

COMP 1000 Lab 10

Question 1

The Custom Coffee Company is a small service organisation that provides coffee, tea and snacks to local charities. The company has an Access database that has been working well for one year. The owner believes that the database needs some maintenance. You have been asked to review the database and create several queries; these queries can be run periodically by the owner. Open the database *a07p2coffee* and save the databases as *a07p2coffee_Lastname_Firstname*.

- a. Open the *Sales Reps* table and replace the entry *Your_Name* with your name.
- b. Edit the *Profit Query* in Query Design view to create a **parameter query**. This parameter query should prompt the user for the following information: (1) What City (2) Enter Last Name of the Sales Rep. Edit the *Criteria* row of the appropriate fields to create the necessary prompts. Make sure the prompts are specified in square brackets .e.g., [What City?]. Test your query providing the city "Miami" as the city and "your name" . Results should contain 26 records. Save and close the query.
- c. Create a *Find Unmatched Query*, selecting *Customers* as the first table and *Orders* as the second table and using *CustomerID* as the common field. All fields are to be selected for the query result. Your result should show four inactive customers.
- d. Use the above query to create a *Make Table Query*, so that the four records are copied to a new table called *Inactive Customers*. Save the query as **Make Inactive Customers Table**. Verify that four records have been archived in the new table by clicking on the newly created table. Record the *CustomerID* of these records. Close the table after you have verified the results.
- e. Edit the above query to now create a Delete Query that deletes the inactive customers from the *Customers* table. [Hint: Switch to Design view of your previous query, choose *Delete Query Type*, right click on the *Orders* table and click on *remove table*. Then add the *CustomerIDs* that you had recorded in the previous step]. Save the query as **Delete Inactive Customers Query**.
- f. Using the *Query Wizard*, create a *Crosstab Query*. For this, use the *Profit Summary* query, choosing *LastName* as the row heading, *City* as the column heading, *Revenue* as the calculated field and then click *Sum* as the aggregate function. Save your query as **Profit_Summary_Crosstab**. View and verify the query results.
- g. Using the *Query Wizard*, create a **Find Duplicates Query** that finds *contact* duplicates in the *Customers* table. Name your query as *Find contact duplicates*. [Hint: Use the table *Customers* and the field *contact* as the duplicate-field value]. View and verify the query results.
- h. Compact and repair the database.
- i. Close the database. Close Access

Question 2

- a. Open the database *company* and save the databases as *company_Lastname_Firstname*.

- b. Open the Relationships window and add the *Contribution*, *Employee* and *JobCode* tables to it. Establish relationships between the tables, enforcing referential integrity and cascade-updating related fields. Save the changes.
- c. Use the Date() function to provide a default value for the field, **HireDate** in the *Employee* table.
- d. Add a data validation rule to make sure that *HireDate* can't be set to be in the future. If a hire date is not valid, the validation text message should say. "HireDate must not be in the future."
- e. Save and close the table.
- f. In the *Contribution* table, create a calculated field called **EmployeeTotal**. The calculation should be EmployeeContribution + CompanyMatch. The result type and format should be Currency.
- g. Create a simple query called **GetEmployeeTotal** to show the field *ZipCode* and *JobCode* from the *Employee* table and the EmployeeTotal from the Contribution Table.
- h. Use the *GetEmployeeTotal* query as a basis for a crosstabs query. The query should be called **Totals_Crosstab** and should use the *ZipCode* as the rowHeadings, the *JobCode* as the Column Heading and the sum of *EmployeeTotal* for the body of the table.
- i. Create a query called **WildcardQuery** that shows the fields *SSN*, *LastName*, *FirstName* and *HireDate* from the *Employee* table. Only show records of employees whose *LastName* starts with W who were hired on the 1st of January 2011 or later. Sort the results in ascending order based on Salary (but do not display the salary field).