should append two records.
5. Create a **Split Form** for the *Umbrella* table and save it, using **Umbrella Split Form** as the name. Do not close the form.
6. Switch the *Umbrella Split Form* to **Form View**, navigate to the record with the *PolicyNumber* field value **U10002**, and **delete** the record. Close the *Umbrella Split Form*.
7. Because you are a regional manager for Personal Insurance, Inc., it is useful to know in which regions of the country each customer resides. Open the *Customers* table in Design View and perform the following tasks:
   1. Move the *Region* field so that it immediately follows the *PostalCode* field. Save the changes to the table design.
   2. Use the **Lookup Wizard** to change the *Region* field to a Lookup field. Select the option to type in the values that you want.
   3. Enter the values shown in Table 1 in the order shown.
   4. Limit the values to only the items in the list, and do not allow multiple values for the field.
   5. Save the changes to the table design, but do not close the table.

* Table 1: Values for Region Lookup Field

|  |
| --- |
| **MidAtlantic** |
| **Midwest** |
| **Northeast** |
| **Southeast** |

1. With the *Customers* table still open in Design View, **delete** the *CreditCard* field. Save the change to the table.
2. Switch to Datasheet View and perform the following tasks:
   1. Add the caption **US Region** to the *Region* field.
   2. Change the *Region* field value to **Midwest** for Joaquin Howe (who has a *CustomerID* field value of 11002). Close the *Customers* table.
3. Open the *Claims* table in Design View and perform the following tasks:
   1. Make the *ClaimID* field the **primary key**.
   2. Change the **field size** property for the *CustomerID* field to **6**.
   3. Change the **data type** for the *ClaimAmount* field to **Currency**.
   4. Add a new field **AmountDue** after the *Paid* field. The field is a calculated field. Use the expression **ClaimAmount - Paid** to calculate the field values.  
        
      Save the changes to the *Claims* table and then close it.
4. Open the *Umbrella* table in Design View and perform the following tasks:
   1. Change the **Decimal Places** property for the *Coverage* field to **0**.
   2. Change the **Format** property for the *PolicyNumber* field so that any letters in the field display in **uppercase**. (*Hint:* Use the > symbol.)
   3. Enter **Additional Liability Coverage** as the Description for the *Coverage* field.  
        
      Save the changes to the *Umbrella* table and then close it.
5. Open the *Homeowners* table in Datasheet View. Add a new field, to the end of the table (*Click to Add* column). The field is a calculated field with the currency format. Use the expression **[Liability]+[PropertyDamage]** to calculate the field values. Assign the name **TotalCoverage** to the field. Save the changes to the table and close it.
6. Open the *Claims* table in Datasheet View and perform the following tasks:
   1. Resize the *PolicyNumber*, *ClaimAmount*, and *ClaimApproved* columns to display the complete field names.
   2. Remove the *Total* row from the table.
   3. Sort the records in **ascending** order by *ClaimAmount*.  
        
      Save the changes to the *Claims* table and then close it.
7. Open the *Renters* table in Design View and make the following changes:
   1. Enter a **Validation Rule** for the *Deductible* field to ensure that values in the field **are greater than or equal to 0**.
   2. Enter the text, **Must be greater than or equal to 0** in the *Validation Text* property box.  
        
      Save the changes to the *Renters* table and then close it. (*Hint*: Because a validation rule was added, a warning message appears asking if you want to test the data. The data is valid, so ignore this message and continue saving the table.)
8. Open the Relationships window and add the *Customers* and *Renters* tables to the Relationships window. Create a one-to-many relationship between the *CustomerID* field in the *Customers* table and the *CustomerID* field in the *Renters* table. Make the relationship enforce referential integrity. Save the relationship.
9. Use the **Find Unmatched Query Wizard** to create a query to find all customers who do not have umbrella coverage.
   1. Select the *Customers* table as the table to display in query results.
   2. Select the *Umbrella* table as the related table.
   3. Select the *CustomerID* as the common field in both tables.
   4. Display **all** fields in the query result.
   5. Save the query using **UnmatchedUmbrella** as the name.  
        
      View the query results. There should be 38 records. Save the query, if necessary, and close it.
10. Open the *TotalCoverage* query in Design View. Use the **Expression Builder** to create a calculated field at the end of the query grid that calculates the sum of the *Liability* and *PropertyDamage* fields. Assign the alias (caption) **TotalCoverage** to the calculated field. Open the query in Datasheet View, and then close it, saving if necessary.
11. Open the *Renters* table in Datasheet View. Modify the expression in the *TotalCoverage* field to **subtract** the *Deductible* from the calculation. (*Hint*: The final expression will be **[Liability]+[PersonalProperty]-[Deductible]**). Save the changes to the table and close it.
12. Open the *Umbrella* table in Datasheet View. Add the **Total** row to the datasheet and calculate the **Average** for the *Premium* field. Save the changes to the table and close it.
13. Open the *Customers* table in Datasheet View and display the **Subdatasheet** for the customer with *CustomerID* **11004**. Update the *Deductible* for policy **R10223** to **$1,000**. Close the *Customers* table.

Save and close any open objects in your database. Compact and repair your database, close it, and then exit Access. Follow the directions on the SAM website to submit your completed project.