Date: 04-10-2024   Total Marks: 20

Q-1 Create a database named **Employee_DB** with **two tables**: **Dept** and **Emp**. Insert one record into the Emp table and four records into the Dept table, representing the following departments: BCA, MCA, B.Sc. (IT), and M.Sc. (IT). **[05]**

Table: Emp

Column Name	Data Type	Remarks
Emp_ID	Int	Primary Key (Identity)
Emp_Name	Varchar(20)	Not Null
Emp_Sal	Int	-
Dept_Id	Int	-

Table: Dept

Column Name	Data Type
Dept_ID	Int
Dept_Name	Varchar(10)

Form Design:

Form Design Operations: (Marks: 15)

• By default, the Employee_Id textbox should be disabled.

• The **department combo box** should be populated from the Dept table, displaying department names. When a department is selected, its corresponding DeptID should be stored in the Emp table.

• **On clicking "Insert"**, the data entered in the form controls should be inserted into the Emp table, with the Employee_Id remaining disabled.

• **On clicking "View"**, all employee records should be displayed in a DataGridView.

• **Validation:** Name, Salary and Department are mandatory.
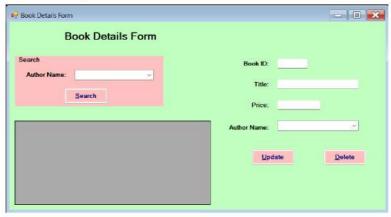
Date: 04-10-2024   Total Marks: 20

Q-1 Create a database named **BookStore_DB** with 2 tables: **Books** and **Authors**. Insert four records into the Books table and four records into the Authors table. **[Marks : 05]**

Table: Books

Column Name	Data Type	Additional Details
Book_ID	Int	Primary Key, Identity
Title	Varchar(50)	Not Null
Price	Decimal	-
Author_ID	Int	-

Table: Authors

Column Name	Data Type	Additional Details
Author_ID	Int	Primary Key, Identity
Author_Name	Varchar(30)	Not Null

Form Design:

Form Design Operations: [Marks: 15]

- **On Form load**, all textboxes, as well as the Update and Delete buttons, should be disabled. The Author combo box should display the author names from the Authors table.

- When the **"Search" button is clicked**, retrieve all data for books by the selected author and display it in the grid view. Enable all textboxes, along with the Update and Delete buttons.

- When a **record is selected from the grid view**, the corresponding fields should be populated in the textboxes.

- When the **"Update" button is clicked**, update the record corresponding to the selected book ID in the books table, and then disable all textboxes, along with the Update and Delete buttons.

- When the "Delete" button is clicked, delete the record corresponding to the selected book ID from the books table, and then disable all textboxes, along with the Update and Delete buttons.

Date: 04-10-2024   Total Marks: 20

Q-1   Create a database named **Movie_DB** with a table called Movie. Insert 2 records into the **Movie** table. **[Marks : 05]**

Table: Movie

Movie_ID	Int	Primary Key (Identity)
Movie_Title	Varchar(50)	Not Null
Director_Name	Varchar(20)	Not Null
Release_Yesr	Int	-
Genre	Vacrchar(10)	-

Form Design:

Form Design Operations: [Marks: 15]

• **On form load**, all input controls should be disabled, except the "Insert" and "Update" buttons, while the "Save" button and Movie_ID combo box should remain disabled. The Genre combo box should contain fixed values: "Action," "Drama," "Comedy," and "Horror."

• **On clicking "Insert"**, enable all input controls except the Movie_ID combo box. The "Save" button should be enabled, and the "Insert" and "Update" buttons should be disabled.

• **On clicking "Save"**, the movie details from the controls should be saved into the database. Fill all movie Ids in Movie_ID combo box and make the Movie_ID combo box enabled. Disable the "Save" button, while enabling the "Insert" and "Update" buttons.

• **On clicking "Update"**, populate the Movie_ID combo box with available movie IDs. Disable the "Insert" and "Update" buttons, and enable the "Save" button and Movie_ID combo box.

• When a **movie ID is selected** from the Movie_ID combo box, the corresponding movie details should be populated in the form controls.
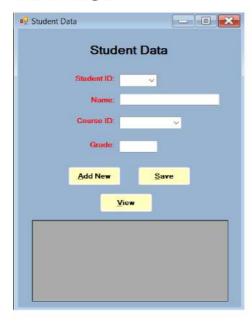
Date: 04-10-2024   Total Marks: 20

Q-1 Create a database named **Student_DB** with 2 tables: **Course** and **Student**. Insert 3 records into the **Course** table and 5 records into the **Student** table. [05]

Table: Student

Column Name	Data Type	Additional Details
Student_ID	Int	Primary Key, Identity
Name	Varchar(30)	Not Null
Course_ID	Int	-
Grade	Varchar(2)	Not Null

Table: Course

Column Name	Data Type	Additional Details
Course_ID	Int	Primary Key, Identity
Course_Name	Varchar(20)	Not Null

Form Design:

Form Design Operations: [20]

• **On Form Load**, all input controls and the "Save" button should be disabled.

• The **Course** combo box should display the course names from the **Course** table.

• **On clicking "Add New"**, enable all input controls, except the Student_ID. The "Save" button should also be enabled.

• **On clicking "Save"**, insert the student record into the **Student** table and disable the textboxes, along with the "Save" button.

• **On click of "View"**, fill all the data in grid view and also fill all students IDs in student ID combo box.

Date: 07-10-2024   Total Marks: 20

Q-1 Create a database named Inventory_DB with two tables: Category and Product. Insert one record into the Product table and four records into the Category table representing the following categories: Electronics, Furniture, Clothing, and Groceries. **[05 Marks]**

Table: Product

Column Name	Data Type	Remarks
Product_ID	Int	Primary Key (Identity)
Product_Name	Varchar(50)	Not Null
Price	Decimal(10)	-
Category_ID	Int	-

Table: Category

Column Name	Data Type
Category_ID	Int
Category_Name	Varchar(20)

Form Design:

Form Design Operations: (Marks: 15)

• Disable the Product_ID textbox by default.

• Populate the Category combo box from the Category table, displaying category names. When a category is selected, its Category_ID should be stored in the Product table.

• On clicking the "Insert" button, insert the product details into the Product table.

• On clicking "View", display all product records in a DataGridView.

• **Validation:** Product Name, Price, and Category selection are mandatory fields.

Date: 07-10-2024   Total Marks: 20

Q-1   Create a database named Restaurant_DB with two tables: Menu and Order. Insert four records into the Menu table representing different dishes available and insert one record into the Order table.
[05 Marks]

Table: Menu

Column Name	Data Type	Remarks
Menu_ID	Int	Primary Key (Identity)
Dish_Name	Varchar(50)	Not Null
Price	Decimal(10)	-

Table: Order

Column Name	Data Type	Remarks
Order_ID	Int	Primary Key (Identity)
Customer_Name	Varchar(20)	Not Null
Menu_ID	Varchar(20)	
Quantity	Int	
Total_Amount	Decimal(10)	

Form Design:

Form Design Operations: (Marks: 15)

- **On Form load,** all textboxes and the Insert and Delete buttons should be disabled. The Customer Name combo box should display the customer names from the Order table. Menu ID combo box should be filled from Menu table. It should display Dish Name.
- When the **"Search"** button is clicked, retrieve all data for orders by the selected Customer and display it in the DataGridView. Enable all textboxes, along with the Insert and Delete buttons.
- **Auto Calculation:** The Total_Amount should be automatically calculated as Price * Quantity based on the selected dish from the Menu combo box and the entered quantity.
- When the **"Insert"** button is clicked, insert the record in the Order table, and then disable all textboxes, along with the Insert and Delete buttons. Menu ID should be stored in the Order table of selected Dish Name.
- When the **"Delete"** button is clicked, delete the record corresponding to the selected Order_ID from the Order table, and then disable all textboxes, along with the Insert and Delete buttons.