***Lab 3- Average Units Shipped By Employee***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Event Handler: btnExit\_Click | | | | |
| User action | Input Case | Desired Response | Control Object | Event |
| User press enter on Exit Button |  | The application ends | btnExit | Click |
| User clicks with mouse on Exit Button |  | The application ends | btnExit | Click |
| User presses Alt + x to Exit |  | The application ends | btnExit | Click |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Event Handler: Closing form | | | | |
| User action | Input Case | Desired Response | Control Object | Event |
| User clicks on close(X) button |  | To exit from the application | Close (X) | Click |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Event Handler: btnReset\_Click | | | | |
| User action | Input Case | Desired Response | Control Object | Event |
| User clicks with mouse on the Reset Button |  | Call function InitializeAll()  txtUnitsPerDay.Text = ""  txtUnitsPerDay.Focus()  txtUnitsPerDay.ReadOnly() = False  btnEnter.Enabled() = True  txtEmp1WeeklyUnits.Text = ""  txtEmp2WeeklyUnits.Text = ""  txtEmp3WeeklyUnits.Text = ""  lblDaysCounter.Text = ""  lblAvgEmp1.Text = ""  lblAvgEmp2.Text = ""  lblAvgEmp3.Text = ""  lblOverallResult.Text = ""  totalInputValues = 0  loopCounterForRows = 0  loopCounterForColumns =  daysCounter = 1  lblEmployee1.Font=New Font(lblEmployee1.Font, FontStyle.Regular)  lblEmployee2.Font=New Font(lblEmployee2.Font, FontStyle.Regular)  lblEmployee3.Font=New Font(lblEmployee3.Font, FontStyle.Regular) | btnReset | Click |
| User press enter on Reset Button |  | btnReset | Click |
| User presses Alt + r to Exit |  | btnReset | Click |
| User presses Esc Key |  | btnReset | Click |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Event Handler: btnEnter\_Click | | | | |
| User action | Input Case | Desired Response | Control Object | Event |
| * User clicks with mouse on the Enter Button * User presses Enter Button * User clicks the Alt + E to Enter | Array(0, 0) =1  Array(1, 0) =2  Array(2, 0) =3  Array(3, 0) =4  Array(4, 0) =5  Array(5, 0) =6  Array(6, 0) =7  Array(0, 1) =11  Array(0, 2) =12  Array(1, 1) =13  Array(2, 1) =14  Array(3, 1) =15  Array(4, 1) =16  Array(5, 1) =17  Array(6, 1) =21  Array(1, 2) =22  Array(2, 2) =23  Array(3, 2) =24  Array(4, 2) =25  Array(5, 2) =26  Array(6, 2) =27  Array(0, 0) = “” (Space/No entry)  Array(0, 0) = ABC  Array(0, 0) = -1  Array(0, 0) = 1001 | Units  (If user enters all whole numbers between 0 to 1000)  Employee 1 Average: 4  Employee 2 Average: 14  Employee 3 Average: 24  Overall Average: 14  Unit Textbox : “”  Unit Textbox : Read only  Reset Button: Focus  btnEnter.Enabled = False  lblDaysCounter.Text = "Done!" | btnEnter | Click |
| * User clicks with mouse on the Enter Button * User presses Enter Button * User clicks the Alt + E to Enter | Units    (If user enters space)  Message Box : “Please Ensure To Enter The Value For Unit Numbers!” | btnEnter | Click |
| * User clicks with mouse on the Enter Button * User presses Enter Button * User clicks the Alt + E to Enter | Units  ABC  (If user enters character or string of characters)  Message Box : “Please Ensure To Enter Numbers Only For Shippend Units!” | btnEnter | Click |
| * User clicks with mouse on the Enter Button * User presses Enter Button * User clicks the Alt + E to Enter | Units  -1  (If user negative means less than 0 then user will get this message)  Message Box : “Please Ensure the Shipped Units Are Between 0 and 1000!” | btnEnter | Click |
| * User clicks with mouse on the Enter Button * User presses Enter Button * User clicks the Alt + E to Enter | Units  1001  (If user enters character or string of characters)  Message Box : “Please Ensure the Shipped Units Are Between 0 and 1000!” | btnEnter | Click |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Event Handler: Closing | | | | |
| User action | Input Case | Desired Response | Control Object | Event |
| User clicks on close(X) button |  | To exit from the application | Close (X) | Click |

**Array Observation 3 Employees’ 7 Day Unit Input**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 2D Array | | Columns | | |  | Array Name (row, column) | |
| 0 | 1 | 2 |  | theArray(0, 0) = | 1 |
| Rows | 0 | 1 | 11 | 21 |  | theArray(0, 1) = | 11 |
| 1 | 2 | 12 | 22 |  | theArray(0, 2) = | 21 |
| 2 | 3 | 13 | 23 |  | theArray(1, 0) = | 2 |
| 3 | 4 | 14 | 24 |  | theArray(1, 1) = | 12 |
| 4 | 5 | 15 | 25 |  | theArray(1, 2) = | 22 |
| 5 | 6 | 16 | 26 |  | theArray(2, 0) = | 3 |
| 6 | 7 | 17 | 27 |  | theArray(2, 1) = | 13 |
| Sum | | 28 | 98 | 168 |  | theArray(2, 2) = | 23 |
| Average | | 4 | 14 | 24 |  | theArray(3, 0) = | 4 |
| Sum Of All Averages | | 42 | | |  | theArray(3, 1) = | 14 |
| Over All Averages | | 14 | | |  | theArray(3, 2) = | 24 |
|  |  |  |  |  |  | theArray(4, 0) = | 5 |
|  |  |  |  |  |  | theArray(4, 1) = | 15 |
|  |  |  |  |  |  | theArray(4, 2) = | 25 |
|  |  |  |  |  |  | theArray(5, 0) = | 6 |
|  |  |  |  |  |  | theArray(5, 1) = | 16 |
|  |  |  |  |  |  | theArray(5, 2) = | 26 |
|  |  |  |  |  |  | theArray(6, 0) = | 7 |
|  |  |  |  |  |  | theArray(6, 1) = | 17 |
|  |  |  |  |  |  | theArray(6, 2) = | 27 |
|  |  |  |  |  |  | count | 21 |
|  |  |  |  |  |  | sum | 294 |
|  |  |  |  |  |  | average | 14 |