

Unit 7: Database Development (Basic)

Assignment Solutions

Multiple-Choice Questions (MCQs)

- In which of the following types of databases, a single table or file stores all the data?
 - Flat-file database
 - Relational database
 - Distributed database
 - All of these

Ans. a

- DML stands for
 - Data Manipulation Language
 - Data Manipulative Language
 - Database Manipulation Language
 - Data Management Language

Ans. b

- Which of the following refers to uniquely identifying a record in a table?
 - Field
 - Primary key
 - Record
 - Foreign key

Ans. b

- Which of the following is not a data type available in MS Access 2010?
 - Text
 - Memo
 - Number
 - String

Ans. d

- Which of the following tools are used to create a form in MS Access 2010?
 - Form
 - Form Design
 - Blank Form
 - All of these

Ans. d

Very Short Answer Questions

- What is summarizing?

Ans. Summarizing refers to the procedure of retrieving the summary of data based on some defined criteria.

- What is a flat-file database?

Ans. A flat-file database refers to the type of database in which a single table or file stores all the data.

- Define a distributed database.

Ans. A distributed database refers to a central database that is distributed at multiple locations within a network.

- What is a relational database?

Ans. A relational database refers to a database in which data is stored in multiple tables. These tables are linked to one another through common fields.

- What do you understand by data definition language?

Ans. Data Definition Language (DDL) comprises SQL commands that are used for defining a database schema.

Short Answer Questions-I

- How DBMS reduces the inconsistency of data?

Ans. DBMS helps you to reduce data inconsistency as the entire data is stored at one central location. DBMS ensures that when data is changed at one location, the corresponding data is also changed at other locations. This process is known as propagating updates.

- How database ensures data security?

Ans. DBMS provides security to data by ensuring that only authorized users are able to access the database. Authorized users are those users whose credentials are verified through security checks. In other words, authorized users have the rights or permission to access or change the database.

- What do you understand by backup and recovery of database?

Ans. DBMS provides backup and recovery facilities to protect data from hardware and software failures. The backup is the copy of data that can be used for future references for the purpose of recovery of the database.

- What is a flat-file database?

Ans. A flat-file database refers to a type of database in which a single table or file stores all the data, for example, an employee database in an organization. The most common example of this type of database is a spreadsheet.

- Enlist some properties exhibited by a table in RDBMS.

Ans. The following are some of the properties exhibited by a table in RDBMS:

- Each table provides information about a single entity. This allows you to maintain information of each entity independently.
- A table does not contain duplicate values. This ensures that there is no repetition or redundancy in the table. Moreover, you can easily update the values in the table.

Short Answer Questions-II

1. Write the steps of closing and quitting a database in MS Access 2010.

Ans. Perform the following steps to close a database and quit the MS Access 2010 application:

1. Select the File tab in the Ribbon. The Backstage view appears.
2. Select the Close Database option.
3. The Office Database is closed and the Backstage view reappears.
4. Select the Exit option in the File tab to close the MS Access 2010 application.

2. How can you open a table in Design View?

Ans. Perform the following steps to open a table in the Design View:

1. Select the desired table from the Navigation Pane that you wish to open in Design View.
2. Right-click the table. A context menu appears.
3. Select the Design View option from the context menu. In the Design View, you can add a new field, modify a field such as change a field name, and delete a field.

3. What do you understand by editing a record in a table?

Ans. Editing a record means changing or modifying it in a table. You can edit records in any objects such as forms and reports in the Datasheet or Design View. You need to select a record before performing any tasks in a table. For example, for changing a record or deleting a record, you need to select that particular record that you wish to change or delete.

4. Write the steps to save a table with an appropriate name in MS Access 2010.

Ans. Perform the following steps to save and close a table:

1. Right-click the table tab. A context menu appears.
2. Select the Save option. The Save As dialog box appears.
3. Type the desired name in the Table Name text box.
4. Click the OK button to close the Save As dialog box. The table is saved.

5. Enlist the different types of forms available in the More Forms tools.

Ans. The More Forms tools contains the following forms:

- **Multiple Items:** Shows one or more records at a time. In multiple items form, data is arranged in rows and columns similar to an Excel worksheet.
- **Datasheet:** Creates a form that is similar to the Datasheet View in MS Access 2010.
- **Split Form:** Refers to a form that is divided into two parts where one part shows a simple form containing a single record and the other part shows the entire data in the Datasheet view.
- **Modal Dialog:** Provides a template for designing a form according to your requirements.
- **PivotChart:** Appears in the form of a chart that helps you to analyze and summarize data efficiently.
- **PivotTable:** Creates a form that contains a pivot table using which you can summarize data quickly.

Long Answer Questions

1. Write the steps of creating a form by using the form tool and Split Form tool.

Ans. Perform the following steps to create a form using the Form tool:

1. Open the database in which you want to create a form.
2. Double-click the desired table from the Navigation Pane that you want to open.
3. Select the Create tab on the Ribbon.
4. Click the Form button under the Forms group in the Create tab.
5. A form appears containing a record of the table.

Perform the following steps to create a split form:

1. Select the Create tab on the Ribbon.
2. Click the More Forms button under the Forms group in the Create tab. A drop-down list appears.
3. Select the Split Form option from the drop-down list. A split form appears.

2. How can you save a query in MS Access 2010?

Ans. Perform the following steps to save a query:

1. Click the File tab on the Ribbon. A Backstage view appears.
2. Select the Save option to save the query.
3. The Save As dialog box appears.
4. Type the name with which you want to save your query under the Query Name text box.
5. Click the OK button. The query is saved with the given name.

3. What are reports? What are the different ways of creating a report in a database? Write the steps of creating a report by using the Report Wizard tool.

Ans. A report refers to a database object that displays the summarized form of data in an attractive manner. Reports allow you to share your data files by converting them to PDF or XPS files or by exporting them to other file formats. You can create reports through various tools such as Report tool, Report Design tool, Blank Report tool, and Report Wizard. You can also create a report in different file formats, such as Portable Document Format (PDF). Perform the following steps to create a report by using Report Wizard:

1. Select the Create tab on the Ribbon.
2. Click the Report Wizard button under the Reports group in the Create tab. The first page of Report Wizard appears.
3. Click the down arrow of the Tables/Queries option. A drop-down list appears.
4. Select the desired table from the drop-down list.
5. Click the Add button to add the selected field in the Selected Fields list box. The selected field is added in the Selected Fields list box.
6. Repeat steps 5 and 6 to add more fields in the Selected Fields list box.
7. Click the Next button. A grouping level page appears in Report Wizard.
8. Select the fields that you want to group.
9. Click the Add button to add the field. The layout page of the Report Wizard appears.
10. Click the Next button. The report title page appears showing the table name using which you are preparing the report.

11. Type the desired name for the report title under the What title do you want for your report? text box. After providing the name for the report, you can preview the report or modify the design of the report by selecting the respective radio button from the Report Wizard.
12. Click the Finish button.

4. How can you delete a field from a table in a database?

Ans. Let's perform the following steps to delete a field:

1. Select the desired field that you wish to delete.
2. Right-click the City field. A context menu appears.
3. Select the Delete Rows option from the context menu. The selected field is deleted.
4. Save and close the table in the Design View.

5. Write the steps of creating a new table in the Datasheet View.

Ans. Let's perform the following steps to create a new table in the Datasheet View:

1. Open a database in which you wish to create a table.
2. Select the Create tab.
3. Click the Table button under the Tables group of the Create tab.
A new table named as Table1 appears in the Datasheet View with an 'ID' field and 'Click to Add' placeholder.
4. Click the down-arrow of 'Click to Add' placeholder. A drop-down list appears.
5. Select the desired field from the drop-down list. The Field1 text box appears.
6. Type the desired name for the new field in the Field1 text box.
7. Repeat steps 4 to 6 to add more fields.