



Nikhil Badyal  
001810501069

# ASSIGNMENT-1 LAB REPORT

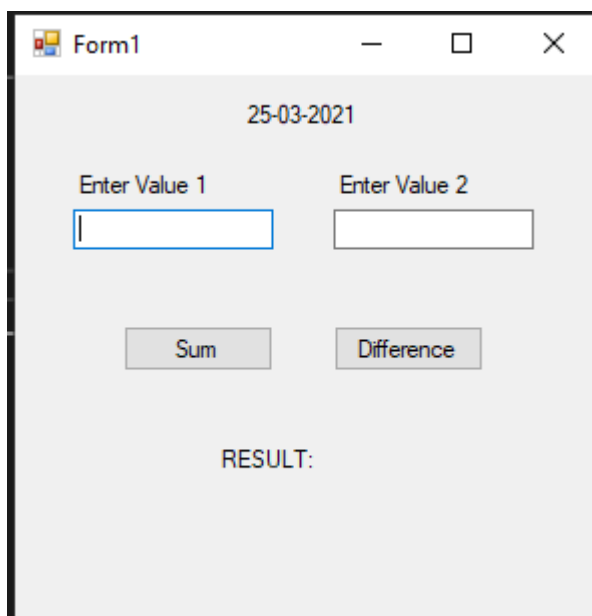
DBMS

Q1.

Develop an application using Visual Basic as follows.

User will enter two numbers. Provide button to add or to find the difference. Depending on the option result will be shown in result box. Add a suitable title to the screen. Whenever the form is loaded, also display current date in the title bar

LAYOUT: -

The image shows a screenshot of a Windows application window titled "Form1". The window has a standard Windows title bar with minimize, maximize, and close buttons. Inside the window, the date "25-03-2021" is displayed at the top center. Below the date, there are two input fields side-by-side. The first input field is labeled "Enter Value 1" and the second is labeled "Enter Value 2". Below these input fields, there are two buttons side-by-side. The first button is labeled "Sum" and the second button is labeled "Difference". At the bottom of the form, there is a label "RESULT:".

COMPONENTS USED: -

Here I have used two input fields which are used to take two numbers, two button which are used to print the result (sum or difference) and two labels which are used to print result and date.

## EVENT HANDLERS: -

The Buttons have event-Handlers associated with them. After the user types the input and clicks the button the event handler associated with them is called and the answer prints.

The event-handlers are show below: -

```
Private Sub sumButton_Click(ByVal sender As System.Object, ByVal e As  
System.EventArgs) Handles sumButton.Click
```

```
    Private Sub diffButton_Click(ByVal sender As System.Object, ByVal e As  
System.EventArgs) Handles diffButton.Click
```

## SPECIAL PROPERTIES

Here I am displaying the current date on the top of the form.

RESULT: -

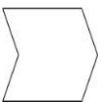
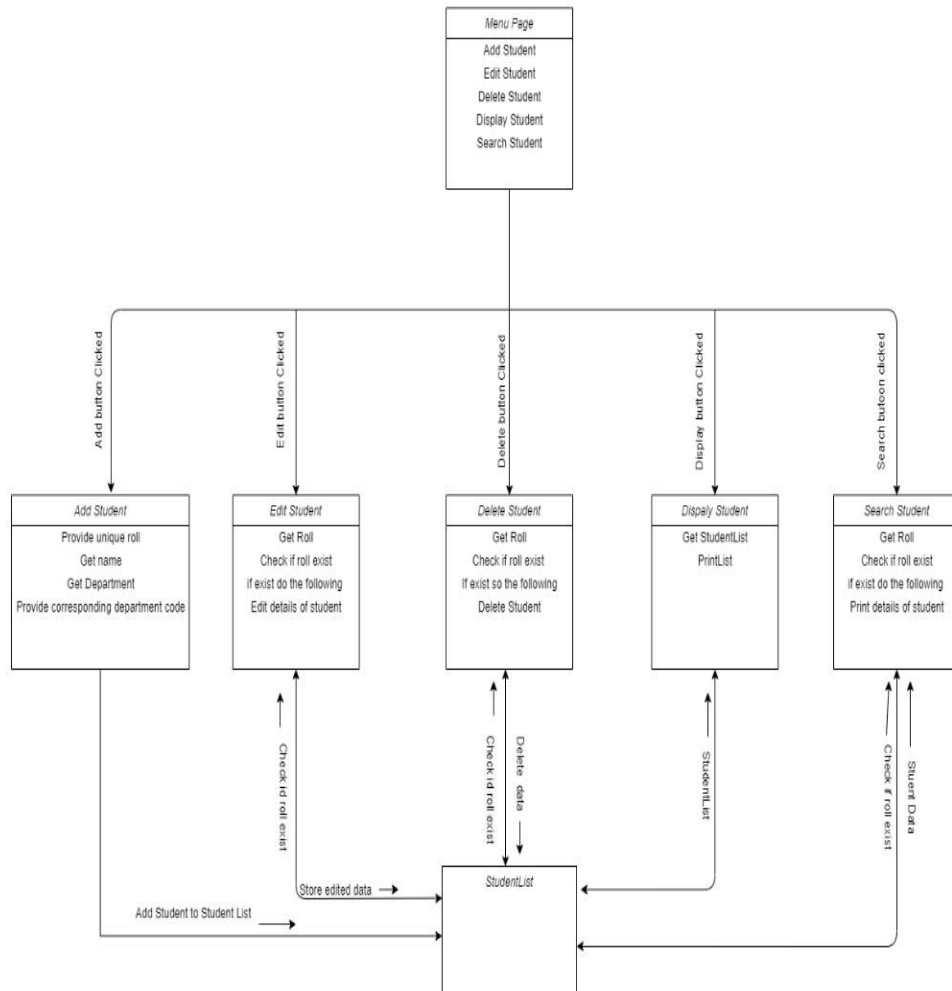
A screenshot of a Windows application window titled "Form1". The window has a standard Windows title bar with minimize, maximize, and close buttons. The main content area has a light gray background. At the top, the date "25-03-2021" is displayed. Below the date, there are two input fields. The first is labeled "Enter Value 1" and contains the number "3". The second is labeled "Enter Value 2" and contains the number "8". Below these fields are two buttons: "Sum" and "Difference". The "Sum" button is highlighted with a blue border. Below the buttons, the text "RESULT:" is displayed, followed by the number "11".

A screenshot of a Windows application window titled "Form1". The window has a standard Windows title bar with minimize, maximize, and close buttons. The main content area has a light gray background. At the top, the date "25-03-2021" is displayed. Below the date, there are two input fields. The first is labeled "Enter Value 1" and contains the number "3". The second is labeled "Enter Value 2" and contains the number "8". Below these fields are two buttons: "Sum" and "Difference". The "Difference" button is highlighted with a blue border. Below the buttons, the text "RESULT:" is displayed, followed by the number "-5".

*Q1.* Consider list of departments (dept code and name), list of students (roll, dept code, name, address and phone) preloaded in array. Now develop an application for the following.

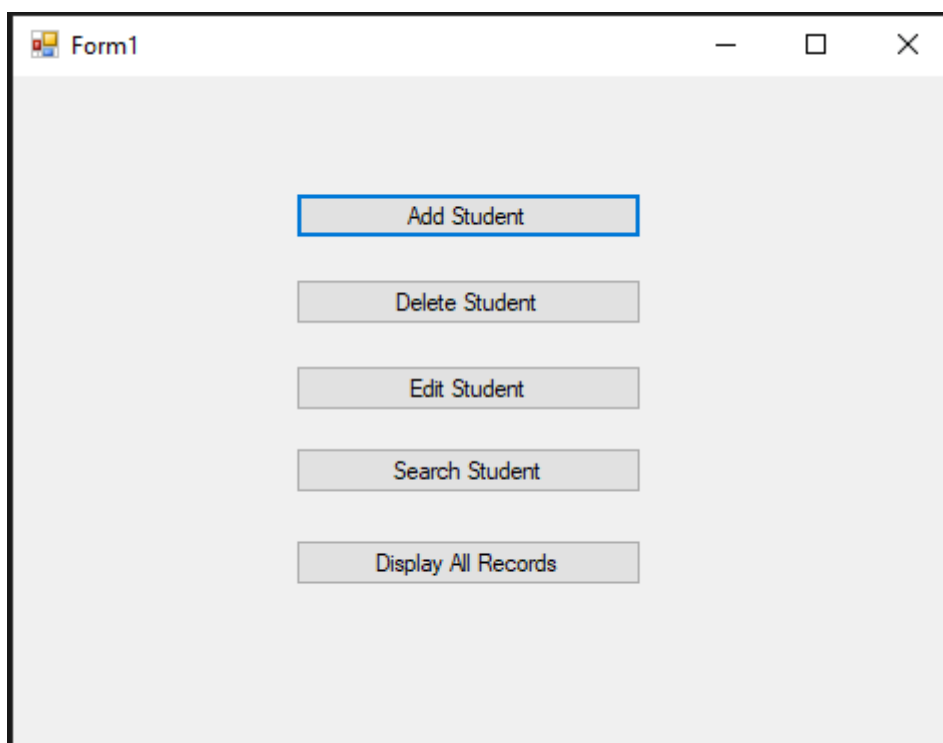
User may add/search/edit/delete/display all student record. While adding, ensure roll must be unique, a list of dept name to be shown from which user selects one and corresponding dept code to be stored. On collecting the data user may choose CANCEL/SAVE button to decide course of action. For searching user provides roll. If it exists details are shown else suitable message to be displayed. To delete user provides roll. If it does not exist then suitable message is to be displayed. To edit also user provides roll. If it exists user may be allowed to edit any field except roll. User may select CANCEL/SAVE to decide course of action. To display all records, at a time five records are to be shown. IT will also have PREV/NEXT button to display previous set and next set respectively. When first set is displayed PREV button must be disabled and at last set NEXT button must be disabled.

## SCHEMATIC DIAGRAM: -

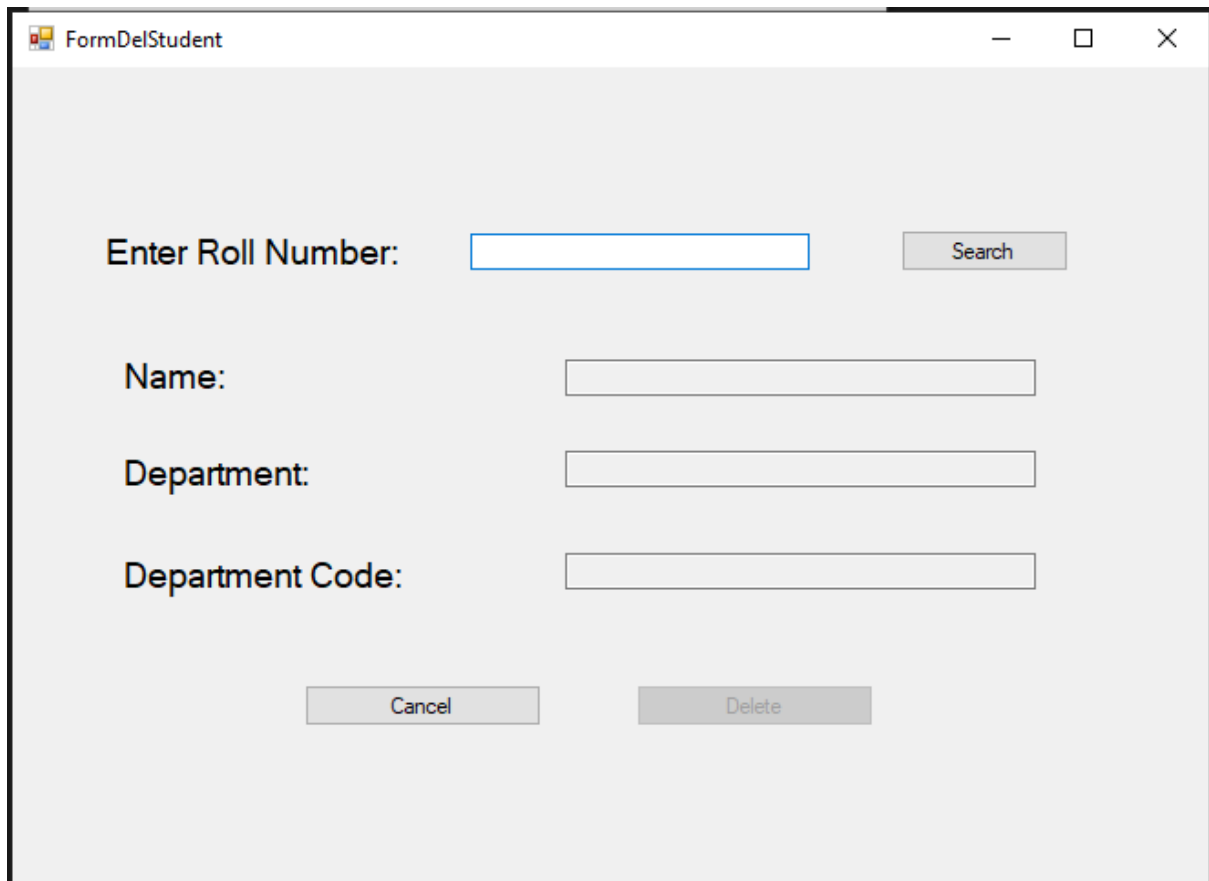


LAYOUT:-

MENU PAGE:-



## DELETE STUDENT PAGE:-

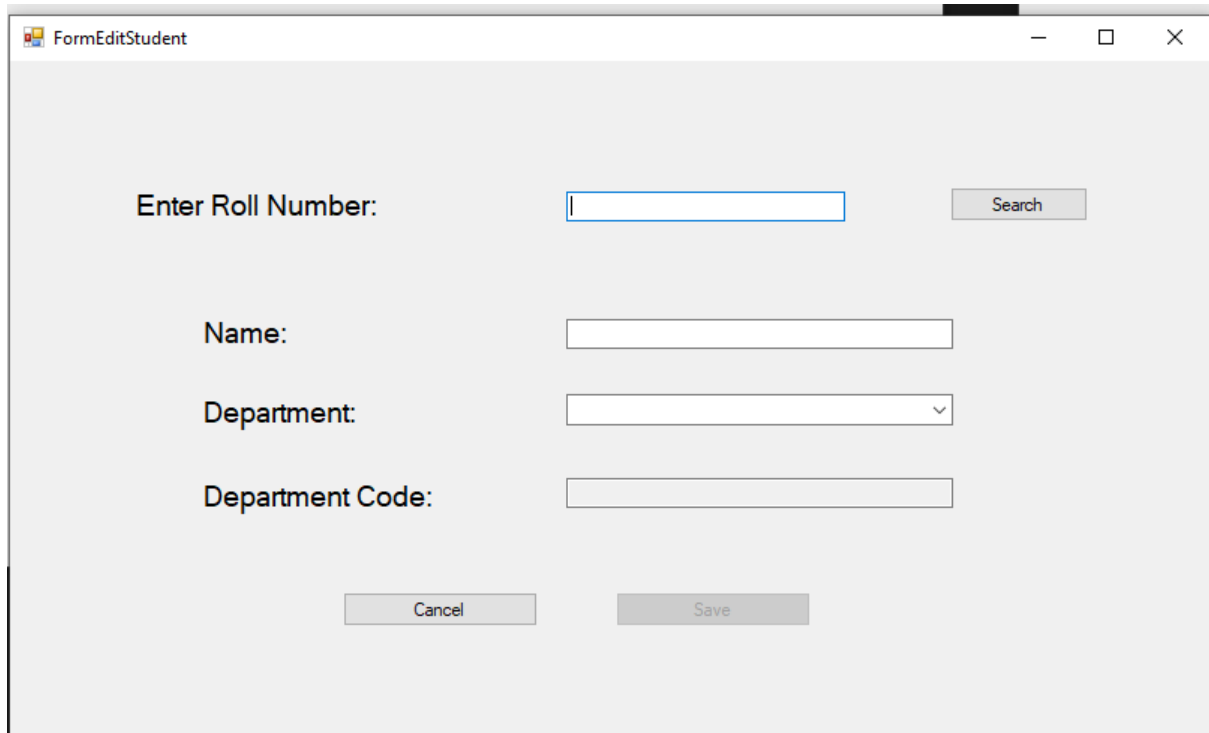


The screenshot displays a Windows application window titled "FormDelStudent". The window contains a form with the following elements:

- Enter Roll Number:** A text label followed by a text input field and a "Search" button.
- Name:** A text label followed by a text input field.
- Department:** A text label followed by a text input field.
- Department Code:** A text label followed by a text input field.
- Buttons:** "Cancel" and "Delete" buttons are positioned at the bottom of the form.

## EDIT STUDENT PAGE:-





FormEditStudent

Enter Roll Number:

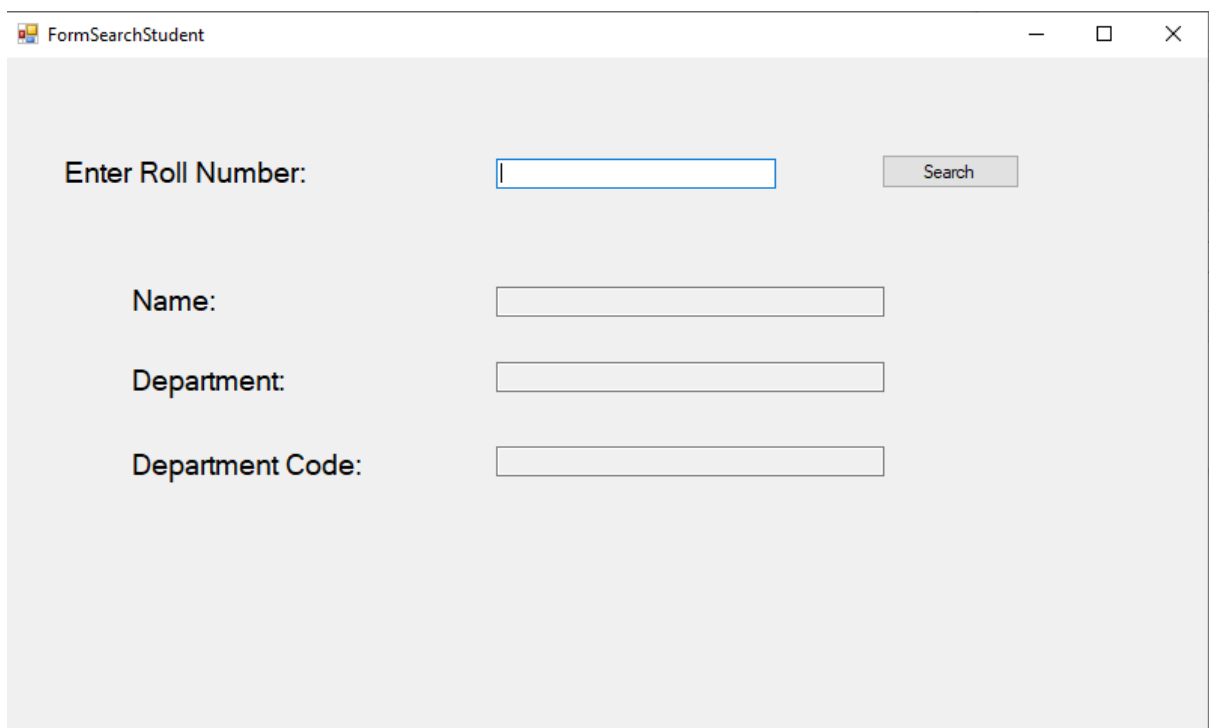
Name:

Department:

Department Code:

This is a screenshot of a Windows application window titled 'FormEditStudent'. The window has a standard Windows title bar with minimize, maximize, and close buttons. The main content area is light gray. It contains four input fields: 'Enter Roll Number:' with a text box and a 'Search' button to its right; 'Name:' with a text box; 'Department:' with a text box; and 'Department Code:' with a text box. At the bottom, there are two buttons: 'Cancel' and 'Save'.

SEARCH STUDENT PAGE:-



FormSearchStudent

Enter Roll Number:

Name:

Department:

Department Code:

This is a screenshot of a Windows application window titled 'FormSearchStudent'. The window has a standard Windows title bar with minimize, maximize, and close buttons. The main content area is light gray. It contains four input fields: 'Enter Roll Number:' with a text box and a 'Search' button to its right; 'Name:' with a text box; 'Department:' with a text box; and 'Department Code:' with a text box. There are no buttons at the bottom of this window.

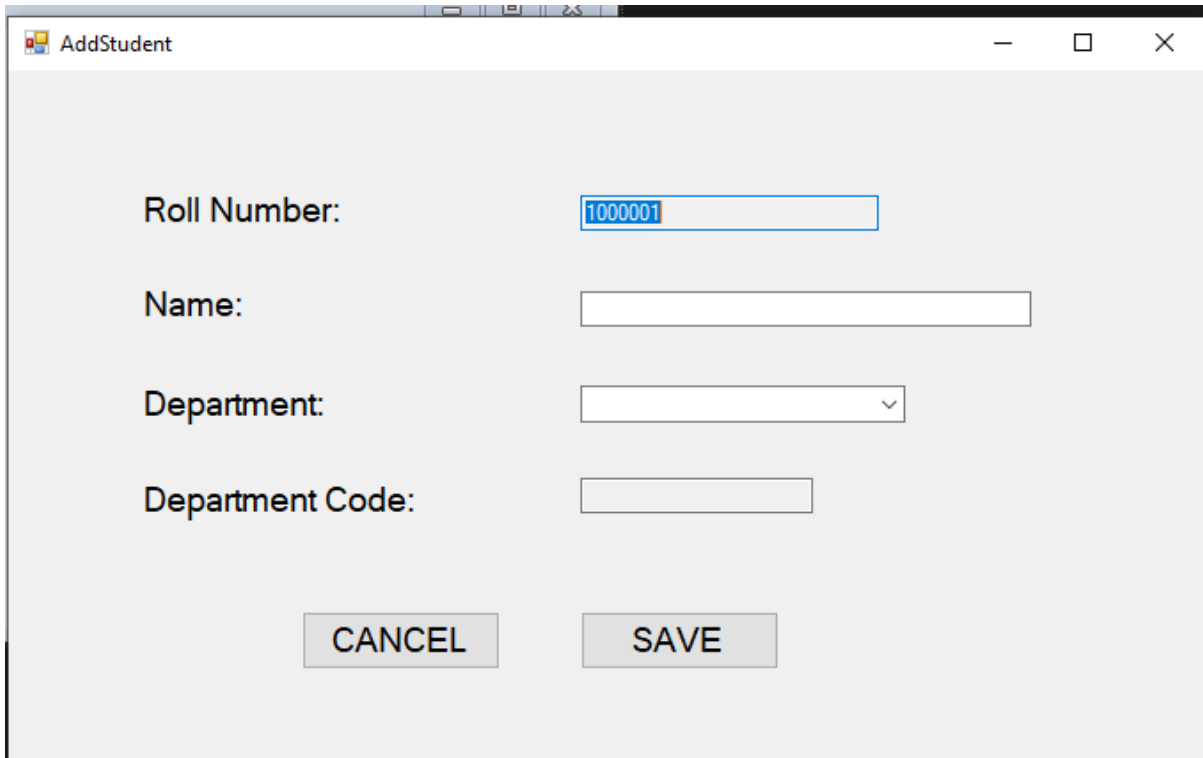
DISPLAY PAGE:-

	Roll No.	Name	Department	Department Code
▶	1000000	aman	CSE	D1

&lt; PREV

NEXT &gt;

## ADD STUDENT PAGE:-



The screenshot shows a window titled "AddStudent" with a standard Windows title bar (minimize, maximize, close buttons). The window contains four input fields arranged vertically on the left side, each with a corresponding label to its left:

- Roll Number:** A text box containing the value "1000001".
- Name:** An empty text box.
- Department:** A dropdown menu with a downward arrow on the right side.
- Department Code:** An empty text box.

At the bottom of the window, there are two buttons: "CANCEL" on the left and "SAVE" on the right.

## COMPONENTS USED:-

Here collectively I have used input fields (textbox and dropdown) which are used to take input from users, button which are used to print the result and two labels which are used to print result.

## EVENT HANDLERS:-

The Buttons have event-Handlers associated with them. After the user types the input and clicks the button the event handler associated with them is called and the answer prints.

The event-handlers are show below:-

## MENU-PAGE

```
Private Sub addst_Click(sender As Object, e As EventArgs) Handles addst.Click
    End Sub

    Private Sub delst_Click(sender As Object, e As EventArgs) Handles delst.Click
        End Sub

    Private Sub editst_Click(sender As Object, e As EventArgs) Handles editst.Click
        End Sub

    Private Sub srchst_Click(sender As Object, e As EventArgs) Handles srchst.Click
        End Sub

    Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
        End Sub

    Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
        End Sub
```

## ADD-PAGE

```
Private Sub FormAddStudent_Load(sender As Object, e As EventArgs) Handles MyBase.Load
    End Sub

    Private Sub dept_SelectedIndexChanged(sender As Object, e As EventArgs) Handles
dept.SelectedIndexChanged
        End Sub

    Private Sub btn_cancel_Click(sender As Object, e As EventArgs) Handles
btn_cancel.Click
        End Sub

    Private Sub btn_save_Click(sender As Object, e As EventArgs) Handles
btn_save.Click
        End Sub
```

## DELETE-PAGE

```
Private Sub search_del_Click(sender As Object, e As EventArgs) Handles
search_del.Click
    End Sub

    Private Sub del_cancel_Click(sender As Object, e As EventArgs) Handles
del_cancel.Click
    End Sub

    Private Sub del_save_Click(sender As Object, e As EventArgs) Handles
del_save.Click
    End Sub

    Private Sub FormDelStudent_Load(sender As Object, e As EventArgs) Handles
MyBase.Load

    End Sub
```

## DISPLAY-PAGE

```
Private Sub prev_btn_Click(sender As Object, e As EventArgs) Handles prev_btn.Click
    End Sub

    Private Sub next_btn_Click(sender As Object, e As EventArgs) Handles
next_btn.Click
    End Sub

    Private Sub FormAllRec_Load(sender As Object, e As EventArgs) Handles MyBase.Load
    End Sub

    Private Sub records_CellContentClick(sender As Object, e As
DataGridViewCellEventArgs) Handles records.CellContentClick
    End Sub
```

## EDIT-PAGE

```
Private Sub search_edit_Click(sender As Object, e As EventArgs) Handles
search_edit.Click
    End Sub

    Private Sub edit_cancel_Click(sender As Object, e As EventArgs) Handles
edit_cancel.Click
    End Sub

    Private Sub edit_save_Click(sender As Object, e As EventArgs) Handles
edit_save.Click
    End Sub

    Private Sub edit_dept_SelectedIndexChanged(sender As Object, e As EventArgs)
Handles edit_dept.SelectedIndexChanged
    End Sub

    Private Sub FormEditStudent_Load(sender As Object, e As EventArgs) Handles
MyBase.Load

    End Sub
```

## SEARCH-PAGE

```
Private Sub search_Click(sender As Object, e As EventArgs) Handles search.Click  
    End Sub
```

## SPECIAL PROPERTIES

Any error msg will be shown in a message dialogue box and if user enters a roll that does not exist in case editing, deleting or searching record of a student.