**for Invest4U users**

**Assignment 3 :**

/\* Student Name: Nirod Kumar Das

\* Student ID: 21240437

\* Date:20/10/2021

\* Assignment: 3

\* Assignment:Well designed Application for Invest4U for investment with different interest and different time period

\*/

**using** System**;**

**using** System**.**Collections**.**Generic**;**

**using** System**.**ComponentModel**;**

**using** System**.**Data**;**

**using** System**.**Drawing**;**

**using** System**.**Linq**;**

**using** System**.**Text**;**

**using** System**.**Threading**.**Tasks**;**

**using** System**.**Windows**.**Forms**;**

**using** System**.**IO**;**

**namespace** Das\_Nirod\_Assign3\_MS806

**{**

**public** **partial** class MainForm **:** Form

**{**

//hiding groupboxes as per design for form load

**public** MainForm**()**

**{**

InitializeComponent**();**

InvestmentgroupBox**.**Visible **=** **false;**

Inv\_Dtl\_Groupbox**.**Visible **=** **false;**

AmountGroupBox**.**Visible **=** **false;**

SearchGroupBox**.**Visible **=** **false;**

SearchResultListBox**.**Visible **=** **false;**

ButtonPanel**.**Visible **=** **false;**

SummaryGroupBox**.**Visible **=** **false;**

**}**

//Assigning no of field varriables to use in multiple buttons and calculations throughout the application

string Password**,** Name1**,** Email**,** Date**;**

int P\_counter **=** 0**,** Duration **=** 0**,** phoneno**,** TranscationID **=** 0**;**

const decimal Int\_Rate\_1 **=** 0.005000m**,** Int\_Rate\_2 **=** 0.006250m**,** Int\_Rate\_3 **=** 0.007125m**,** Int\_Rate\_4 **=** 0.011250m**,** Int\_Rate\_5 **=** 0.006000m**,** Int\_Rate\_6 **=** 0.007250m**,** Int\_Rate\_7 **=** 0.008125m**,** Int\_Rate\_8 **=** 0.012500m**;**

const int Duration1 **=** 1**,** Duration2 **=** 3**,** Duration3 **=** 5**,** Duration4 **=** 10**;**

const int Period1 **=** 12**,** Period2 **=** 36**,** Period3 **=** 60**,** Period4 **=** 120**;**

decimal Inv\_amount **=** 0m**,** Bonus **=** 25000m**,** FinalValue **=** 0m**,** Total1 **=** 0m**,** Total2 **=** 0m**,** Total3 **=** 0m**,** Total4 **=** 0m**,** Total5 **=** 0m**,** Return\_Investment**;**

StreamWriter Outputfile**;**

const string Password1**=** "ShowMeTheMoney#"**;**

const int FORMSTARTWIDTH **=** 650**,** FORMEXPANDWIDTH **=** 900**,** FORMSTARTHEIGHT **=** 500**,** FORMEXPANDHEIGHT **=** 800**;**

//Assigning starting height while form load

**private** void MainForm\_Load**(object** sender**,** EventArgs e**)**

**{**

**this.**Size **=** **new** Size**(**FORMSTARTWIDTH**,** FORMSTARTHEIGHT**);**

**}**

**private** void LoginButton\_Click**(object** sender**,** System**.**EventArgs e**)**

**{**

Password **=** PasswordTextBox**.**Text**;**

//for checking and comparing password entered by user is same with password saved on string variable

**if** **(**Password **==** Password1**)**

**{**

InvestmentgroupBox**.**Visible **=** **true;**

//expanding form if passwors matches

**this.**Size **=** **new** Size**(**FORMEXPANDWIDTH**,** FORMEXPANDHEIGHT**);**

//creating a streamwriter file , use of "append" for multiple inputs

Outputfile **=** File**.**AppendText**(**"Invest4U.txt"**);**

Outputfile**.**Close**();**

**}**

**else**

**{**

P\_counter**++;**

//for defining maximum no of attempt

**if** **(**P\_counter **==** 4**)**

**{**

MessageBox**.**Show**(**"Sorry you have exhusted maximum attempt"**,** "Login Error"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Exclamation**);**

**this.**Close**();**

**}**

**else**

**{**

MessageBox**.**Show**(**"Please enter correct password .No of attempt left " **+** **(**4 **-** P\_counter**),** "Invalid password"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Exclamation**);**

PasswordTextBox**.**Focus**();**

PasswordTextBox**.**SelectAll**();**

**return;**

**}**

**}**

AmountGroupBox**.**Visible **=** **true;**

WelcomePanel**.**Visible **=** **false;**

InvestmentgroupBox**.**Visible **=** **false;**

SearchGroupBox**.**Visible **=** **true;**

ButtonPanel**.**Visible **=** **true;**

**this.**Text **=** "Investment Page"**;**

**}**

**private** void DisplayButton\_Click**(object** sender**,** System**.**EventArgs e**)**

**{**

//exception handeling to check and process integer value

**try**

**{**

//taking input from customer

Inv\_amount **=** decimal**.**Parse**(**AmountTextBox**.**Text**);**

//exception handeling to check negative integer

**if** **(**Inv\_amount **>** 0**)**

**{**

//Use of If..Else if as requird by application to check if amount>1000000 or less and assigning interest

**if** **(**Inv\_amount **>** 100000**)**

**{**

Total1 **=** Total**(**Int\_Rate\_5**,** Period1**,** Inv\_amount**);**

Total2 **=** Total**(**Int\_Rate\_6**,** Period2**,** Inv\_amount**);**

Total3 **=** Total**(**Int\_Rate\_7**,** Period3**,** Inv\_amount**);**

Total4 **=** Total**(**Int\_Rate\_8**,** Period4**,** Inv\_amount**);**

//calling method Total for the Final value in radio button text box

P\_RadioButton1**.**Text **=** "1 Years 0.006000%" **+** " " **+** Total**(**Int\_Rate\_5**,** Period1**,** Inv\_amount**).**ToString**(**"C2"**);**

P\_RadioButton2**.**Text **=** "3 Years 0.007250%" **+** " " **+** Total**(**Int\_Rate\_6**,** Period2**,** Inv\_amount**).**ToString**(**"C2"**);**

P\_RadioButton3**.**Text **=** "5 Years 0.008125%" **+** " " **+** Total**(**Int\_Rate\_7**,** Period3**,** Inv\_amount**).**ToString**(**"C2"**);**

P\_RadioButton4**.**Text **=** "10 Years 0.012500%" **+** " " **+** Total**(**Int\_Rate\_8**,** Period4**,** Inv\_amount**).**ToString**(**"C2"**);**

**}**

**else** **if** **(**Inv\_amount **>** 0 **&&** Inv\_amount **<=** 100000**)**

**{**

Total1 **=** Total**(**Int\_Rate\_1**,** Period1**,** Inv\_amount**);**

Total2 **=** Total**(**Int\_Rate\_2**,** Period2**,** Inv\_amount**);**

Total3 **=** Total**(**Int\_Rate\_3**,** Period3**,** Inv\_amount**);**

Total4 **=** Total**(**Int\_Rate\_4**,** Period4**,** Inv\_amount**);**

//calling method Total for the Final value in radio button text box

P\_RadioButton1**.**Text **=** "1 Years 0.005000%" **+** " " **+** Total**(**Int\_Rate\_1**,** Period1**,** Inv\_amount**).**ToString**(**"C2"**);**

P\_RadioButton2**.**Text **=** "3 Years 0.006250%" **+** " " **+** Total**(**Int\_Rate\_2**,** Period2**,** Inv\_amount**).**ToString**(**"C2"**);**

P\_RadioButton3**.**Text **=** "5 Years 0.007125%" **+** " " **+** Total**(**Int\_Rate\_3**,** Period3**,** Inv\_amount**).**ToString**(**"C2"**);**

P\_RadioButton4**.**Text **=** "10 Years 0.011250%" **+** " " **+** Total**(**Int\_Rate\_4**,** Period4**,** Inv\_amount**).**ToString**(**"C2"**);**

**}**

**else**

**{**

MessageBox**.**Show**(**"Please enter a Positive Integer"**,** "Error"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Exclamation**);**

AmountTextBox**.**Focus**();**

AmountTextBox**.**SelectAll**();**

**return;**

**}**

**}**

**else**

**{**

MessageBox**.**Show**(**"Please enter a poitive value"**,** "invalid input"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Exclamation**);**

AmountTextBox**.**Focus**();**

AmountTextBox**.**SelectAll**();**

**return;**

**}**

**}**

**catch**

**{**

MessageBox**.**Show**(**"Please enter integer number"**,** "invalid input"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Exclamation**);**

AmountTextBox**.**Focus**();**

AmountTextBox**.**SelectAll**();**

**return;**

**}**

InvestmentgroupBox**.**Visible **=** **true;**

AmountGroupBox**.**Enabled **=** **false;**

SearchGroupBox**.**Visible **=** **false;**

SummarButton**.**Visible **=** **false;**

SummaryGroupBox**.**Visible **=** **false;**

SearchResultListBox**.**Visible **=** **false;**

**}**

//Use of Method to calculate total

**private** decimal Total**(**decimal InterestRate**,** int duration**,** decimal InterestReturn**)**

**{**

**for** **(**int count **=** 0**;** count **<** duration**;** count**++)**

**{**

InterestReturn **=** InterestReturn **+** **(**InterestRate **\*** InterestReturn**);**

**}**

FinalValue **=** Math**.**Round**(**InterestReturn**,** 2**);**

**return** InterestReturn**;**

**}**

**private** void ProceedButton\_Click**(object** sender**,** System**.**EventArgs e**)**

**{**

//Use of If..Else if for use different radio buttons and assigning values as per required

**if** **(**P\_RadioButton1**.**Checked**)**

**{**

Duration **=** Duration1**;**

Total5 **=** Math**.**Round**(**Total1**,** 2**);**

**}**

**else** **if** **(**P\_RadioButton2**.**Checked**)**

**{**

Duration **=** Duration2**;**

Total5 **=** Math**.**Round**(**Total2**,** 2**);**

**}**

**else** **if** **(**P\_RadioButton3**.**Checked**)**

**{**

**if** **(**Inv\_amount **>** 1000000**)**

**{**

Total5 **=** Math**.**Round**((**Total3 **+** Bonus**),** 2**);**

**}**

**else**

**{**

Total5 **=** Math**.**Round**(**Total3**,** 2**);**

**}**

Duration **=** Duration3**;**

**}**

**else** **if** **(**P\_RadioButton4**.**Checked**)**

**{**

**if** **(**Inv\_amount **>** 1000000**)**

**{**

Total5 **=** Math**.**Round**((**Total4 **+** Bonus**),** 2**);**

**}**

**else**

**{**

Total5 **=** Math**.**Round**(**Total4**,** 2**);**

**}**

Duration **=** Duration4**;**

**}**

//Exception Handeling to check if the user didnt click any radio buttons

**else**

**{**

MessageBox**.**Show**(**"Please Select an Option"**,** "Error"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Exclamation**);**

**return;**

**}**

Return\_Investment **=** Total5 **-** Inv\_amount**;**

//Use of DateTime to allocate System generated Date of traction

DateTime Currenttime **=** DateTime**.**Now**;**

Date **=** Currenttime**.**ToShortDateString**();**

DateLabel**.**Text **=** Date**;**

Boolean UniqueNum**;**

//Generating a Random no And checking If it's Unique using do while loop and calling Unique method

**do**

**{**

Random Trans\_ID **=** **new** Random**();**

TranscationID **=** Trans\_ID**.**Next**(**10000000**,** 99999999**);**

UniqueNum **=** IsUnique**(**TranscationID**);**

**}**

**while** **(!**UniqueNum**);**

//After checking if random no is Unique , assigning it to TransactionID Label

Trans\_ID\_Label**.**Text **=** TranscationID**.**ToString**();**

Inv\_Dtl\_Groupbox**.**Visible **=** **true;**

InvestmentgroupBox**.**Enabled **=** **false;**

AmountGroupBox**.**Enabled **=** **false;**

**}**

//Method to check If the random no is unique or not

**private** Boolean IsUnique**(**int searchstring**)**

**{**

int TransLength **=** 8**;**

//for Opening the text file

StreamReader inputfile **=** File**.**OpenText**(**"Invest4U.txt"**);**

**while** **(!**inputfile**.**EndOfStream**)**

**{**

**if** **(**searchstring**.**Equals**(**inputfile**.**ReadLine**()))**

**{**

inputfile**.**Close**();**

**return** **false;**

**}**

**for** **(**int i **=** 0**;** i **<** TransLength **-** 1**;** i**++)**

**{**

inputfile**.**ReadLine**();**

**}**

**}**

inputfile**.**Close**();**

//closing text file after checking uniquness in while loop

**return** **true;**

**}**

**private** void SubmitButton\_Click**(object** sender**,** System**.**EventArgs e**)**

**{**

string Name**;**

Name **=** Name\_TextBox**.**Text**;**

//exception handeling to check if Name is not null

**if** **(**Name\_TextBox**.**Text **!=** ""**)**

**{**

Name1 **=** Name**;**

**}**

**else**

**{**

MessageBox**.**Show**(**"Name Can't be blank"**,** "Error"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Exclamation**);**

Name\_TextBox**.**Focus**();**

Name\_TextBox**.**SelectAll**();**

**return;**

**}**

//exception handeling to check email

**if** **(**Email\_TextBox**.**Text **!=** "" **&&** Email\_TextBox**.**Text**.**Contains**(**"@"**)** **&&** Email\_TextBox**.**Text**.**Contains**(**"."**))**

**{**

Email **=** Email\_TextBox**.**Text**;**

**}**

**else**

**{**

MessageBox**.**Show**(**"invalid Email Address"**,** "invalid input"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Exclamation**);**

Email\_TextBox**.**Focus**();**

Email\_TextBox**.**SelectAll**();**

**return;**

**}**

//exception handeling to check length of phone no

**if** **(**Phone\_TextBox**.**Text**.**Length **==** 10**)**

**{**

phoneno **=** int**.**Parse**(**Phone\_TextBox**.**Text**);**

**}**

**else**

**{**

MessageBox**.**Show**(**"please enter only 10 digit mobile number"**,** "Error"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Exclamation**);**

Phone\_TextBox**.**Focus**();**

Phone\_TextBox**.**SelectAll**();**

**return;**

**}**

//printing result in formated message

DialogResult Output **=** MessageBox**.**Show**(**"Your transaction ID is - " **+** TranscationID **+** "\n" **+** "Transaction Date - " **+** Date **+** "\n" **+** "Email ID - " **+** Email **+** "\n" **+** "Full Name - " **+** Name **+** "\n" **+** "Phone Number" **+** phoneno **+** "\n" **+** "Total Amount Invested - €" **+** Inv\_amount **+** "\n" **+** "For total period - " **+** Duration **+** "\n" **+** "The maturity value will be - €" **+** Total5**,** "Comfirmation"**,** MessageBoxButtons**.**YesNo**,** MessageBoxIcon**.**Information**);**

//To give option, if the user want to procced or not

**if** **(**Output **==** DialogResult**.**Yes**)**

**{**

**try**

**{**

MessageBox**.**Show**(**"Successful Transaction!"**,** "Success"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Information**);**

StreamWriter OutputFile**;**

//to write data to text file

OutputFile **=** File**.**AppendText**(**"Invest4U.txt"**);**

OutputFile**.**WriteLine**(**TranscationID **+** "\n" **+** Date **+** "\n" **+** Email **+** "\n" **+** Name **+** "\n" **+** phoneno **+** "\n" **+** Inv\_amount **+** "\n" **+** Duration **+** "\n" **+** Return\_Investment**);**

OutputFile**.**Close**();**

//to back to main menu for next entry

AmountTextBox**.**Clear**();**

P\_RadioButton1**.**Checked **=** **false;**

P\_RadioButton2**.**Checked **=** **false;**

P\_RadioButton3**.**Checked **=** **false;**

P\_RadioButton4**.**Checked **=** **false;**

Name\_TextBox**.**Clear**();**

Email\_TextBox**.**Clear**();**

Phone\_TextBox**.**Clear**();**

Trans\_ID\_Label**.**Text **=** ""**;**

DateLabel**.**Text **=** ""**;**

SearchTextBox**.**Clear**();**

SearchResultListBox**.**Items**.**Clear**();**

InvestmentgroupBox**.**Visible **=** **false;**

InvestmentgroupBox**.**Enabled **=** **true;**

Inv\_Dtl\_Groupbox**.**Visible **=** **false;**

Inv\_Dtl\_Groupbox**.**Enabled **=** **true;**

AmountGroupBox**.**Enabled **=** **true;**

SummarButton**.**Visible **=** **true;**

SearchGroupBox**.**Visible **=** **true;**

Trans\_ID\_ListBox**.**Items**.**Clear**();**

**}**

**catch**

**{**

MessageBox**.**Show**(**"Transaction Error "**,** "Error"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Error**);**

**}**

**}**

**else**

**{**

//Message box to confirm cancellation of transaction

MessageBox**.**Show**(**"Cancelling Investment"**,** "Cancellation Confirmation"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Warning**);**

//To back to main menu for new input

AmountTextBox**.**Clear**();**

P\_RadioButton1**.**Checked **=** **false;**

P\_RadioButton2**.**Checked **=** **false;**

P\_RadioButton3**.**Checked **=** **false;**

P\_RadioButton4**.**Checked **=** **false;**

Name\_TextBox**.**Clear**();**

Email\_TextBox**.**Clear**();**

Phone\_TextBox**.**Clear**();**

Trans\_ID\_Label**.**Text **=** ""**;**

DateLabel**.**Text **=** ""**;**

SearchTextBox**.**Text **=** ""**;**

SearchResultListBox**.**Items**.**Clear**();**

InvestmentgroupBox**.**Visible **=** **false;**

InvestmentgroupBox**.**Enabled **=** **true;**

Inv\_Dtl\_Groupbox**.**Visible **=** **false;**

Inv\_Dtl\_Groupbox**.**Enabled **=** **true;**

AmountGroupBox**.**Enabled **=** **true;**

SummarButton**.**Visible **=** **true;**

SearchGroupBox**.**Visible **=** **true;**

Trans\_ID\_ListBox**.**Items**.**Clear**();**

**}**

**}**

**private** void SummarButton\_Click**(object** sender**,** EventArgs e**)**

**{**

int TotalTransactions **=** 0**;**

decimal TotalAccuredInterest **=** 0m**,** Total\_Investment**=**0m**,** TotalSumTenure **=** 0**,** i **=** 0**;**

//opening text file

StreamReader Outputfile **=** File**.**OpenText**(**"Invest4U.txt"**);**

//to read until the file ends and assiging varriables

**while** **(!**Outputfile**.**EndOfStream**)**

**{**

i**++;**

string Line **=** Outputfile**.**ReadLine**();**

**if** **(**i **==** 1**)**

**{**

Trans\_ID\_ListBox**.**Items**.**Add**(**Line**);**

TotalTransactions**++;**

**}**

**else** **if** **(**i **==** 6**)**

**{**

Total\_Investment **+=** int**.**Parse**(**Line**);**

**}**

**else** **if** **(**i **==** 7**)**

**{**

TotalSumTenure **+=** int**.**Parse**(**Line**);**

**}**

**else** **if** **(**i **==** 8**)**

**{**

TotalAccuredInterest **+=** decimal**.**Parse**(**Line**);**

i **=** 0**;**

**}**

**}**

//calculation ofsummary data

TotalAmountLable**.**Text **=** Total\_Investment**.**ToString**(**"c2"**);**

TotalInterestlabel**.**Text **=** **(**TotalAccuredInterest**).**ToString**(**"c2"**);**

AvgAmountLable**.**Text **=** Average**(**Total\_Investment**,**TotalTransactions**).**ToString**(**"c2"**);**

AvgDurationLabel**.**Text **=** Average**(**TotalSumTenure**,**TotalTransactions**).**ToString**();**

Outputfile**.**Close**();**

SummaryGroupBox**.**Visible **=** **true;**

**}**

//Method for calculation of Average

**private** decimal Average**(**decimal First\_No**,**int Second\_No**)**

**{**

decimal Avg**;**

Avg**=**Math**.**Round**(** First\_No **/** Second\_No**,**2**);**

**return** Avg **;**

**}**

//to clear data and back to main menu

**private** void ClearButton\_Click**(object** sender**,** EventArgs e**)**

**{**

AmountTextBox**.**Clear**();**

P\_RadioButton1**.**Checked **=** **false;**

P\_RadioButton2**.**Checked **=** **false;**

P\_RadioButton3**.**Checked **=** **false;**

P\_RadioButton4**.**Checked **=** **false;**

Name\_TextBox**.**Clear**();**

Email\_TextBox**.**Clear**();**

Phone\_TextBox**.**Clear**();**

Trans\_ID\_Label**.**Text **=** ""**;**

DateLabel**.**Text **=** ""**;**

InvestmentgroupBox**.**Visible **=** **false;**

InvestmentgroupBox**.**Enabled **=** **true;**

Inv\_Dtl\_Groupbox**.**Visible **=** **false;**

Inv\_Dtl\_Groupbox**.**Enabled **=** **true;**

AmountGroupBox**.**Enabled **=** **true;**

SearchTextBox**.**Clear**();**

Trans\_ID\_ListBox**.**Items**.**Clear**();**

AvgAmountLable**.**Text **=** ""**;**

TotalAmountLable**.**Text **=** ""**;**

TotalInterestlabel**.**Text **=** ""**;**

AvgDurationLabel**.**Text **=** ""**;**

SearchGroupBox**.**Visible **=** **true;**

SummarButton**.**Visible **=** **true;**

SearchResultListBox**.**Items**.**Clear**();**

SummaryGroupBox**.**Visible **=** **false;**

TransID\_RadioButton**.**Checked **=** **false;**

EmailRadioButton**.**Checked **=** **false;**

DateRadioButton**.**Checked **=** **false;**

**}**

//For exit from application

**private** void ExitButton\_Click**(object** sender**,** EventArgs e**)**

**{**

**this.**Close**();**

**}**

**private** void SearchButton\_Click**(object** sender**,** EventArgs e**)**

**{**

//calling searching method

IsSearching**();**

**}**

//method for searching

**private** void IsSearching**()**

**{**

string TransactionID1 **=** ""**,** Date1 **=** ""**,** Email1**=**""**,** Name1**=**""**,** PhoneNo1**=**""**,** Inv\_Amount1**=**""**,** Year1**=**""**,** Inv\_return1**=**""**;**

int TransLength **=** 8**;**

StreamReader Outputfile **=** File**.**OpenText**(**"Invest4U.txt"**);**

**while** **(!**Outputfile**.**EndOfStream**)**

**{**

**for** **(**int i **=** 0**;** i **<** TransLength **-** 1**;** i**++)**

**{**

//assigning and storing varriables

TransactionID1 **=** Outputfile**.**ReadLine**();**

Date1 **=** Outputfile**.**ReadLine**();**

Email1 **=** Outputfile**.**ReadLine**();**

Name1 **=** Outputfile**.**ReadLine**();**

PhoneNo1 **=** Outputfile**.**ReadLine**();**

Inv\_Amount1 **=** Outputfile**.**ReadLine**();**

Year1 **=** Outputfile**.**ReadLine**();**

Inv\_return1 **=** Outputfile**.**ReadLine**();**

//For exception handeling to check if any Radio Button is checked or not

**if** **(**TransID\_RadioButton**.**Checked **||** DateRadioButton**.**Checked **||** EmailRadioButton**.**Checked**)**

**{**

//To compare and print if Transaction ID match

**if** **(**TransID\_RadioButton**.**Checked **&&** SearchTextBox**.**Text**.**Equals**(**TransactionID1**))**

**{**

SearchResultListBox**.**Items**.**Add**(**TransactionID1**);**

SearchResultListBox**.**Items**.**Add**(**Date1**);**

SearchResultListBox**.**Items**.**Add**(**Email1**);**

SearchResultListBox**.**Items**.**Add**(**Name1**);**

SearchResultListBox**.**Items**.**Add**(**PhoneNo1**);**

SearchResultListBox**.**Items**.**Add**(**Inv\_Amount1**);**

SearchResultListBox**.**Items**.**Add**(**Year1**);**

SearchResultListBox**.**Items**.**Add**(**Inv\_return1**);**

**}**

//To Compare and Print if Date Matched

**else** **if** **(**DateRadioButton**.**Checked **&&** SearchTextBox**.**Text**.**Equals**(**Date1**))**

**{**

SearchResultListBox**.**Items**.**Add**(**TransactionID1**);**

SearchResultListBox**.**Items**.**Add**(**Date1**);**

SearchResultListBox**.**Items**.**Add**(**Email1**);**

SearchResultListBox**.**Items**.**Add**(**Name1**);**

SearchResultListBox**.**Items**.**Add**(**PhoneNo1**);**

SearchResultListBox**.**Items**.**Add**(**Inv\_Amount1**);**

SearchResultListBox**.**Items**.**Add**(**Year1**);**

SearchResultListBox**.**Items**.**Add**(**Inv\_return1**);**

**}**

//To compare and Print if Email Match

**else** **if** **(**EmailRadioButton**.**Checked **&&** SearchTextBox**.**Text**.**Equals**(**Email1**))**

**{**

SearchResultListBox**.**Items**.**Add**(**TransactionID1**);**

SearchResultListBox**.**Items**.**Add**(**Date1**);**

SearchResultListBox**.**Items**.**Add**(**Email1**);**

SearchResultListBox**.**Items**.**Add**(**Name1**);**

SearchResultListBox**.**Items**.**Add**(**PhoneNo1**);**

SearchResultListBox**.**Items**.**Add**(**Inv\_Amount1**);**

SearchResultListBox**.**Items**.**Add**(**Year1**);**

SearchResultListBox**.**Items**.**Add**(**Inv\_return1**);**

**}**

//Exception handeling for empty text box

**else** **if** **(**SearchTextBox**.**Text **==** ""**)**

**{**

MessageBox**.**Show**(**"Search Teaxtbox can't be blank"**,** "Error"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Information**);**

**return;**

**}**

/\*else if(!(SearchTextBox.Text.Equals(TransactionID1) || SearchTextBox.Text.Equals(Date1) || SearchTextBox.Text.Equals(Email1)))

/{

MessageBox.Show("Search Teaxtbox NOT FIND", "Error", MessageBoxButtons.OK, MessageBoxIcon.Information);

return;

}\*/

**}**

**else**

**{**

MessageBox**.**Show**(**"Please Choose an option to search"**,** "Error"**,** MessageBoxButtons**.**OK**,** MessageBoxIcon**.**Error**);**

**return;**

**}**

**}**

**}**

Outputfile**.**Close**();**

SearchResultListBox**.**Visible **=** **true;**

**}**

**}**

**}**