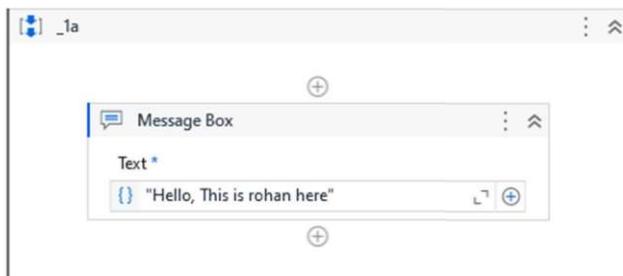


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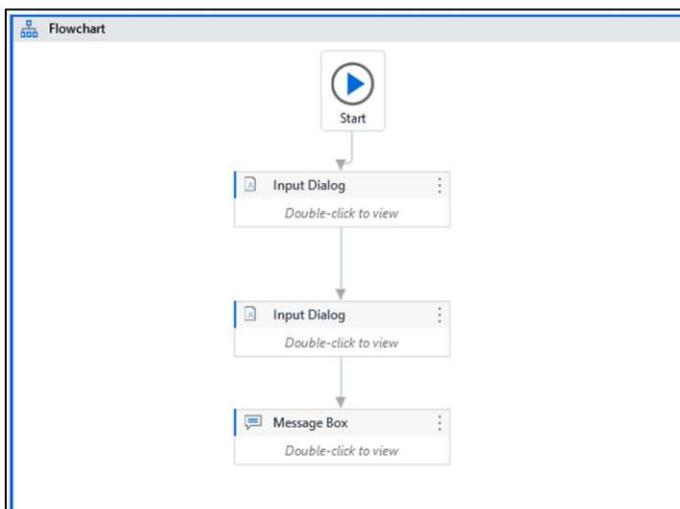
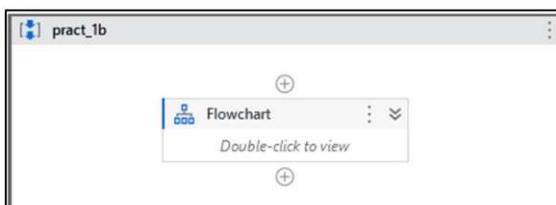
8	<b>A.</b> Aim: Demonstrate the following events in UiPath: i. Element triggering event ii. Image triggering event iii. System triggering event			
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**PRACTICAL NO. 1****A) Aim: Create a Sequence based project.****Steps: -****Step 1:** Open UiPath Studio. Start a Blank Process and give a name to it.**Step 2:** Drag and Drop a Sequence Activity from the Activity Panel in the workflow.**Step 3:** Drag and drop a Message Box Activity in the Sequence Activity and type anything that you want to print. (e.g. "Hello, This is rohan here".)**Step 4:** Run**Output:**

**B) Aim: Create a Flowchart based project.****Steps:** -**Step 1:** First, add a Flowchart from the Activities panel into the Designer panel.**Step 2:** Take two Input dialog activities (for entering the numbers to be added) inside flowchart**Step 3:** Create the variables **x** and **y** to save the values.**Step 4:** Next, add a Message box activity to perform a mathematical operation(addition). To show sum of the two numbers write:  $x + y$ **Step 5:** Run

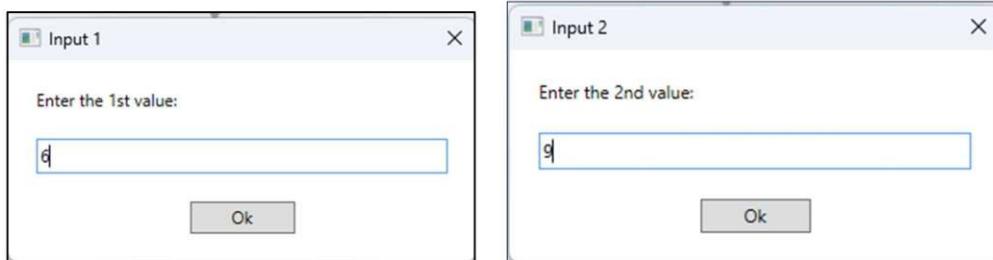
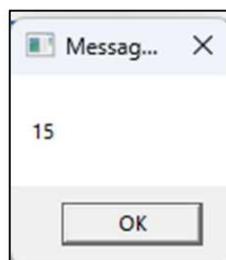
Name	Variable type	Scope	Default
a	Int32	Flowchart	Enter a VB express
b	Int32	Flowchart	Enter a VB express
Create Variable			

Variables Arguments Imports      100%     



The screenshot shows a RPA configuration interface with three main components:

- Input Dialog 1:** Dialog Title: "Input 1", Input Label: "Enter the 1st value:", Input Type: Text Box, Value entered: "a".
- Input Dialog 2:** Dialog Title: "Input 2", Input Label: "Enter the 2nd value:", Input Type: Text Box, Value entered: "b".
- Message Box:** Text: "a+b" (Message Box).

**Output:****Addition of two numbers:**

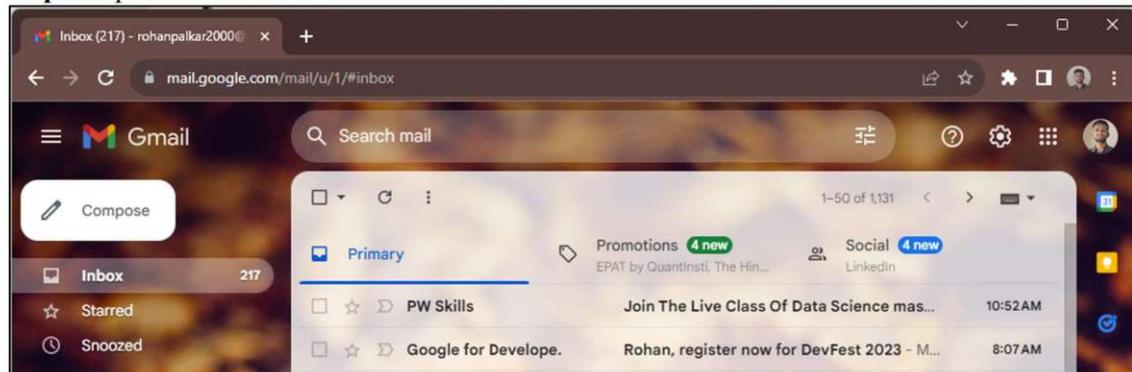
**C) Aim: Create an UiPath Robot which can empty a folder in Gmail solely on basis of recording.**

**Steps: -**

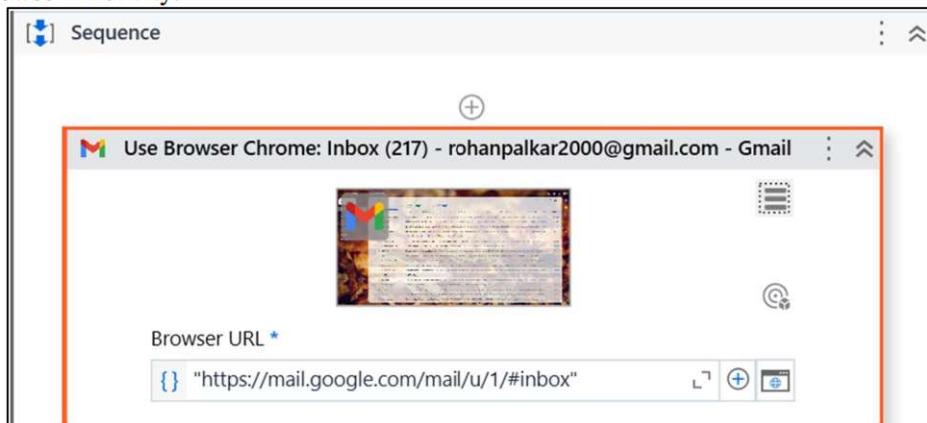
**Step 1:** Open UiPath Studio. Start a blank Process and give it a meaningful name.

**Step 2:** Drag and drop “Sequence” activity in the designer panel.

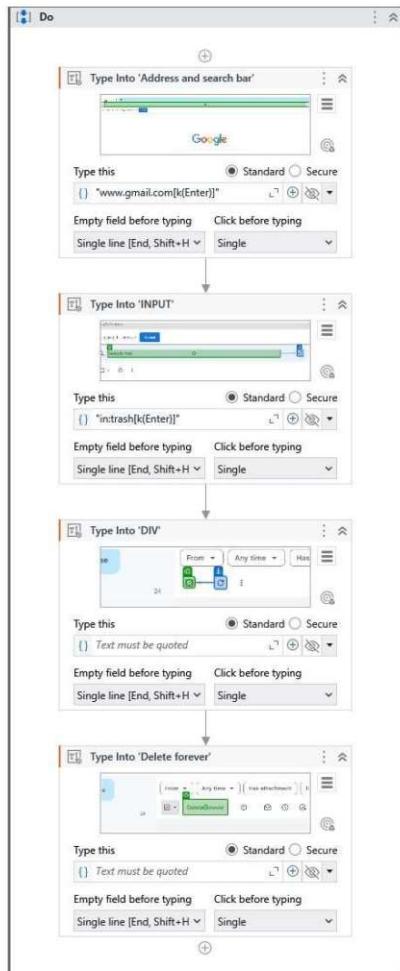
**Step 3:** Open Gmail.



**Step 4:** Click on “App/ Web Recorder” Icon to record the following steps using the “Use Browser” Activity.

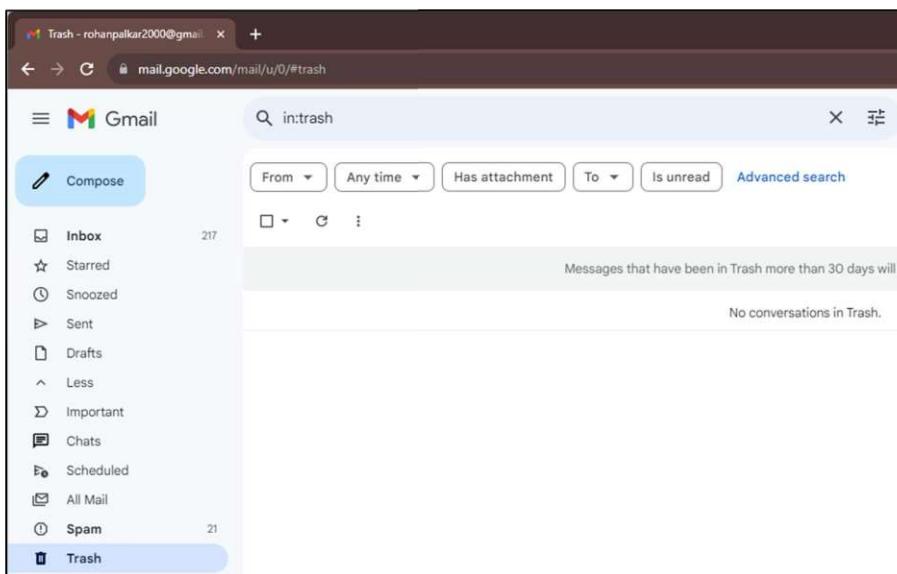


**Step 5:** Record the following steps Click on the “Bin”, then click on “Empty Bin” and Click on Yes to Confirm the Empty Bin action. Save and confirm to return back to UiPath Studio. This will create a Recorder Sequence in the workspace.



**Step 6:** Click the Run button and see the result.

**Output:**



## PRACTICAL NO. 2

**A. Aim: Automate UiPath Number Calculation (Subtraction, Multiplication, Division of numbers).**

**Steps: -**

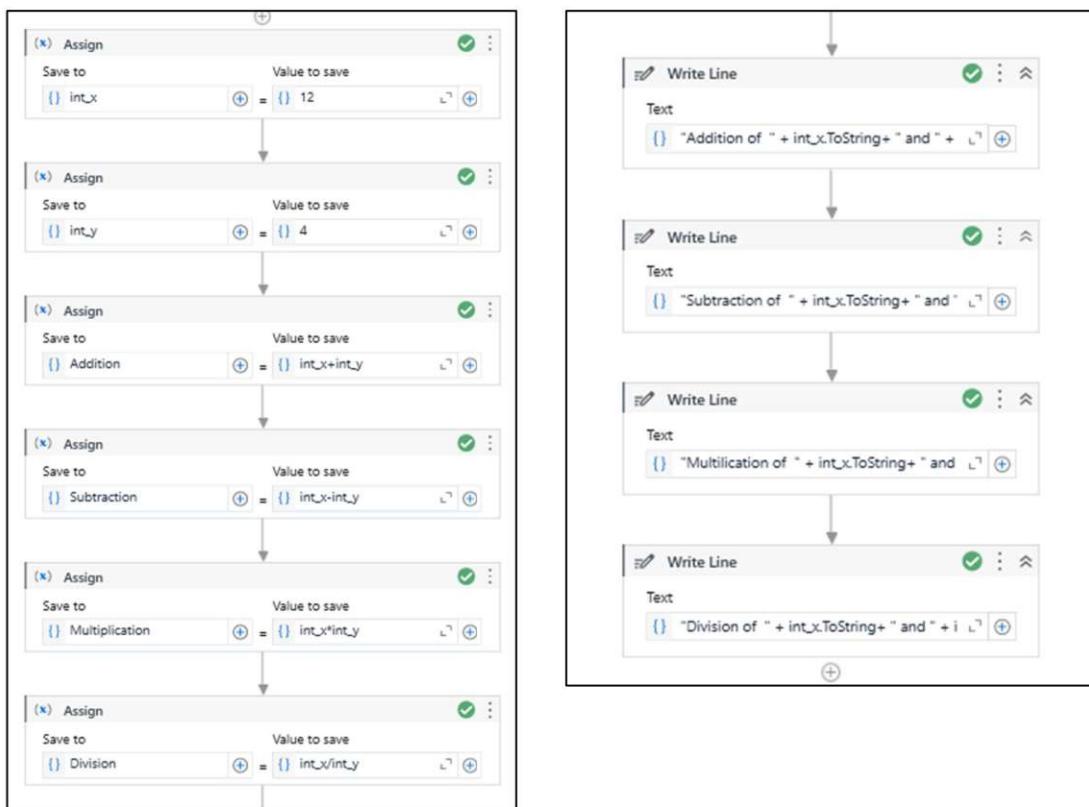
**Step 1:** Drag and Drop a Flowchart Activity in the workflow from the Activity Panel.

**Step 2:** First drag and drop two Assign Activity in the flowchart to store two numbers.

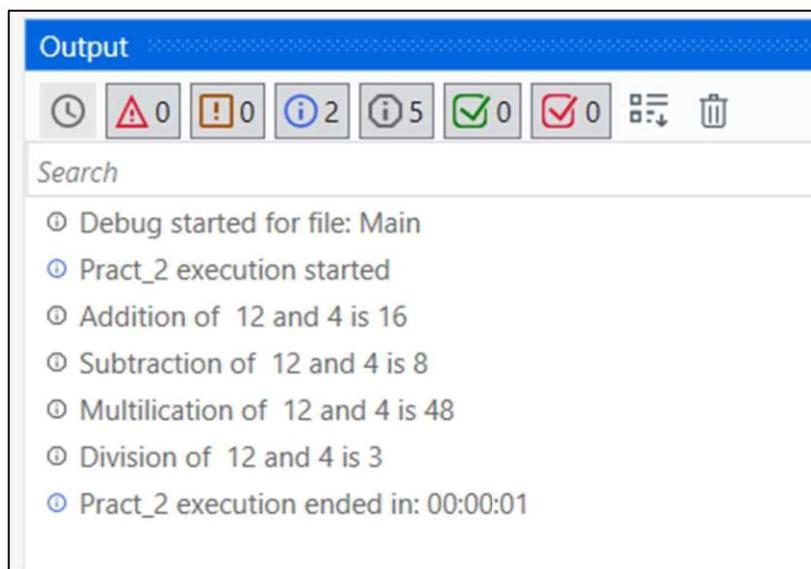
**Step 3:** Again, take four Assign Activity for mathematical calculation: addition, subtraction, division and multiplication. Create a variable for each Assign Activity and save it.

**Step 4:** Now take a WriteLine Activity from the Activity Panel. In the Text field type "Sum of  $x + y$  is" + Enter the name of the variable created (here we have taken int\_sum). Similarly perform all operations by writeline activity.

**Step 5: Run**



Name	Variable type	Scope	Default
int_x	Int64	Main Sequence	Enter a VB expression
int_y	Int64	Main Sequence	Enter a VB expression
Addition	Int64	Main Sequence	Enter a VB expression
Subtraction	Int64	Main Sequence	Enter a VB expression
Multiplication	Int64	Main Sequence	Enter a VB expression
Division	GenericValue	Main Sequence	Enter a VB expression

**Output:**

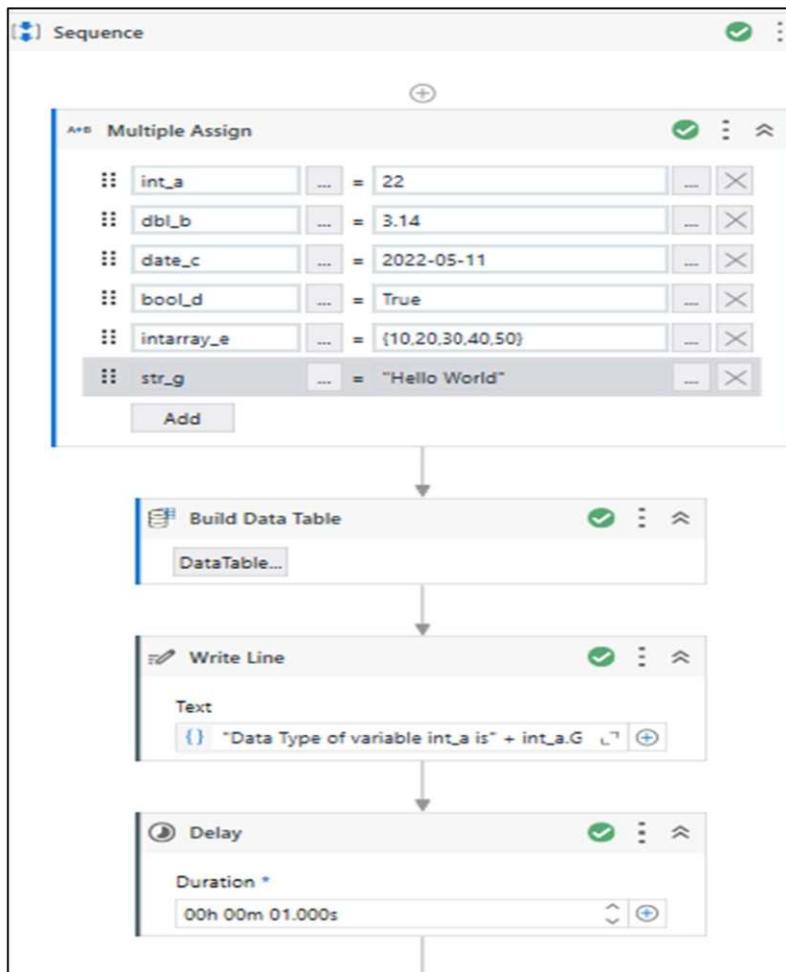
**B. Aim: Create an automation UiPath project using different types of variables  
(number, datetime, Boolean, generic, array, datatable).**

Steps: -

**Step 1:** Drag and drop Sequence Activity from the Activity Panel.

**Step 2:** Now drag and drop a Multiple Assign Activity in the flowchart.

**Step 3:** Add six Multiple Assign Activity (assign int\_a, dbl\_b, date\_c, bool\_d intarray\_e, str\_g , variables). Create a variable for each Multiple Assign Activity and save it.

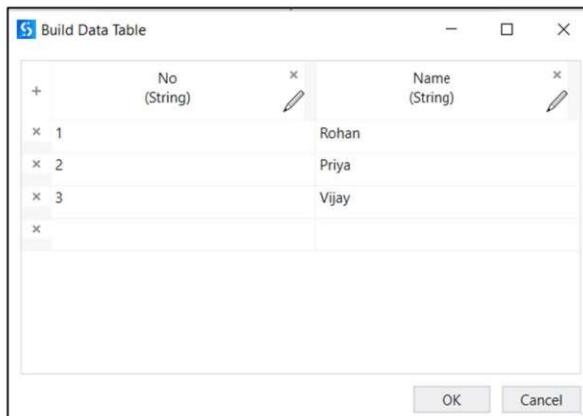




Name	Variable type	Scope	Default
int_a	Int32	Sequence	Enter a VB expression
dbl_b	Double	Sequence	Enter a VB expression
date_c	DateTime	Sequence	Enter a VB expression
bool_d	Boolean	Sequence	Enter a VB expression
intarray_e	Int32[]	Sequence	Enter a VB expression
str_g	String	Sequence	Enter a VB expression
dt_f	DataTable	Sequence	Enter a VB expression
Create Variable			

**Step 4:** For Data Table drag and drop Build Data Table Activity under Multiple assign activity.

**Step 5:** Add a column in Build Data Table and name it as No and Name. In Property Panel of Build Data Table in output type dbl\_b.(variable created in Step 5).



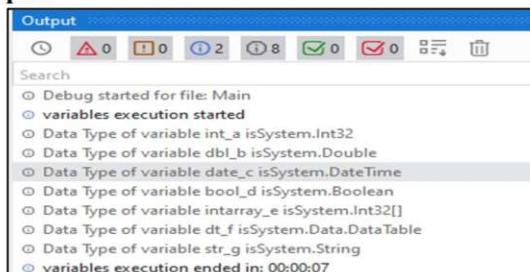
**Step 6:** Now take a Write Line and Delay Activity.

**Step 7:** In the text Field of Write line Activity for number type “Data type of variable int\_a is ” + int\_a.GetTypeOf.ToString and set duration property if Delay Activity.

**Step 8:** Repeat Step 8 and Step 9 for other Multiple Assign Activity as well(dbl\_b, bool\_d, intarray\_e, dt\_f, str\_g).

**Step 9:** Run

**Output:**



### PRACTICAL NO. 3

**A. Aim:** Create an automation UiPath using decision statements.

**i. If Activity:**

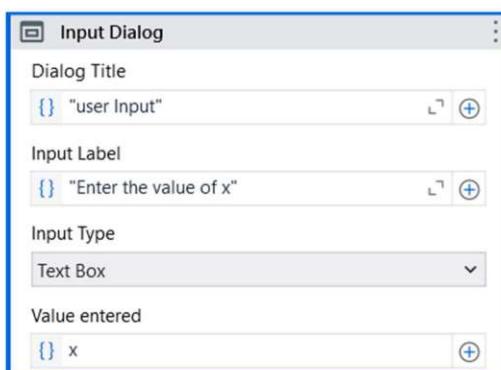
**Steps:** -

**Step 1:** Open UiPath Studio. Start a BlankProcess.

**Step 2:** Add a Flowchart from the Activities panel.



**Step 3:** Add two Input dialog activities. Create two integer variables, x and y.

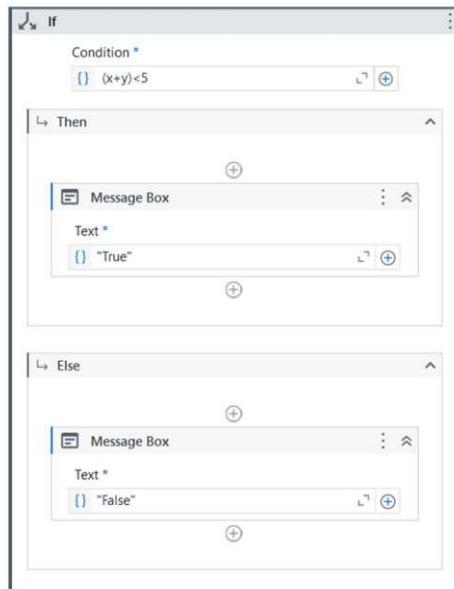
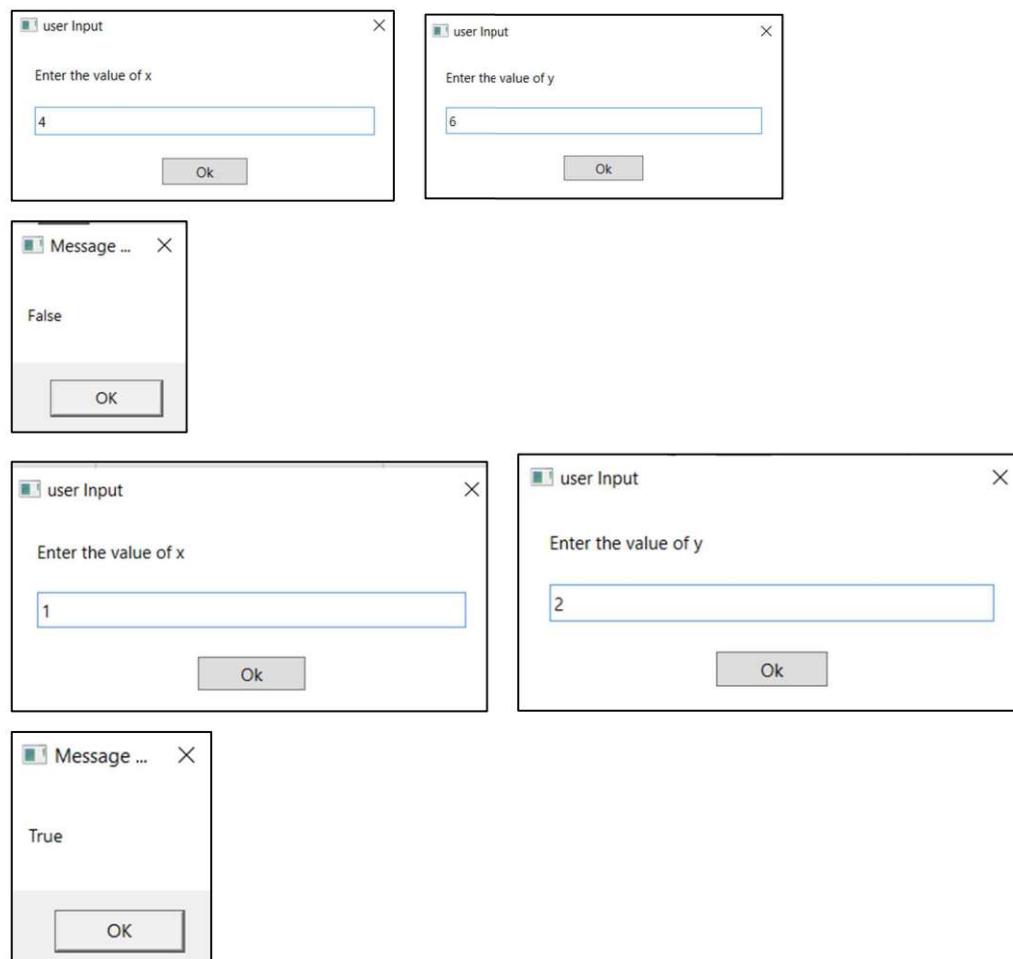


**Step 4:** In the Properties panel, change the label name and title name of both the Input dialog activities.

**Step 5:** Now, specify these names of these two variables in the Result property of both the Input dialog activities.

**Step 6:** Now add the If activity to the Designer panel:

**Step 7:** In the condition part,  $x+y < 5$ , check whether it is true or false. Add two Write line activities and type “True” in one and “False” in the other:

**Step 8: Run****Output:**

**ii. Flow decision:**

**Steps:** -

**Step 1:** First, add a Flowchart from the Activities panel into the Designer panel.

**Step 2:** Add a Sequence activity within the Flowchart.

**Step 3:** Take two Input dialog activities (for entering the numbers to be added) inside the Sequence activity.

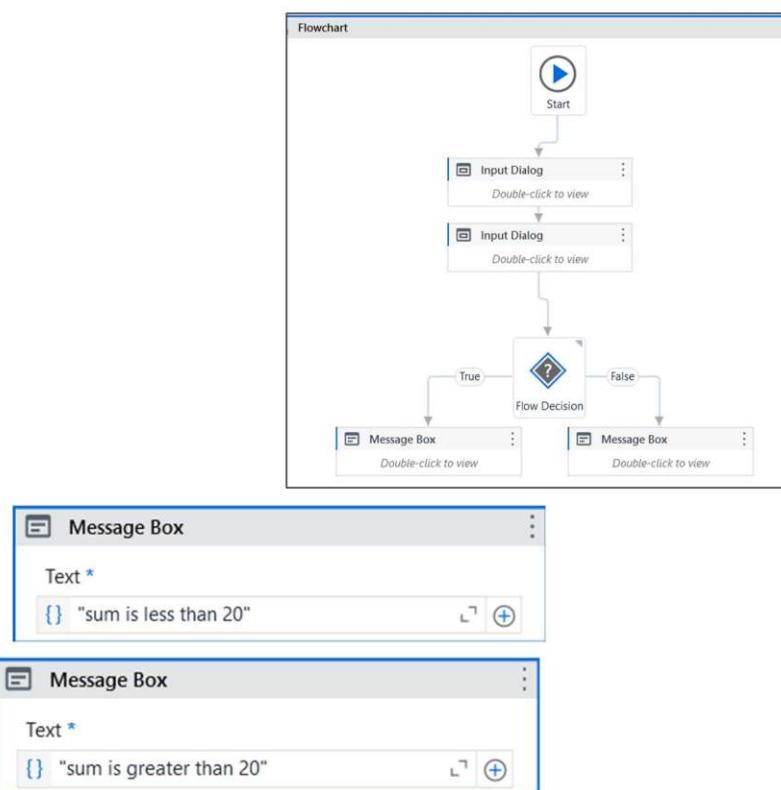
**Step 4:** Create the variables **x** and **y** to save the values. Assign these variables in Input dialog activity.

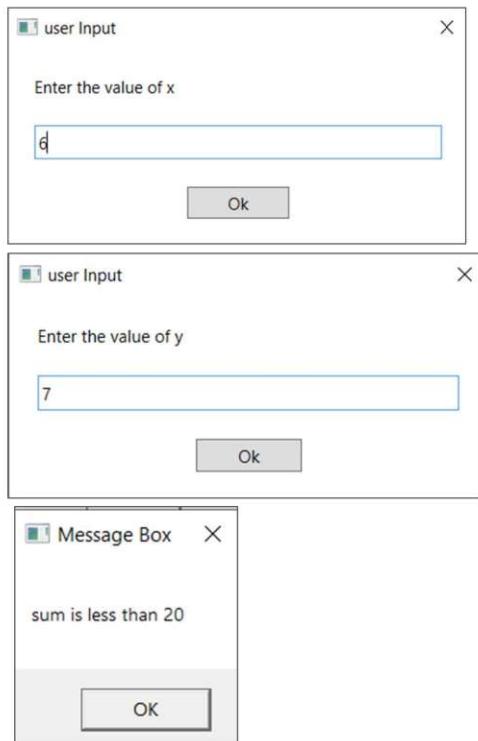
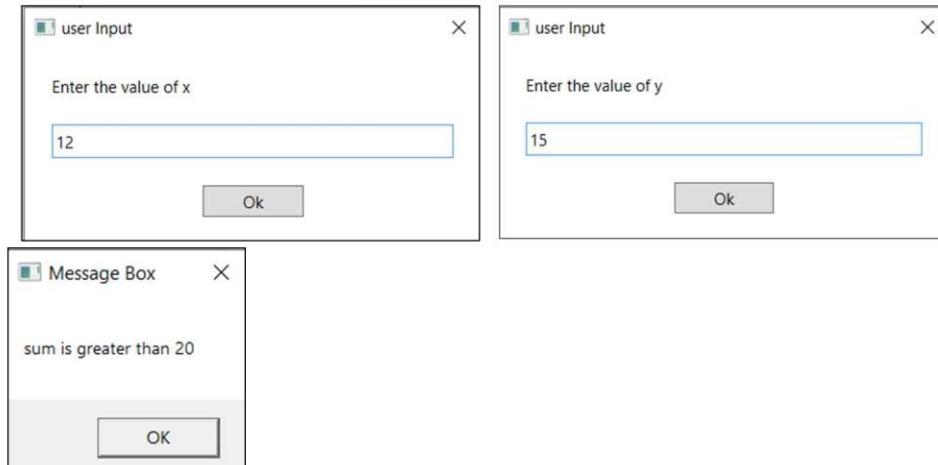
**Step 5:** Next, add a Message box activity to perform a mathematical operation. In our case, the sum of the two numbers is less than 20:

$$x + y < 20$$

**Step 6:** Now, add a Flow Decision activity to check the mathematical operation.

**Step 7:** If true, the Flow Decision will flow toward the true branch. Otherwise, it will flow towards false branch.



**Output:****1) Sum is less than 20:****2) Sum is greater than 20:**

**B. Aim: Create an automation UiPath using looping statements.**

**i. While**

Steps: -

**Step 1:** Open UiPath Studio. Start a BlankProcess. Give it a name.

**Step 2:** Add sequence in the Designer Panel.

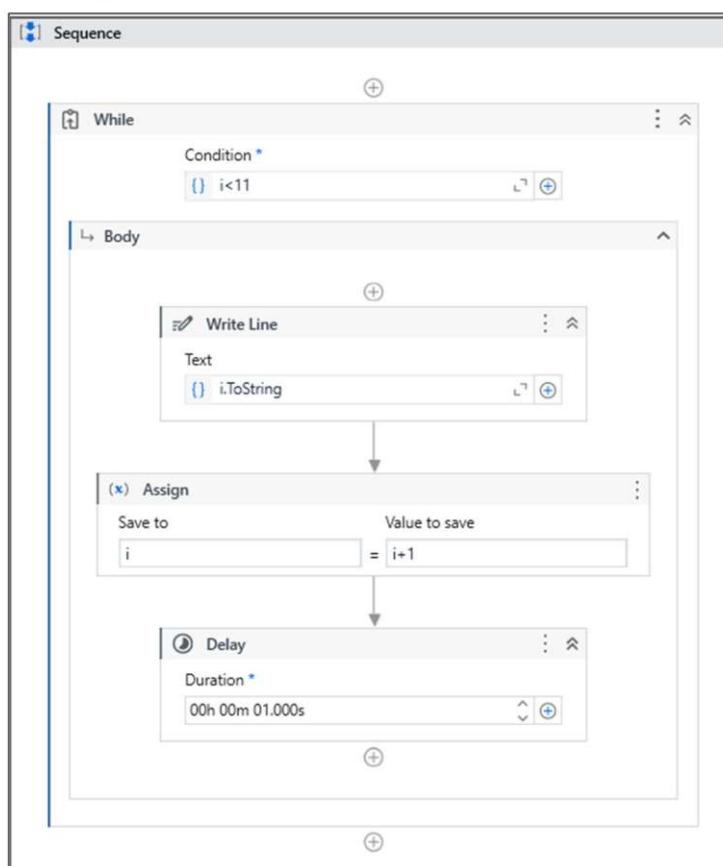
**Step 3:** Add a While activity from the Activities panel.

**Step 4:** In the condition section, set the condition  $i < 11$ . The loop will continue until the condition holds true

**Step 5:** In the body section of the While activity, add an Writeline activity and type in text field as:  $i.ToString$ .

**Step 6:** Create an integer variable  $i$  in the result under property panel and save it. Assign  $i=1$

**Step 7:** Under Writeline Activity again take Assign Activity. Set  $i = i+1$  in the value section of the Assign activity to increment the result each time by 1 until the loop is executed.



Name	Variable type	Scope	Default
i	Int32	Main Sequence	1
<i>Create Variable</i>			

**Step 8:** Run.



### ii. Do...While

Steps: -

**Step 1:** Open UiPath Studio. Start a BlankProcess. Give a name to it.

**Step 2:** Add sequence in the Designer Panel.

**Step 3:** Add a Do while activity from the Activities panel.

**Step 4:** In the body section of the Do while activity, add an Writeline activity and type in text field as: i.ToString.

**Step 5:** Add Assign Activity.

**Step 6:** Create an integer variable i in the result under property panel and save it. Assign i=7

**Step 7:** Add Delay Activity (00:00m:01s)

**Step 8:** In the condition section, set the condition i>7.

The screenshot shows the RPA tool's configuration interface. At the top, there is a 'Do While' loop configuration window. Inside the loop body, there is a 'Write Line' step with the text '{i}.ToString'. Below it is an 'Assign' step where the variable 'i' is set to 'i+1'. After that is a 'Delay' step with a duration of '00h 00m 01.000s'. The condition for the loop is '{i}<7'. Below this, there is a table for creating variables:

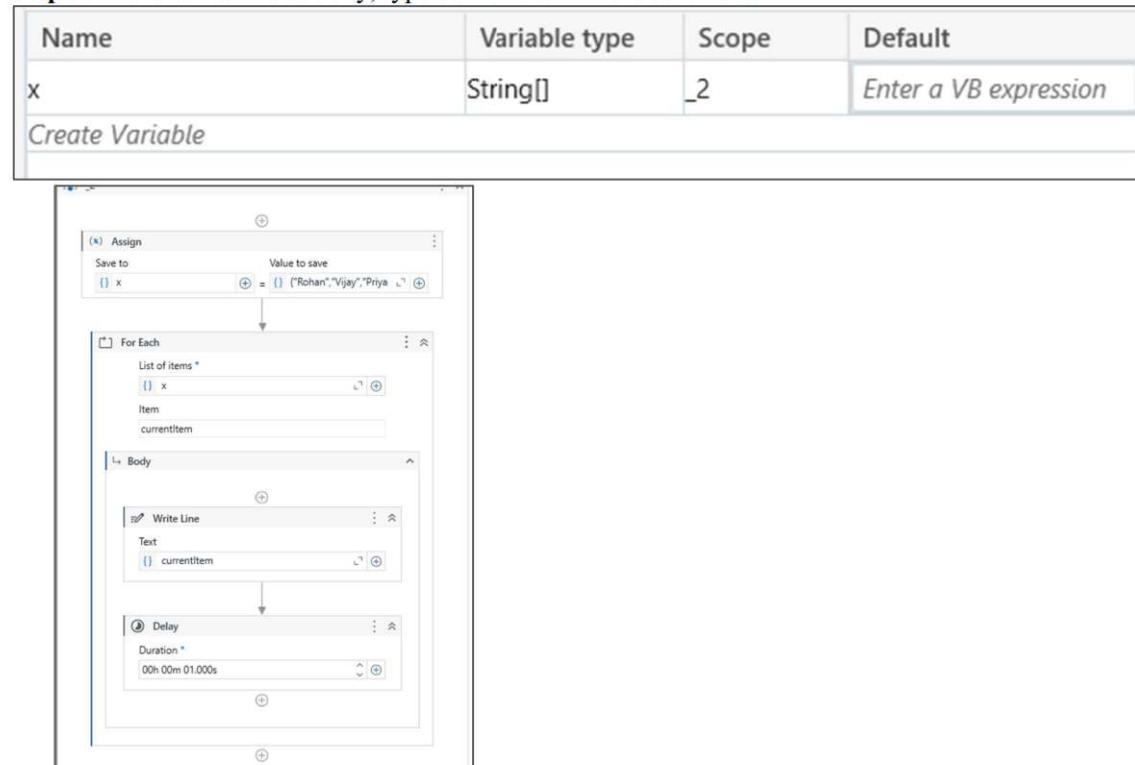
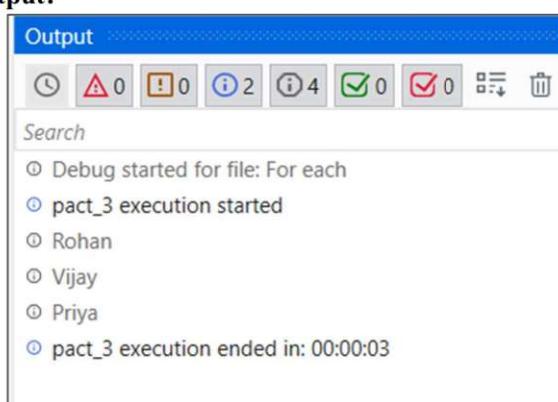
Name	Variable type	Scope	Default
i	Int32	Main Sequence	1
<i>Create Variable</i>			

#### Step 8: Run

The screenshot shows the RPA tool's output window titled 'Output'. It displays the following log entries:

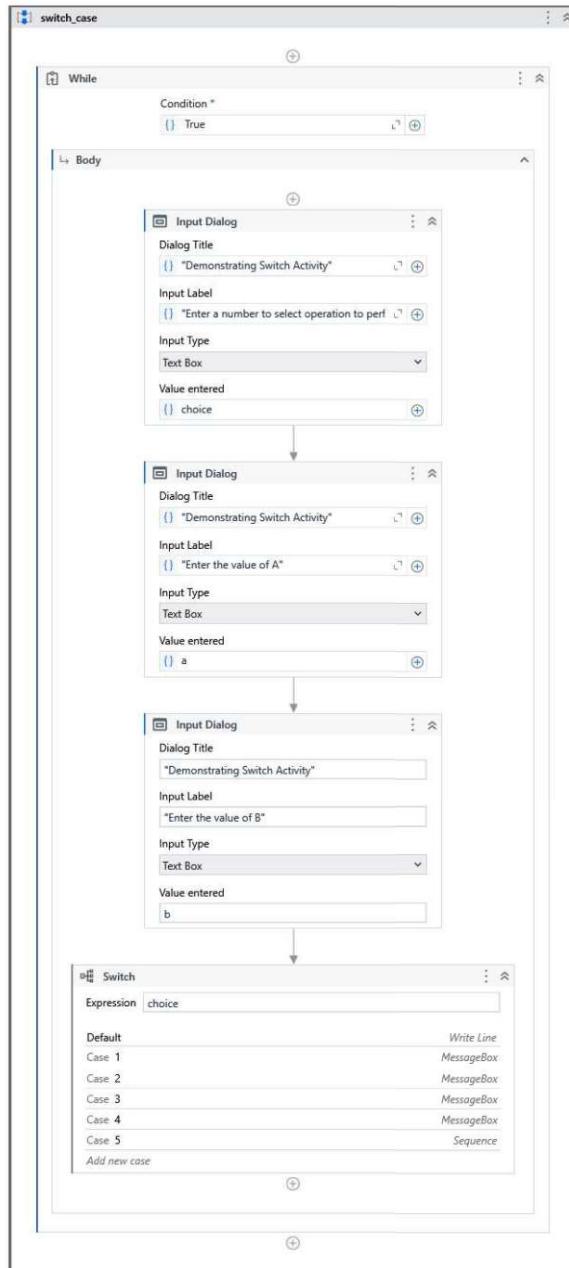
- ⌚ Debug started for file: Do while activity
- ⌚ pact\_3 execution started
- ⌚ 1
- ⌚ 2
- ⌚ 3
- ⌚ 4
- ⌚ 5
- ⌚ 6
- ⌚ pact\_3 execution ended in: 00:00:06

At the top of the output window, there are icons for clock, error (red triangle), warning (yellow exclamation mark), info (blue circle with i), success (green checkmark), and failure (red circle with x).

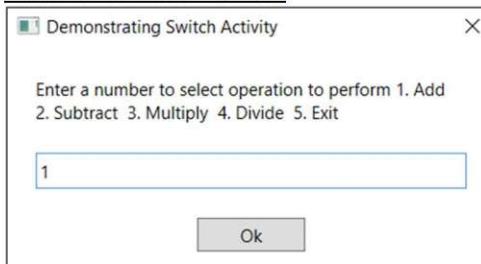
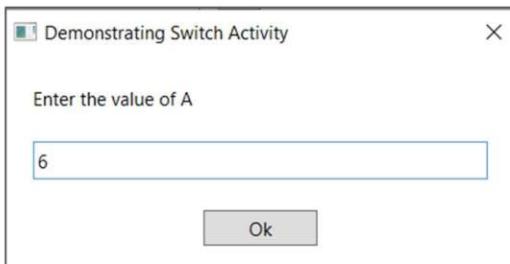
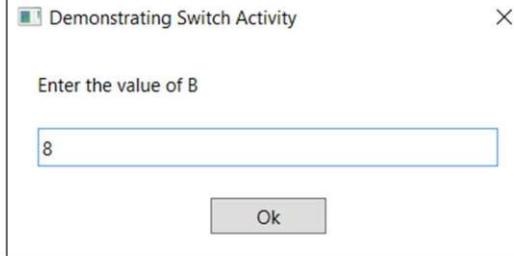
**iii. For each****Steps:** -**Step 1:** Open UiPath Studio. Start a Blank Process and give a name to it.**Step 2:** Add For each Activity.**Step 3:** Create variables; an string variable named item, and give named x. Then, set them to the text field.**Step 4:** Now, assign a default value to the string variable x.**Step 6:** Under the For Each activity, add a Write line activity.**Step 7:** In the Write line activity, type **currentitem** in the text field.**Step 8:** Debug file. It will display the elements one by one, as shown in the following screenshot.**Output:**

**iv. Switch:****Steps: -****Step 1:** Open UiPath Studio. Start a Blank Process and give a name to it.**Step 2:** Add a Sequence activity.**Step 3:** Add while Activity and Give condition True.**Step 4:** Add an Input dialog activity inside the While Activity. Create variable a, b, choice type of int.**Step 5:** Add the Switch activity under the Input dialog activity.**Step 6:** Add a Write line activity to the Default section i.e. case 0 and type in the text field, "Exit".**Step 7:** Now, create Case 1, add the one other Message box activity to it, and in the text field, "Addition of " + a.ToString + " & " + b.ToString + " is " + (a+b).ToString.**Step 8:** Now, create Case 2, add the one other Message box activity to it, and in the text field, "Difference of " + a.ToString + " & " + b.ToString + " is " + (a-b).ToString**Step 9:** Now, create Case 3, add the one other Message box activity to it, and in the text field, "Product of " + a.ToString + " & " + b.ToString + " is " + (a\*b).ToString**Step 10:** Now, create Case 4, add the one other Message box activity to it, and in the text field, "Quotient of " + a.ToString + " & " + b.ToString + " is " + (a/b).ToString**Step 11:** Now, create Case 5, add the one other Message box activity to it, and in the text field, "Exit" and Break the loop.

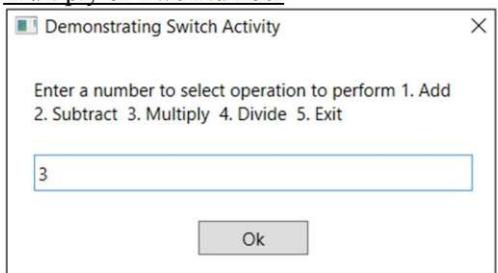
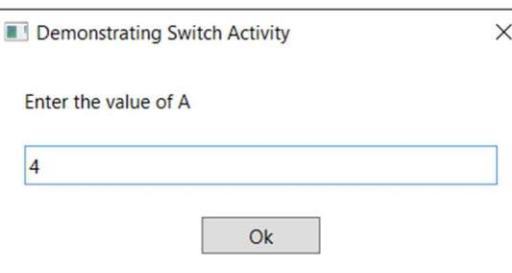
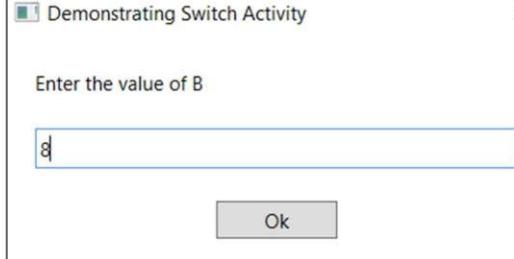
Name	Variable type	Scope	Default
a	Int32	switch_case	Enter a VB expression
b	Int32	switch_case	Enter a VB expression
choice	Int32	switch_case	Enter a VB expression
<i>Create Variable</i>			



**Step 8:** Run.**Output:**Addition of Two Number

 <p>Demonstrating Switch Activity</p> <p>Enter a number to select operation to perform 1. Add 2. Subtract 3. Multiply 4. Divide 5. Exit</p> <p>1</p> <p>Ok</p>	 <p>Demonstrating Switch Activity</p> <p>Enter the value of A</p> <p>6</p> <p>Ok</p>
 <p>Demonstrating Switch Activity</p> <p>Enter the value of B</p> <p>8</p> <p>Ok</p>	 <p>MessageBox</p> <p>Addition of 6 &amp; 8 is 14</p> <p>OK</p>

Multiply of Two Number

 <p>Demonstrating Switch Activity</p> <p>Enter a number to select operation to perform 1. Add 2. Subtract 3. Multiply 4. Divide 5. Exit</p> <p>3</p> <p>Ok</p>	 <p>Demonstrating Switch Activity</p> <p>Enter the value of A</p> <p>4</p> <p>Ok</p>
 <p>Demonstrating Switch Activity</p> <p>Enter the value of B</p> <p>8</p> <p>Ok</p>	 <p>MessageBox</p> <p>Product of 4 &amp; 8 is 32</p> <p>OK</p>

## PRACTICAL NO. 4

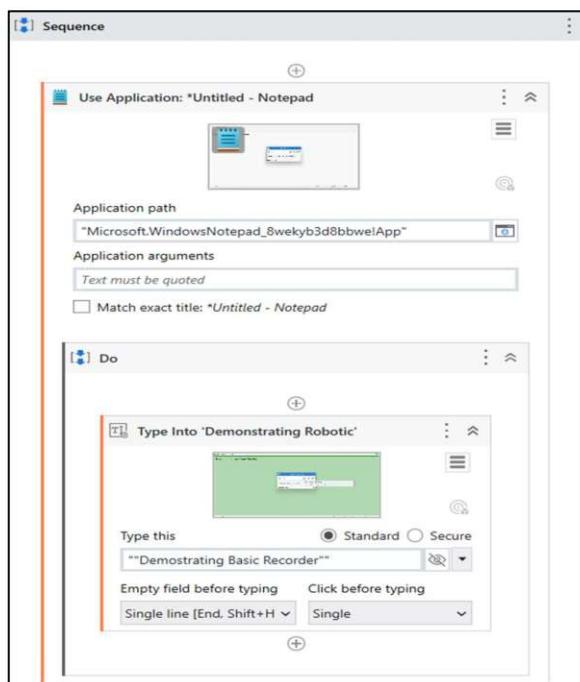
### A. Aim: Automate any process using basic recording.

Steps: -

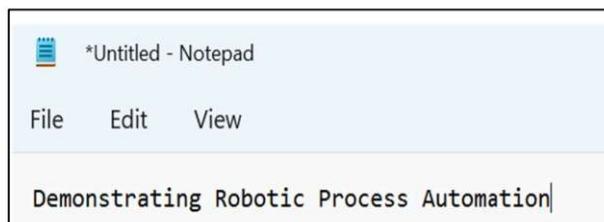
**Step 1:** Open UiPath Studio. Start a BlankProcess. Give it a name.

**Step 2:** Drag and drop a Flowchart activity. Now, click on the Recording icon and choose Basic recording. You can record your actions on the desktop on your own and then save it.

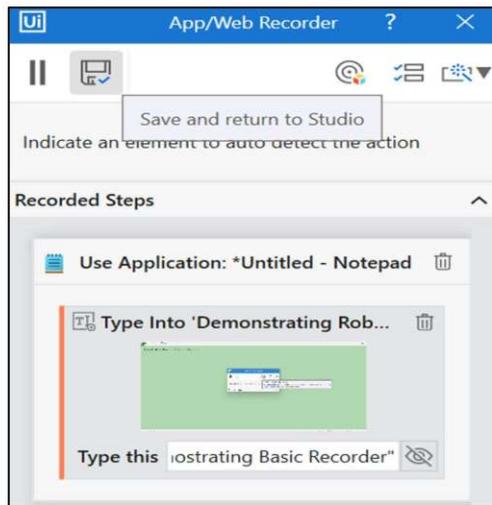
**Step 3:** Click on basic recorder.



**Step 4:** Next, type some text in the notepad.

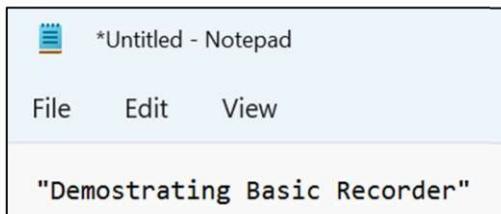


**Step 5:** Pressed the Esc key to exit the recording and click on the Save and Exit button.



**Step 6:** Now, a recording sequence is generated in our Designer panel. Connect this sequence to the Start node.

**Step 7: Run**

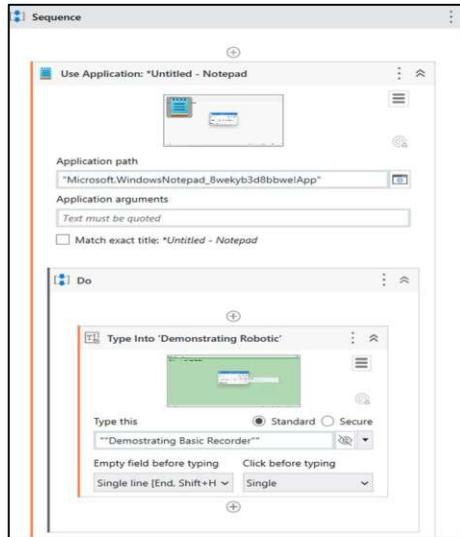


**B. Aim: Automate any process using desktop recording.**

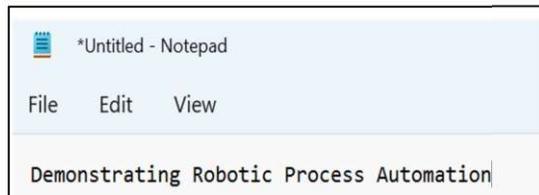
Steps: -

**Step 1:** Open UiPath Studio. Start a BlankProcess and give a name to it.

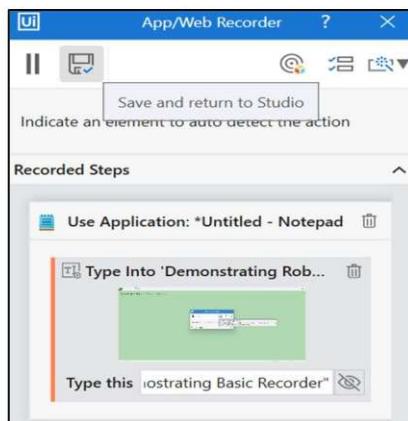
**Step 2:** Drag and drop a Flowchart activity. Now, click on the Recording icon and choose Desktop recording.



**Step 3:** Next, type some text in the notepad.

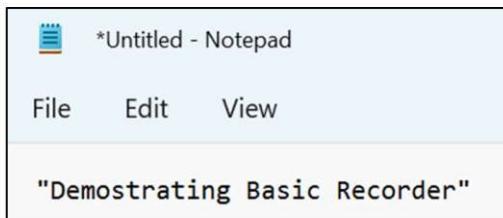


**Step 4:** Then, press the Esc key to exit the recording and clicked on the Save and Exit button.



**Step 5:** Now, a recording sequence is generated in our Designer panel. Connect this sequence to the Start node.

**Step 6:** Hit the Run button to see the result. In the following screenshot, you can see the sequence generated by the Basic recorder.



**C. Aim: Automate any process using web recording.**

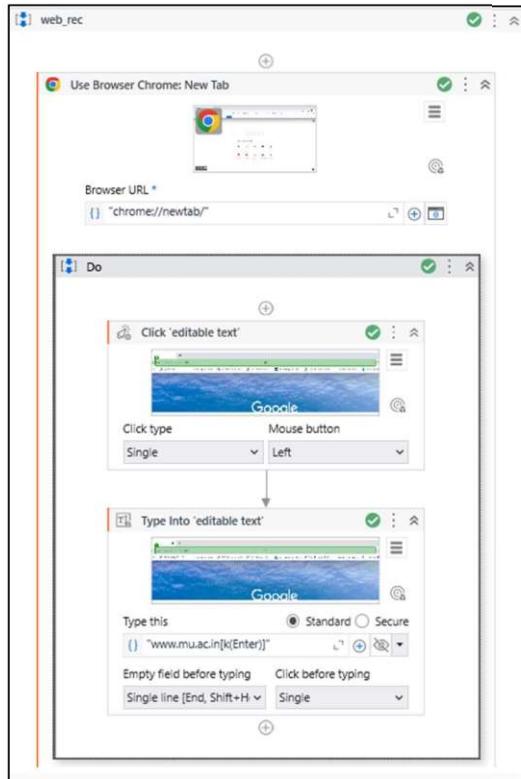
**Steps: -**

**Step 1:** Open UiPath Studio. Start a BlankProcess. Give the BlankProcess a name.

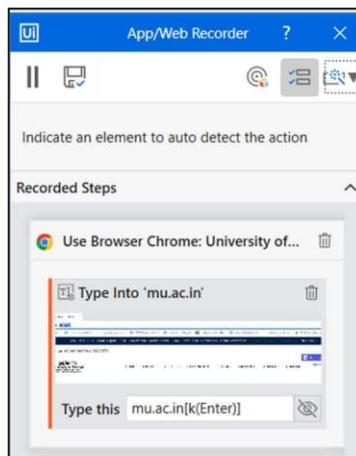
**Step 2:** Drag and drop a Flowchart activity.

**Step 3:** Then, start the recording by clicking on the Record button of the web recorder.

**Step 4:** Next, type some text in the search bar of Google and performed the Click activity.

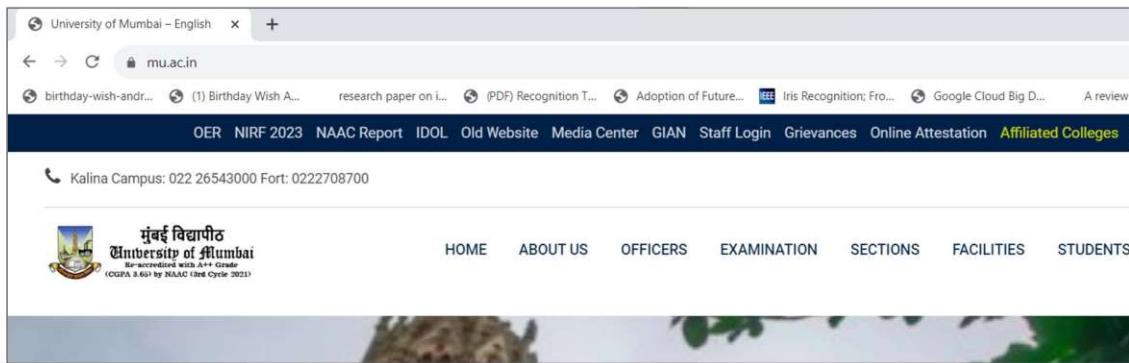


**Step 5:** Then, we pressed the Esc key to exit the recording and clicked on the Save and Exit button.



**Step 6:** Now, a recording sequence is generated in our Designer panel. Connect this sequence to the Start node.

**Step 7:** Hit the Run button to see the result. In the following screenshot, you can see the sequence generated by the Web recorder.



## PRACTICAL NO. 5

- A. Aim:** Consider an array of names. We have to find out how many of them start with the letter "a". Create an automation where the number of names starting with "a" is counted and the result is displayed.

**Steps:** -

**Step 1:** Open UiPath Studio. Start a BlankProcess and give a name to it.

**Step 2:** Drag and Drop Sequence Activity from the Activity Panel.

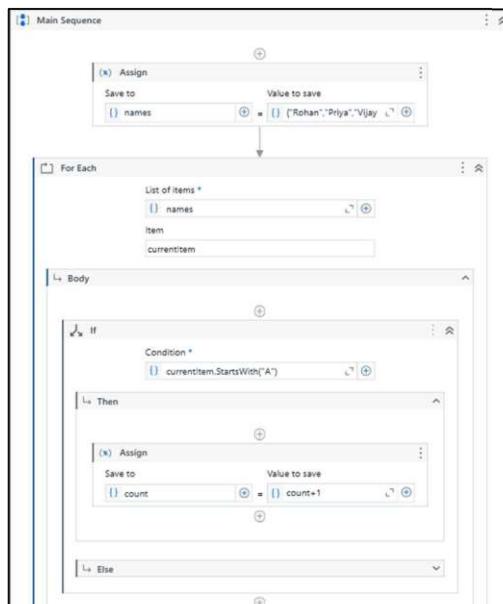
**Step 3** Add an Assign Activity again under Input Dialog Box and create a variable name with Array of String Type and assign name =

{"Rohan", "Priya", "Vijay", "Ajinkya", "Ajay", "Agastya", "Amar"} .

**Step 4:** Now take a For Each Activity. Assign the default variable "currentitem" as name. For the body part drag and drop If Activity.

**Step 5:** Set the condition for If Activity as currentItem.StartsWith("A").

**Step 6:** In the then part of If Activity drag and drop an Assign Activity and set it as count = count+1.

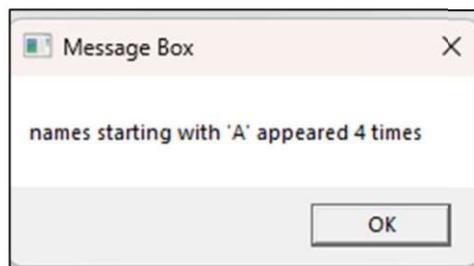


**Step 7:** Now take Message Box Activity under Sequence Activity and in text field type "names starting with 'A' appeared "+ count.ToString + " times"



**Step 8:** Run.

**Output:**



## PRACTICAL NO. 6

**A. Aim:** Create an application automating the read, write and append operation on excel file.

- **Read Cell**

Steps: -

**Step 1:** Drag and drop the Sequence Activity.

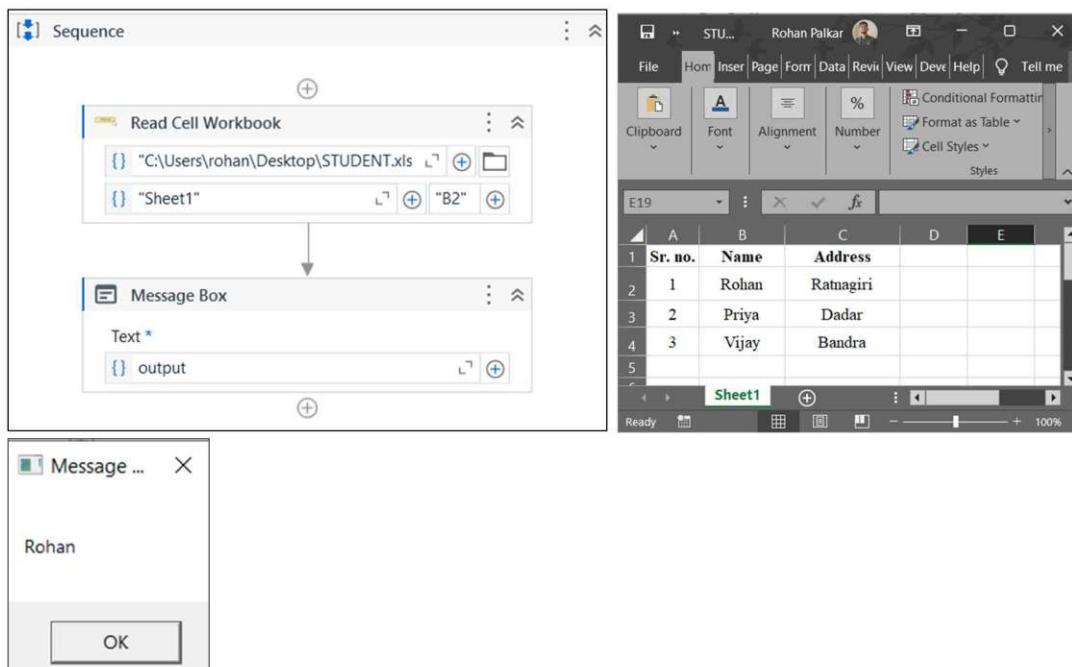
**Step 2:** In Sequence drop the Read Cell Workbook Activity.

**Step 3:** Create an excel file with some data and save it. Give a desired path of excel file in the Read Cell Workbook. Also give the “sheet name” (Sheet1) and assign the cell you want to read (“B2”). Create a variable **output** by pressing ctrl+k. In the output field of Read cell Activity write created variable: **output**

Name	Variable type	Scope	Default
output	String	Sequence	Enter a VB expression
<i>Create Variable</i>			

**Step 4:** Add Message Box Activity and connect it to Read Cell Workbook. In the Text field, type variable “output” created in Step 4.

**Step 5:** Run.



- Write Cell

**Steps:** -

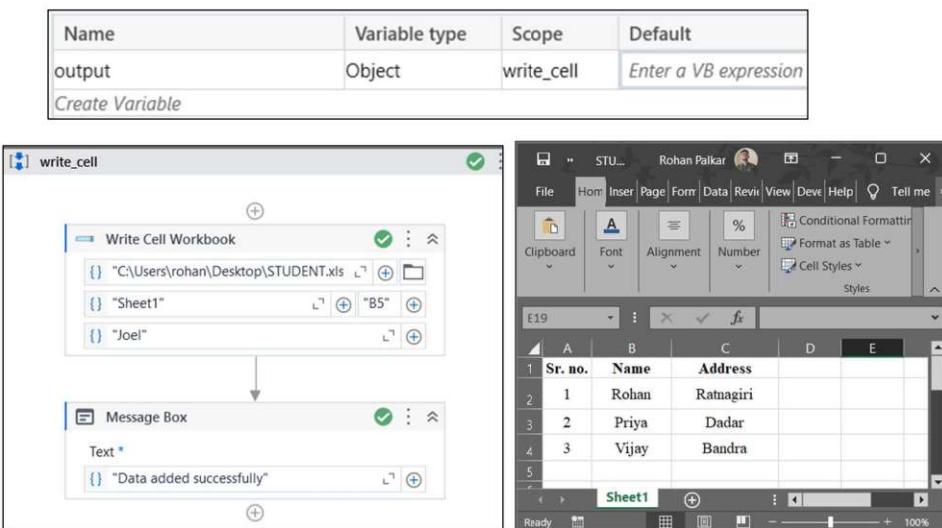
**Step 1:** Drag and drop the Sequence Activity from the Activity Panel.

**Step 2:** In sequence drop the Write Cell Workbook Activity.

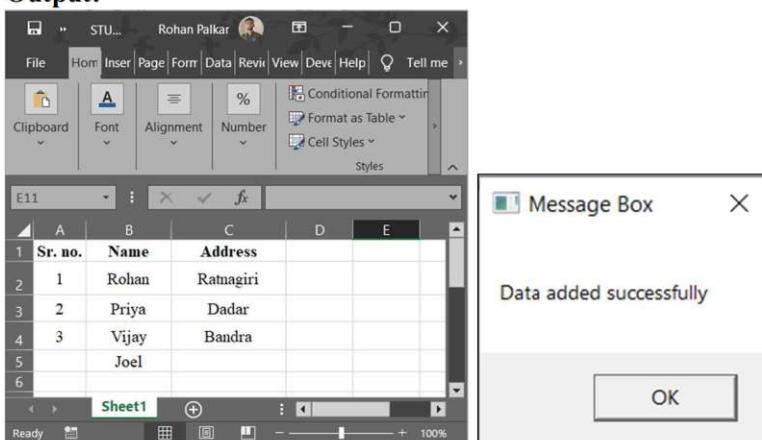
**Step 3:** Give a desired path of already existing excel file in the Write Cell Workbook. Also give the “sheet name” (Sheet1) and assign the cell you want to write (“B5”). Type anything you want in quotes for text field.

**Step 5:** Add Message Box Activity and connect it to Write Cell Workbook. Write ”Data added successfully”

**Step 6:** Run.



**Output:**



- **Read Range**

**Steps:** -

**Step 1:** Drag and drop the Sequence Activity from the Activity Panel.

**Step 2:** In sequence drop the Read Range Workbook Activity.

**Step 4:** Create an excel file with some data and save it. Give a desired path of excel file in the Read Range Workbook. Also give the “sheet name” (Sheet1) and assign the cell you want to read (“A1:B4”). Create a variable outputtable by pressing ctrl+k.

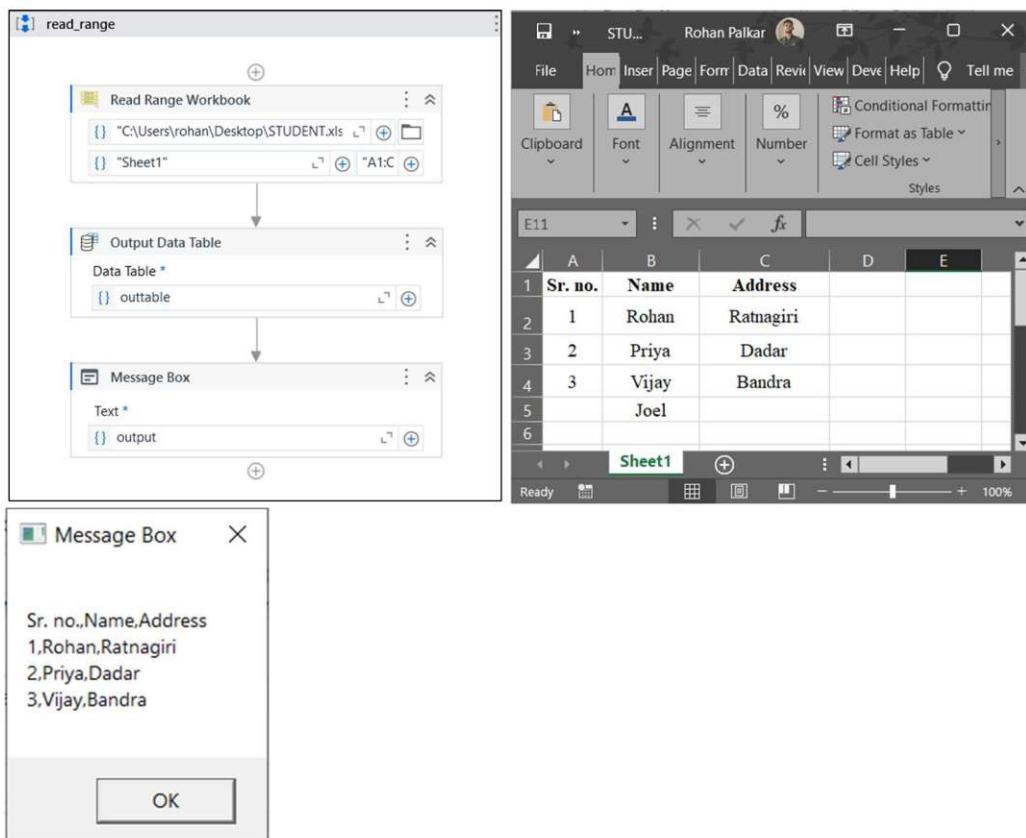
**Step 5:** Add Output Data Table Activity under Read Range Workbook Activity. Set output of Read range activity-outputtable. Create a variable “output” of string type and set its input to outputtable and output to “output”

Name	Variable type	Scope	Default
outtable	DataTable	read_range	Enter a VB expres:
output	String	read_range	Enter a VB expres:

*Create Variable*

**Step 6:** Add Message Box Activity and connect it to Read Range Workbook. In the Text field, type variable “output”

**Step 7:** Run.



- **Write Range**

**Step 1:** Drag and drop the Sequence Activity from the Activity Panel.

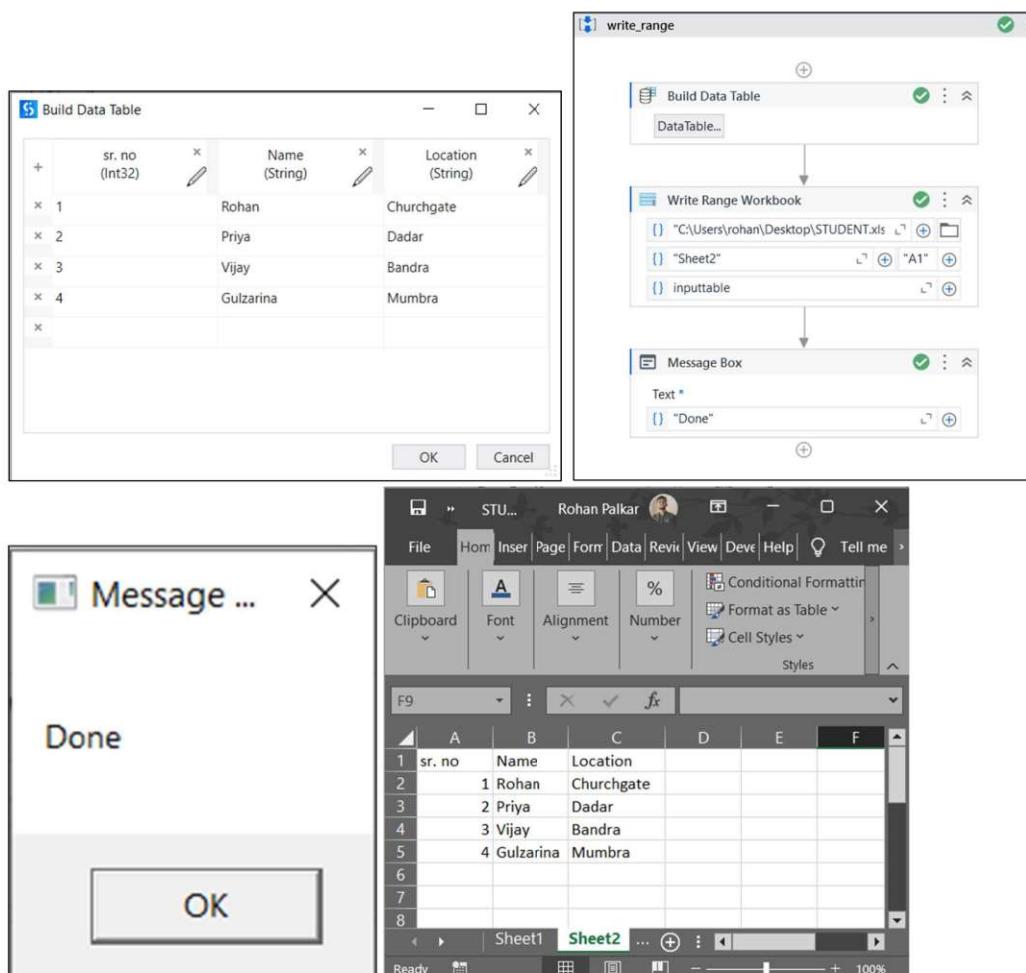
**Step 2:** Now drag and drop the Build Data Table. Create three columns Roll No, Name and Location. Create a variable **inputtable** by pressing **ctr+k**.

**Step 3:** Take Write Range Workbook Activity under Build Data Table.

**Step 4:** Create an empty excel file with and save it. Give a desired path of excel file in the Write Range Workbook. Also give the “sheet name” (**Sheet2**) and assign the cell you want to write from (“A1”). Type the created variable **inputtable** in the text.

**Step 5:** Add Message Box Activity and connect it to Write Range Workbook. In the Text field, type “Done”.

**Sep 6:** Run.



- **Append Range**

**Step 1:** Drag and drop the Sequence Activity from the Activity Panel.

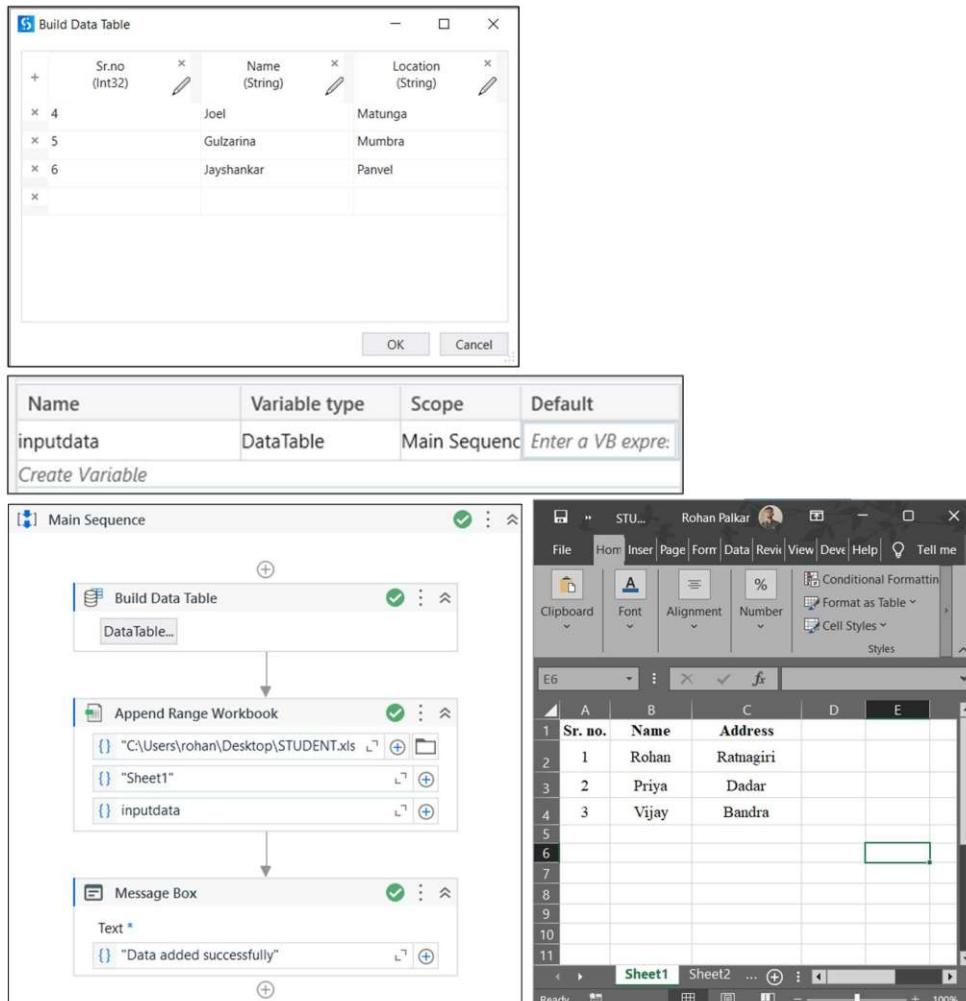
**Step 2:** Now drag and drop the Build Data Table. Create three columns Roll No, Name and Location. Create a variable **inputdata** by pressing ctrl+k.

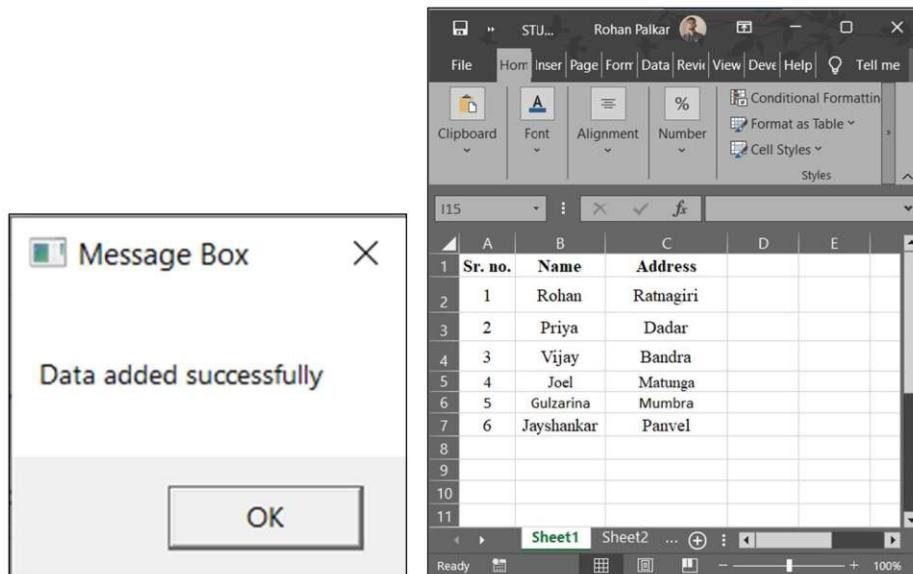
**Step 5:** Take Append Range Workbook Activity under Build Data Table.

**Step 6:** Create an excel file with some data and save it. Give a desired path of excel file in the Append Range Workbook. Also give the “sheet name” (Sheet1). Type the created variable **inputdata** in the text field.

**Step 7:** Add Message Box Activity and connect it to Write Range Workbook. In the Text field, type “Data added successfully”.

**Sep 8:** Run.





**B. Aim: Automate the process to extract data from an excel file into a data table and vice versa.**

**Steps: -**

**Step 1:** Open UiPath Studio. Start a BlankProcess. Give the BlankProcess a name.

**Step 2:** Drag and drop the Sequence Activity from the Activity Panel.

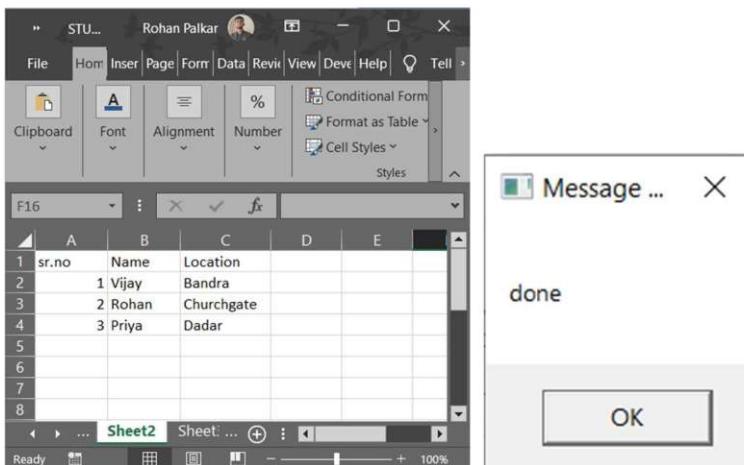
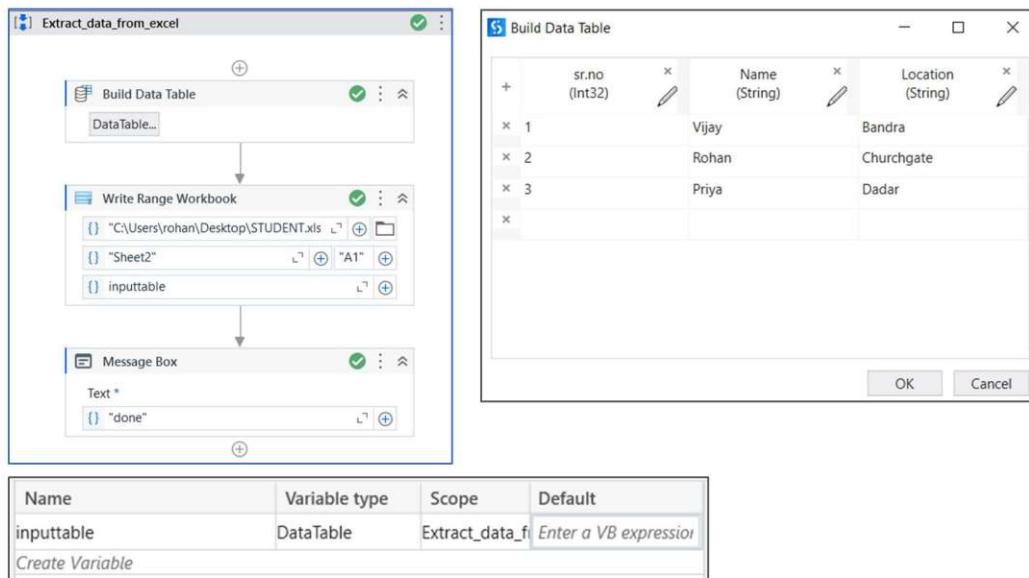
**Step 3:** Now drag and drop the Build Data Table. Create three columns Roll No, Name and Location. Create a variable **inputtable** by pressing ctrl+k.

**Step 4:** Take Write Range Workbook Activity under Build Data Table.

**Step 5:** Create an empty excel file with and save it. Give a desired path of excel file in the Write Range Workbook. Also give the “sheet name” (Sheet2) and assign the cell you want to write from (“A1”). Type the created variable **inputtable** in the text field.

**Step 6:** Add Message Box Activity and connect it to Write Range Workbook. In the Text field, type “Done”.

**Sep 7:** Run.



## PRACTICAL NO. 7

### A. Aim: Implement the attach window activity.

#### Table Extraction:

##### Steps: -

**Step 1:** Open UiPath Studio.

**Step 2:** Start a BlankProcess. Give the BlankProcess a name.

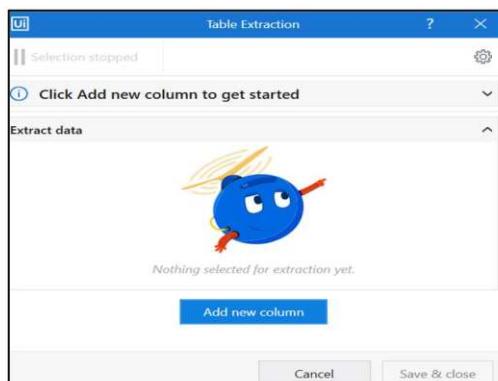
**Step 3:** Drag and drop the Sequence Activity from the Activity Panel.

**Step 4:** Now drag and drop the Use Application/Browser. Indicate the screen where you want to extract data(Google Chrome -> [https://www.w3schools.com/html/html\\_tables.asp](https://www.w3schools.com/html/html_tables.asp)).

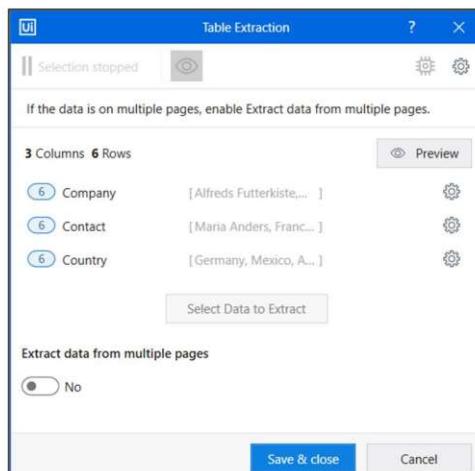
**Step 5:** In Ribbon Panel go to the Design and click on Table Extraction. Add Table Extraction in Do part of Use Application/Browser.



**Step 6:** Open the website where you want to extract data. Click on Add new Column then click on Extract data.



**Step 7:** It will display all the data as shown in the image below.



**Step 7:** Next click on Save and Close. If you wish to extract multiple pages then press the on button for Extract data for Multiple pages

**Sep 8:** A default variable of System.Datatable “**ExtractDataTable**” is created, set its scope from Sequence.

**Step 9:** Take Write Range Workbook Activity.

**Step 10:** Create an empty excel file with and save it. Give a desired path of excel file in the Write Range Workbook. Also give the “sheet name” (W3 School) and assign the cell you want to write from (“A1”). Type the created variable **ExtractDataTable** Table in the text field.

Name	Variable type	Scope	Default
ExtractDataTable	DataTable	Do	Enter a VB expression
output	String	Do	Enter a VB expression
<i>Create Variable</i>			

**Step 11:** Run.

The screenshot shows a robotic process automation tool's workflow editor. The main window displays a sequence of activities:

- Extract data from browser**: Set to "Use Browser Chrome: HTML Tables". The "Browser URL" is set to "https://www.w3schools.com/html/html\_tables.asp".
- Do**: Contains the following steps:
  - Extract Table Data**: Set to "Extract to ExtractDataTable".
  - Output Data Table**: Set to "Data Table \* ExtractDataTable".
  - Write Range Workbook**: Set to "Destination.xlsx", "W3 School" sheet, and cell "A1".

To the right of the workflow, a Microsoft Excel spreadsheet is open, showing the data extracted from the website. The data consists of eight rows of company information:

	A	B	C
1	Company	Contact	Country
2	Alfreds Futterkiste	Maria Anders	Germany
3	Centro comercial Moctezuma	Francisco Chang	Mexico
4	Ernst Handel	Roland Mendel	Austria
5	Island Trading	Helen Bennett	UK
6	Laughing Bacchus Winecellars	Yoshi Tannamuri	Canada
7	Magazzini Alimentari Riuniti	Giovanni Rovelli	Italy
8			

**B. Aim: Find different controls using UiPath.**

**1. Element Exists:**

**Step 1:** Drag and drop sequence activity in the workflow.

**Step 2:** Drag and drop “CV Screen Scope” Activity. Indicate the screen.

**Step 3:** Drag and drop “CV Element Exists” Activity. Indicate the Element. Create and set an output variable to store the Boolean Value Output.

The screenshot shows the UiPath Studio interface. On the left, the 'Element exists' configuration window is open, displaying a 'CV Screen Scope' activity named 'DIV'. Inside the scope, there is a single screen named 'What is machine learning?'. Below the scope, a 'CV Element Exists - Image' activity is connected to it. On the right, an 'Output' panel shows a variable named 'Result' with a value 'x'. At the bottom, a table lists a variable named 'x' with type 'Boolean', scope 'Element exists', and a default value placeholder 'Enter a VB expression'.

Name	Variable type	Scope	Default
x	Boolean	Element exists	Enter a VB expression
<a href="#">Create Variable</a>			

**Step 4:** drag and drop If activity and set its condition.

**Step 5:** Add two Message Box: one in Then part and another in Else Part to check whether element is exists or not. And Run.

The screenshot shows the 'If' activity configuration. The 'Condition' is set to 'x'. The 'Then' branch contains a 'Message Box' activity with text 'Element exists'. The 'Else' branch also contains a 'Message Box' activity with text 'Element does not exists'.

**Output:**

## What is machine learning?

Machine learning is a branch of [artificial intelligence \(AI\)](#) and computer science which focuses on the use of data and algorithms to imitate the way that humans learn, gradually improving its accuracy.

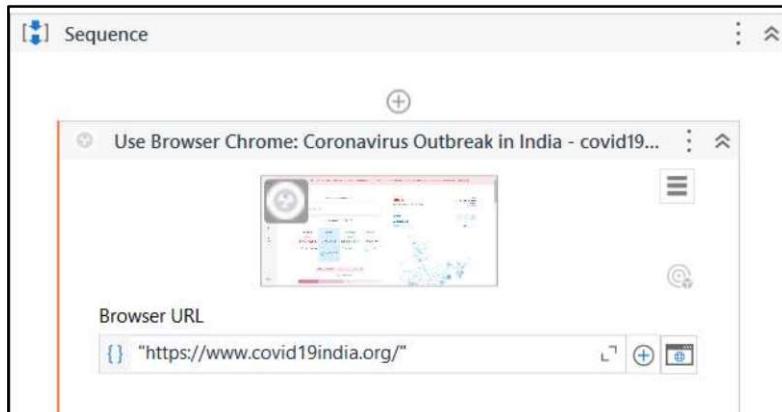
IBM has a rich history with machine learning. One for coining the term, “machine learning” with his ibm.com) around the game of checkers. Robert N master, played the game on an IBM 7094 computer. Compared to what can be done today, this feat s... nuel, is credited outside named checkers t to the computer. nsidered a major milestone in the field of artificial intelligence.



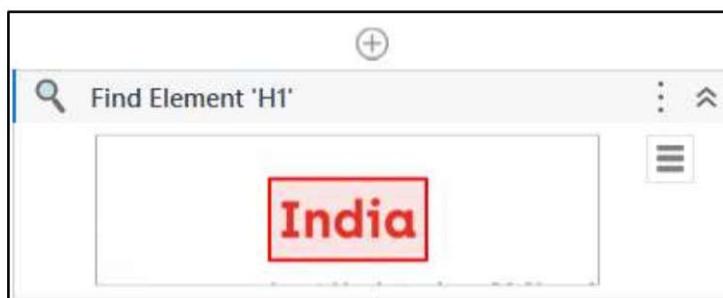
## 2. Find Element:

**Step 2:** Drag and drop “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel.

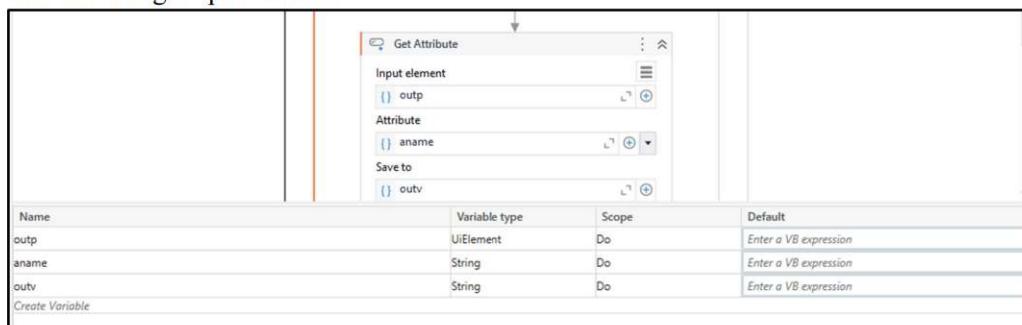
**Step 3:** Drag and drop “Use Browser/ Application” activity Indicate the screen you want to include in the workflow.



**Step 4:** Add “Find Element” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to look for and Click on Save & Close. Create and set an output variable to store the Attribute Value Output.



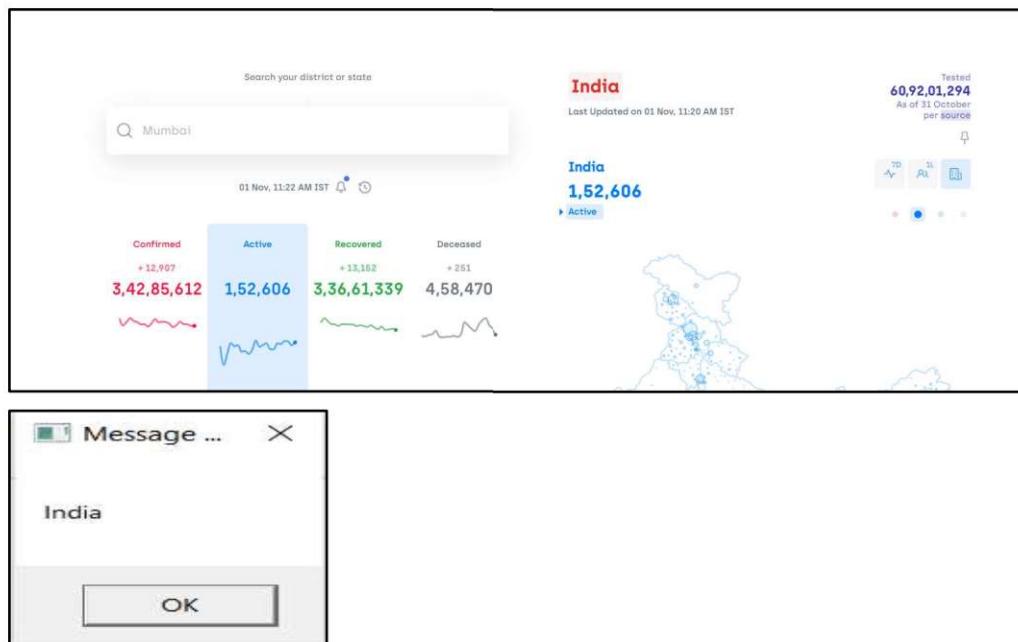
**Step 5:** Search for “Get Attribute” Activity in the Activities Panel and drag it inside the sequence workflow. Input element as the Find Element ouput, create and set an attribute value and and String output variable.



**Step 6:** Search for “Message Box” Activity in the Activities Panel and drag it inside the sequence. Enter the Output value.



**Step 7:** Click the Run button and see the result.

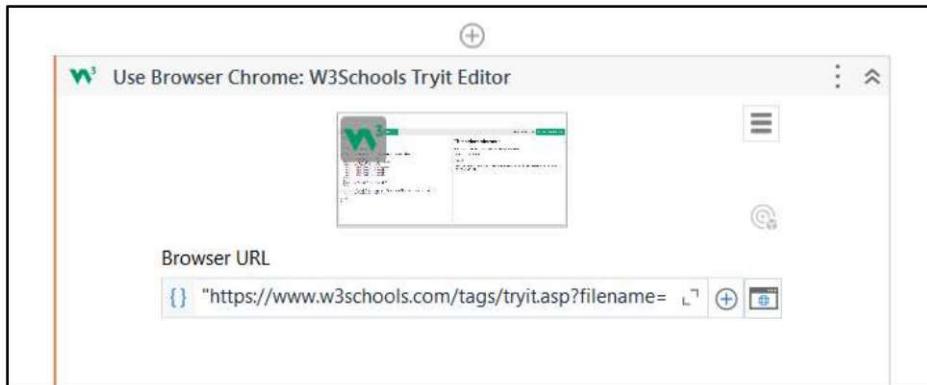


### 3. Find Children

**Steps:** -

**Step 1:** Drag and drop “Sequence” activity in main workflow.

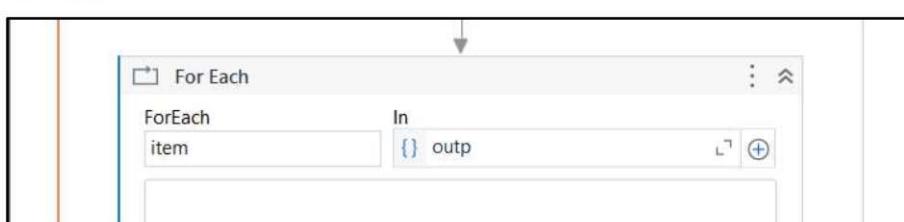
**Step 2:** Drag and drop “Use Browser/ Application” Activity inside sequence. Indicate the screen you want to include in the workflow.



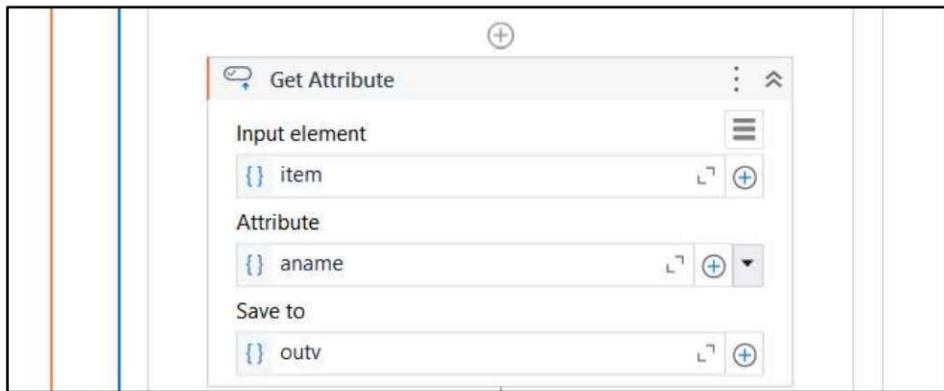
**Step 4:** Add “Find Children” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to look for and Click on Save & Close. Create and set an output variable to store the Attribute Value Output.



**Step 6:** Search for “For Each” Activity in the Activities Panel and drag it inside the sequence workflow.



**Step 6:** Search for “Get Attribute” Activity in the Activities Panel and drag it inside the sequence workflow. Input element as the Find Element ouput, create and set an attribute value and and String output variable.



**Step 6:** Search for “Write Line” Activity in the Activities Panel and drag it inside the sequence.

Enter the Output value.



**Step 7:** Click the Run button and see the result.

### The select element

The select element is used to create a drop-down list.

Choose a car:

Click the "Submit" button and the form-data will be sent to a page on the server called "action\_page.php".

- ① Debug started for file: 7B3
- ① RPAProcess execution started
- ① Audit: Using Web App. Browser: Chrome URL: [https://www.w3schools.com/tags/tryit.asp?filename=tryhtml\\_select](https://www.w3schools.com/tags/tryit.asp?filename=tryhtml_select)
- ① Volvo
- ① Saab
- ① Opel
- ① Audi

**C. Aim: Demonstrate the following activities in UiPath:**

**1. Mouse (click, double click and hover)**

- Mouse Click**

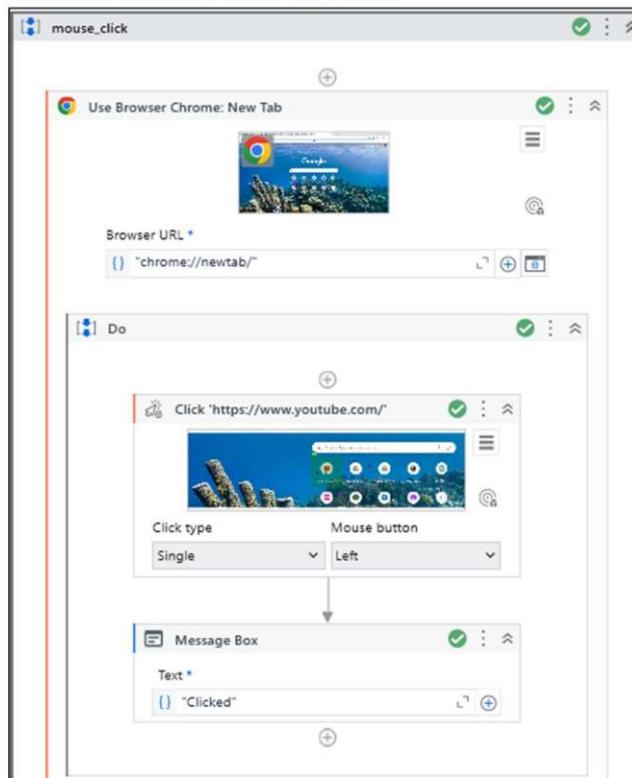
Steps: -

Step 1: Drag and drop a Sequence activity on the Designer panel.

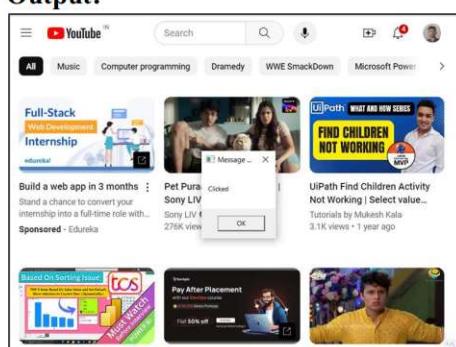
Step 2: Drag and drop use Application/Browser activity.

Step 3: Drag and drop the Click activity.

Step 4: Click on Indicate on screen and indicate the UI element you want to click on: Hit the Run button to see the result.



**Output:**



- **Double Click**

**Steps:** -

**Step 1:** Drag and drop a Sequence activity in the Designer panel.

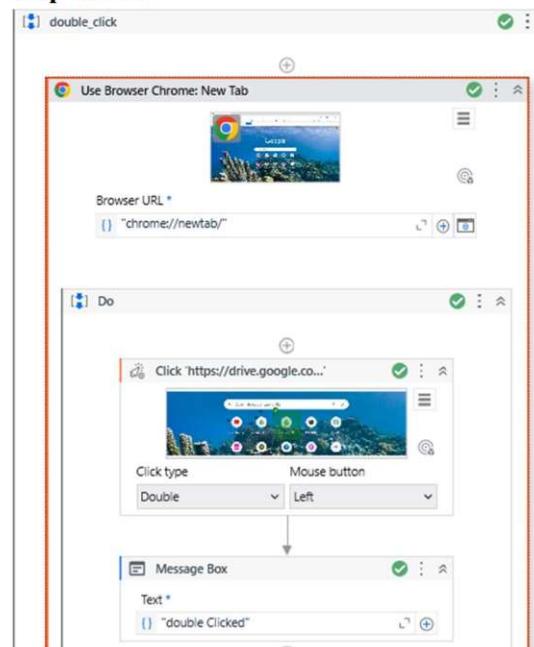
**Step 2:** Drag and drop use Application/Browser activity.

**Step 3:** Drag and drop the Click activity

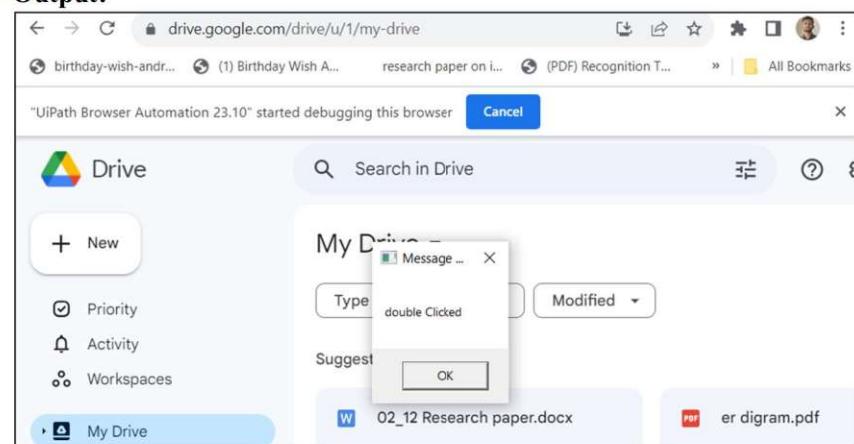
**Step 4:** Indicate the Element you want to double-click on and Click on Save & Close.

Select Click Type as “Double”. Click on Indicate on screen and indicate the UI element you want to double-click on

**Step 5:** Run



**Output:**



- **Mouse Hover:**

**Steps:** -

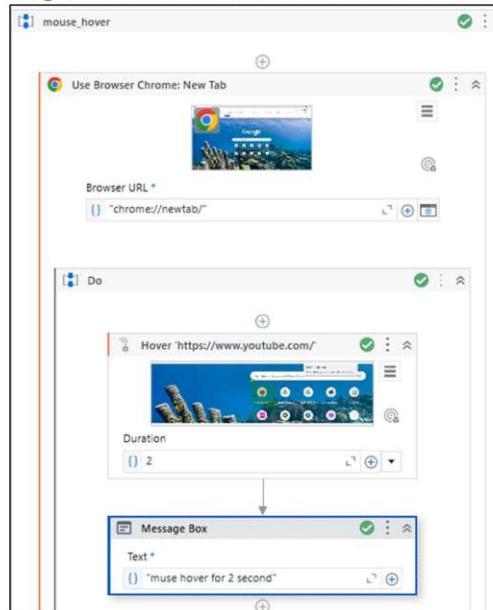
**Step 1:** Drag and drop a Sequence activity in the Designer panel.

**Step 2:** Drag and drop use Application/Browser activity.

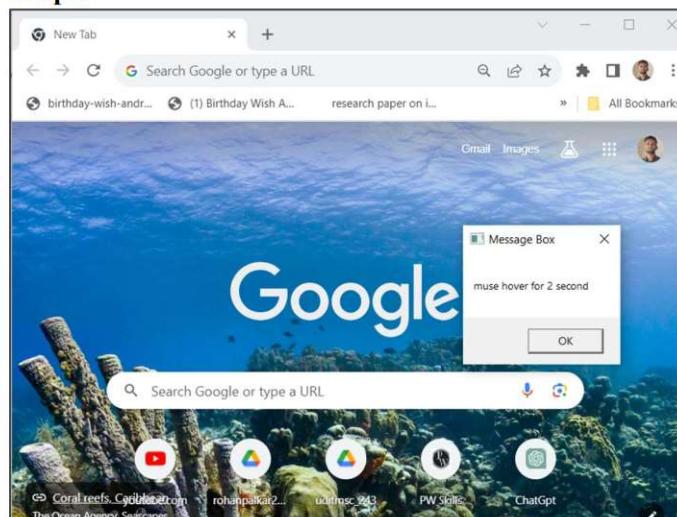
**Step 3:** Drag and drop the Hover activity.

**Step 4:** Click on Indicate on screen and indicate the UI element you want to hover on and set duration of 2 sec.

**Step 5:** Hit the Run button to see the result.



**Output:**



## 2. Type into:

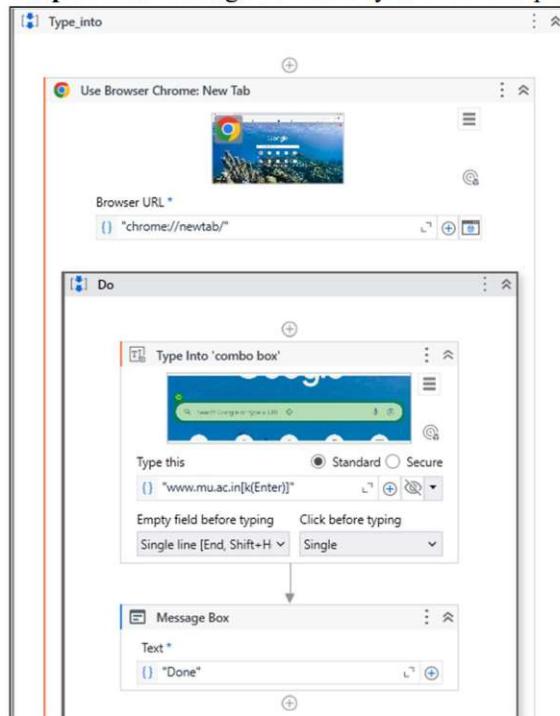
**Steps:** -

**Step 1:** Drag and drop Use Application/Browser.

**Step 1:** Click on “Indicate on screen”. Locate the chrome screen.

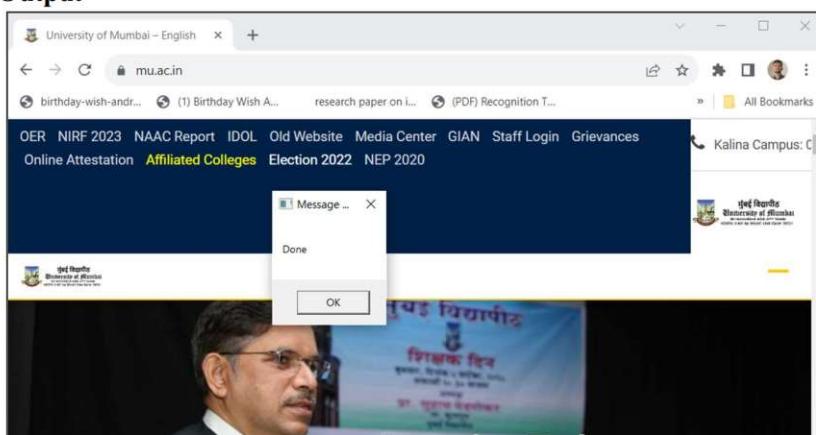
**Step 4:** Add a Type into Activity and again indicate your search section.

**Step 5:** Add message box activity to check the project is successful.



**Step 6: Run**

**Output**



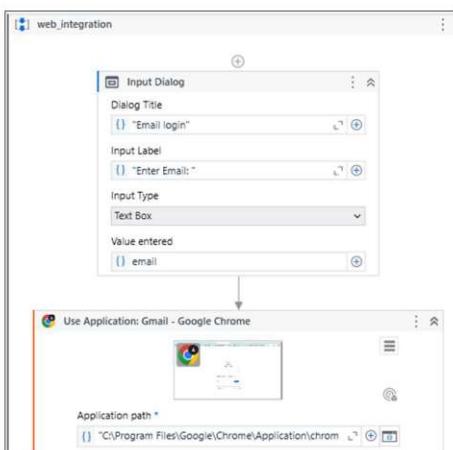
### 3. Type secure text:

**Steps:** -

**Step 1:** Select sequence activity

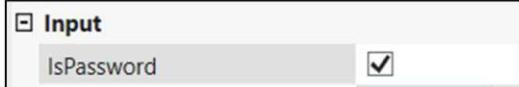
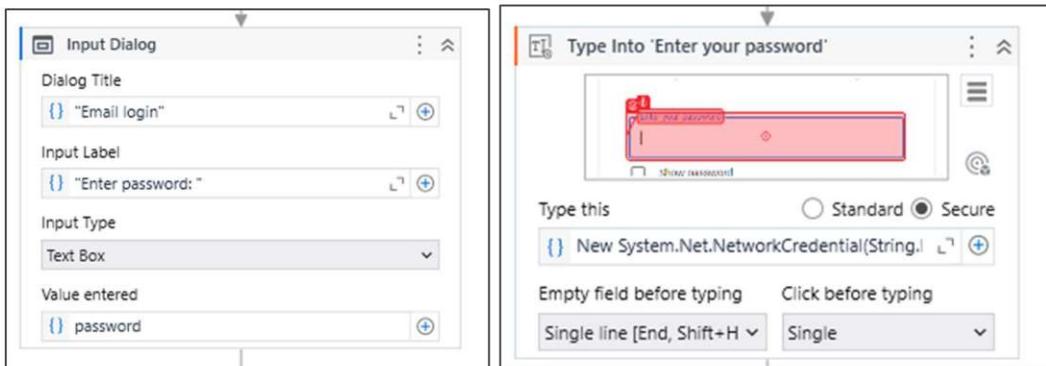
**Step 2:** Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create a variable and specify the variable in the Result property of the Input dialog box.

**Step 3:** Drag and drop “Use Browser/ Application” inside the sequence workflow. Indicate the screen you want to include in the workflow.

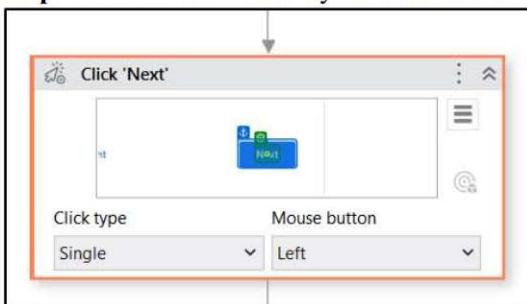


**Step 5:** Drag and “Type Into” Activity inside the sequence workflow. Indicate the Element you want to click on and Click on Save & Close.

**Step 6:** Check the IsPassword property. Select the Secure Radio Button. Set the variable as Secure String using the code – “**new System.Net.NetworkCredential(String.Empty, password).SecurePassword**”.

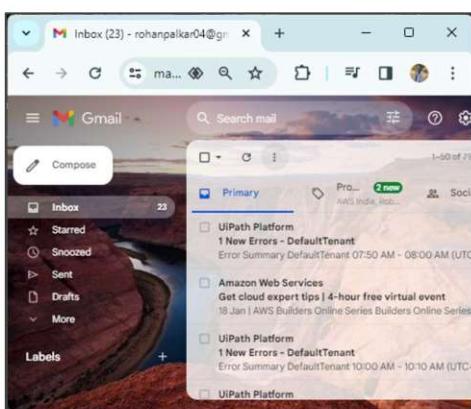
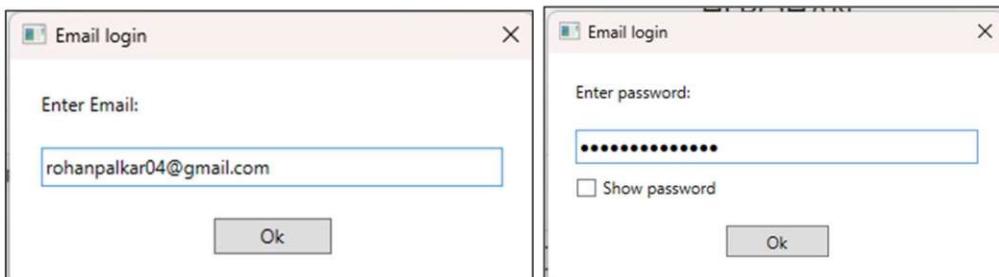


**Step 7:** Add “Click” Activity and Indicate the “Next” button.



**Step 8:** Click the Run button and see the result.

**Output:**



## PRACTICAL NO. 8

**A. Aim: Demonstrate the following events in UiPath:**

**1. Element triggering event**

- **Click Trigger**

**Steps:-**

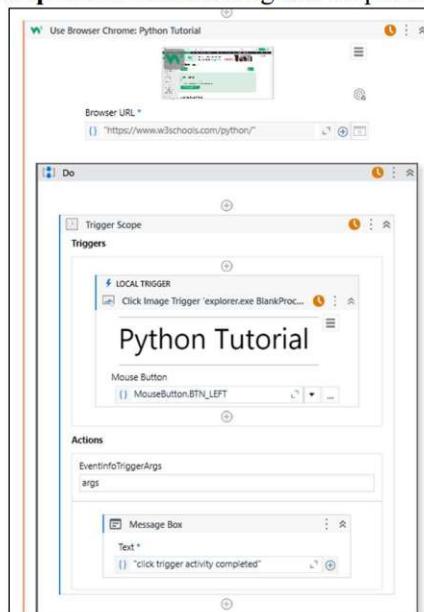
**Step 1:** Drag and drop a Sequence Activity.

**Step 2:** Take Use Application/Browser Activity. Indicate the screen where you want

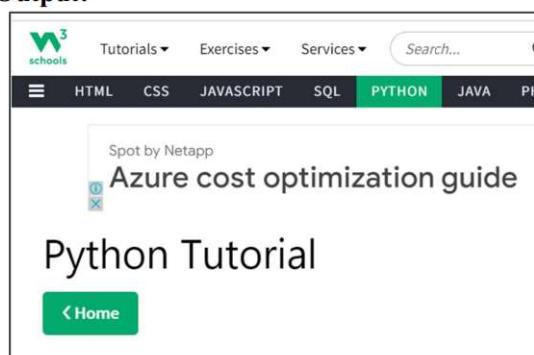
**Step 3:** Add Trigger Scope Activity. In the Trigger Action drag and drop a Click Trigger. Indicate the screen on a particular thing.

**Step 4:** Select BTN\_LEFT of Mouse Button and check true for Include Children.

**Step 5:** For Actions drag and drop the Message Box Activity. Hit the Run button.



**Output:**



- **Key press**

**Steps:** -

**Step 1:** Open UiPath Studio.

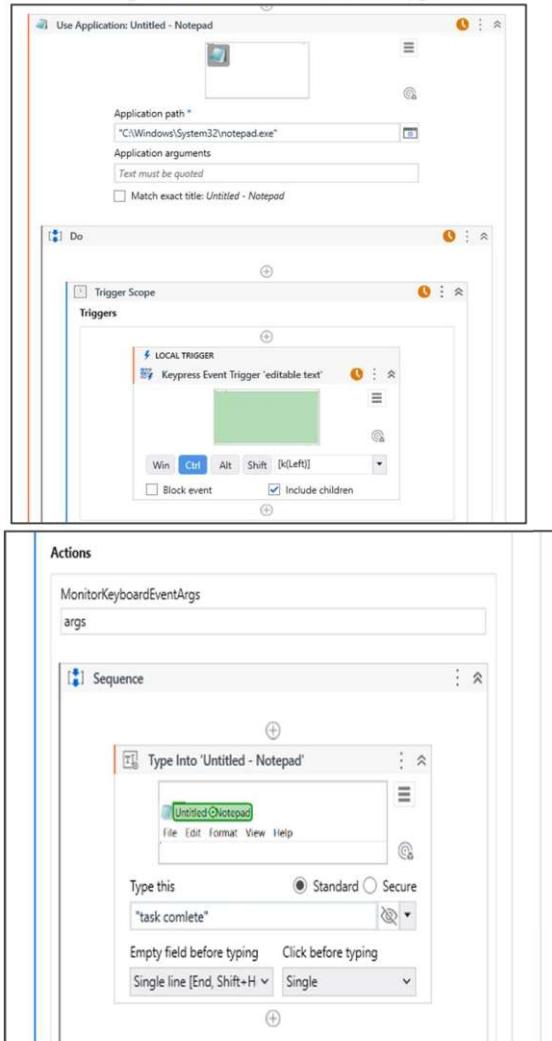
**Step 2:** Start a BlankProcess. Give the BlankProcess a name.

**Step 3:** Drag and drop a Sequence Activity.

**Step 4:** Take Use Application/Browser Activity. Create a Notepad file and indicate the screen on Notepad.

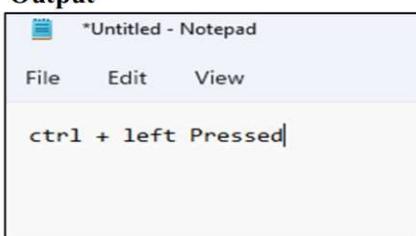
**Step 5:** Add Trigger Scope Activity. In the Trigger Action drag and drop a Key Press Trigger. Select **ctrl + left key**.

**Step 6:** For Actions take a Type into Activity and indicate screen on notepad.



**Step 7:** Run.

**Output**



## 2. Image triggering event:

**Steps: -**

**Step 1:** Drag and drop a Sequence Activity.

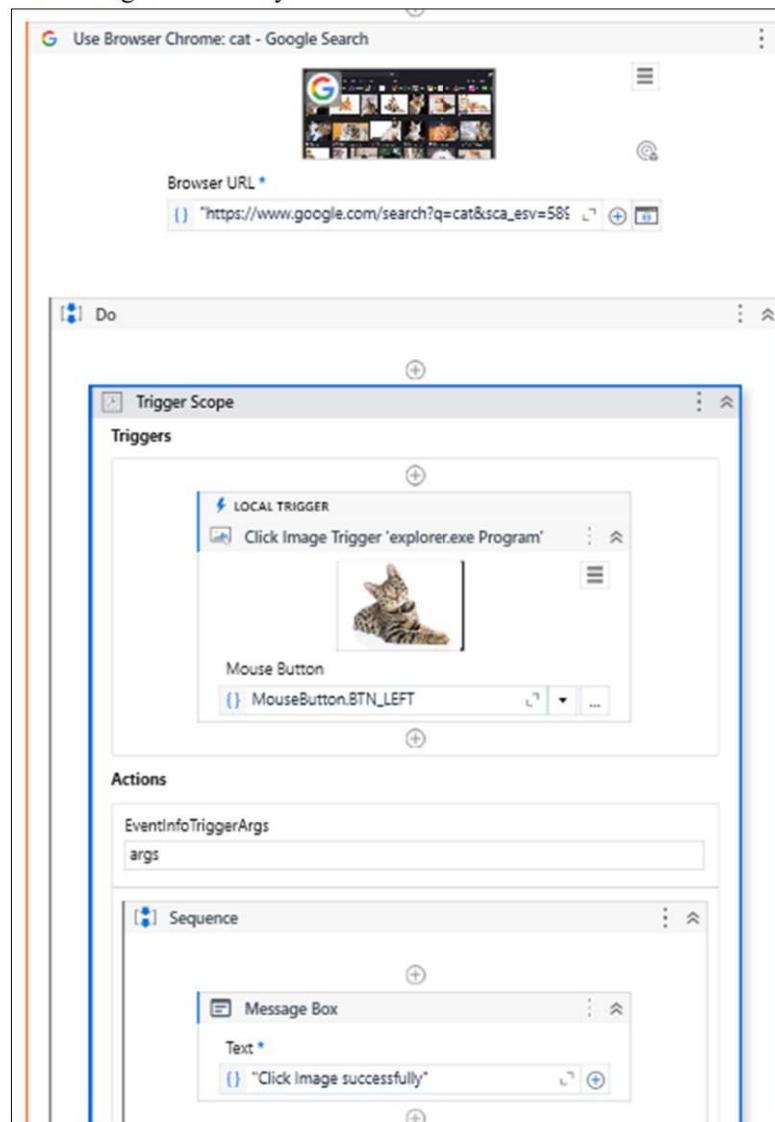
**Step 2:** Take Use Application/Browser Activity. Indicate the screen to the image.

**Step 3:** Add Trigger Scope Activity. In the Trigger Action drag and drop a Click Image Trigger. Drag the cursor on the image and also indicate the scope.

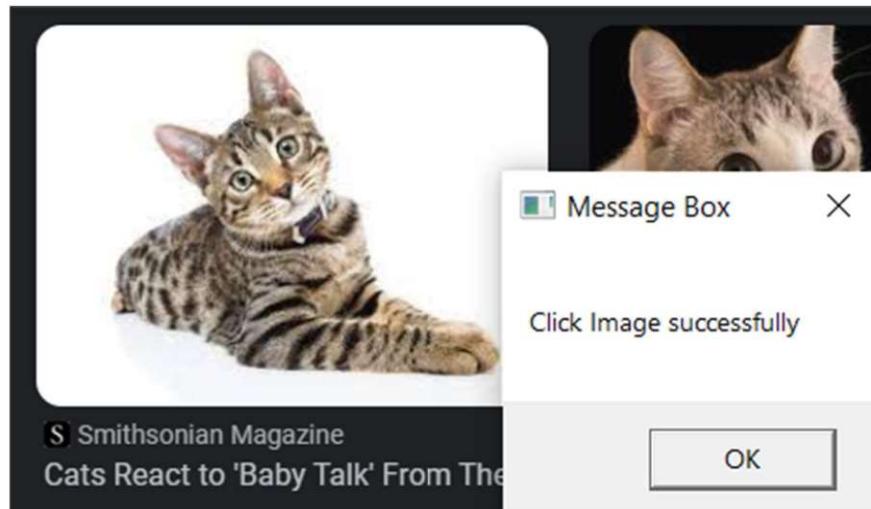
**Step 4:** Select BTN\_LEFT of Mouse Button.

**Step 5:** In selector option Select Indicate Element.

**Step 6:** For Actions drag and drop the Message Box Activity. In the text field type “Click image successfully”.



**Step 7:** Run. (After run click on image)

**Output:**

**3. System triggering event:**

- **Hot Key**

**Steps:** -

**Step 1:** Open UiPath Studio.

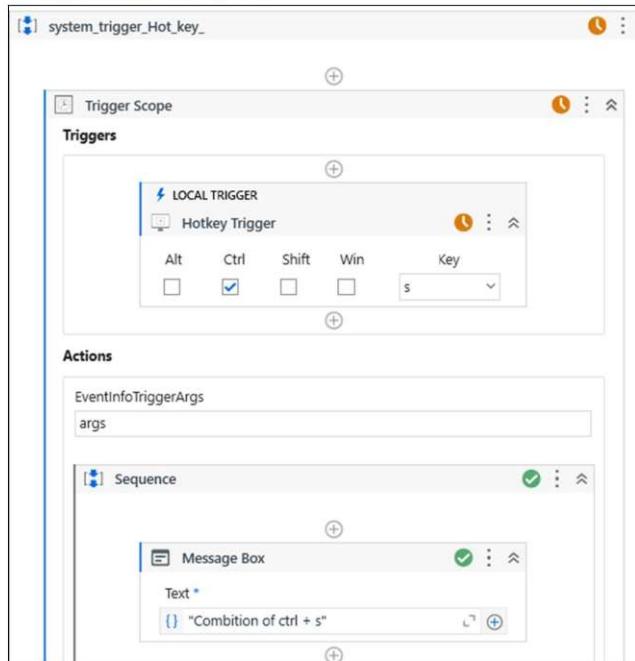
**Step 2:** Start a BlankProcess. Give the BlankProcess a name.

**Step 3:** Drag and drop a Sequence Activity.

**Step 4:** Add Trigger Scope Activity. In the Trigger Action drag and drop a Hotkey Trigger.

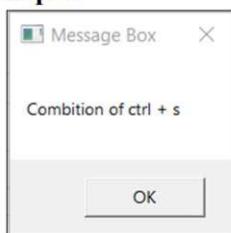
**Step 5:** Select ctrl + s.

**Step 6:** For Actions drag and drop the Message Box Activity. In the text field type “Combination of ctrl + s”.



**Step 7:** Run. (After run click ctrl+s)

**Output:**



- **Mouse Trigger**

**Steps:** -

**Step 1:** Open UiPath Studio.

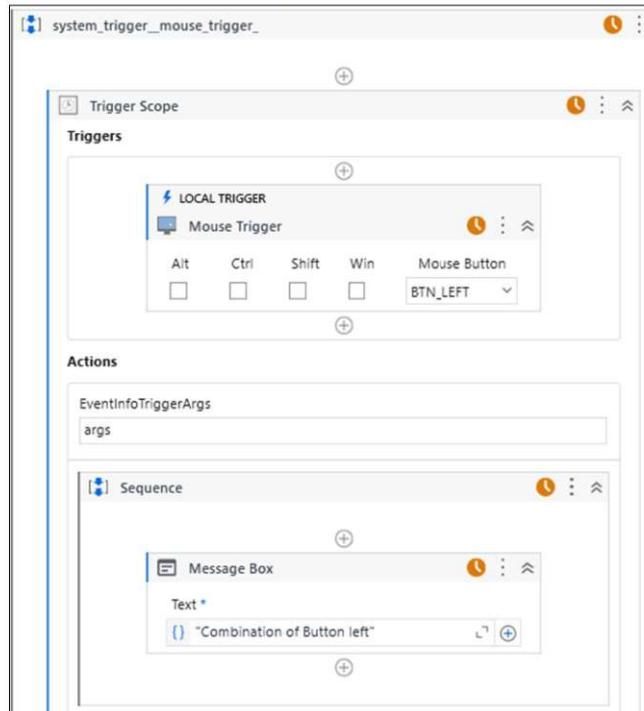
**Step 2:** Start a BlankProcess. Give the BlankProcess a name.

**Step 3:** Drag and drop a Sequence Activity.

**Step 4:** Add Trigger Scope Activity. In the Trigger Action drag and drop a Mouse Trigger.

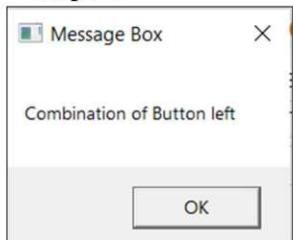
**Step 5:** Select BTN\_LEFT of Mouse Button.

**Step 6:** For Actions drag and drop the Message Box Activity. In the text field type “Combination of Button Left”.



**Step 7:** Run. (After run click right button.)

**Output:**



- **System Trigger**

**Steps:** -

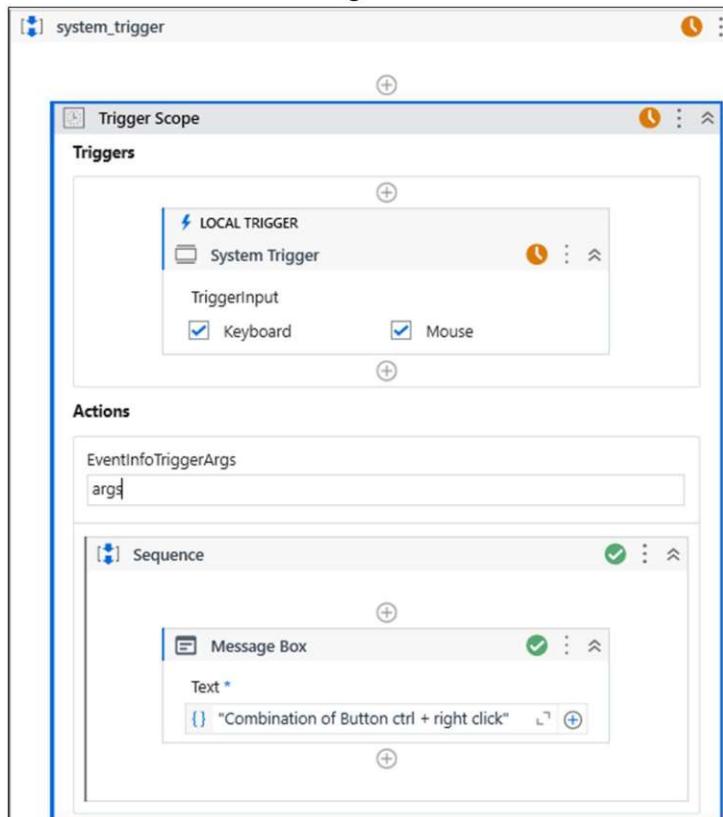
**Step 1:** Open UiPath Studio.

**Step 2:** Start a BlankProcess. Give the BlankProcess a name.

**Step 3:** Drag and drop a Sequence Activity.

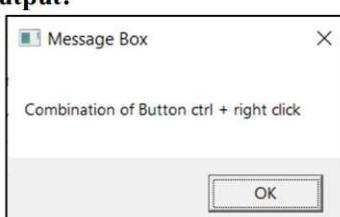
**Step 4:** Add Trigger Scope Activity. In the Trigger Action drag and drop a System Trigger.

**Step 6:** For Actions drag and drop the Message Box Activity. In the text field type “Combination of Button ctrl + right click”.



**Step 7:** Run. (After run click ctrl + right click)

**Output:**



**B. Aim: Install and automate any process using UiPath with the following plugins:**

**i. Java Plugin**

**Steps: -**

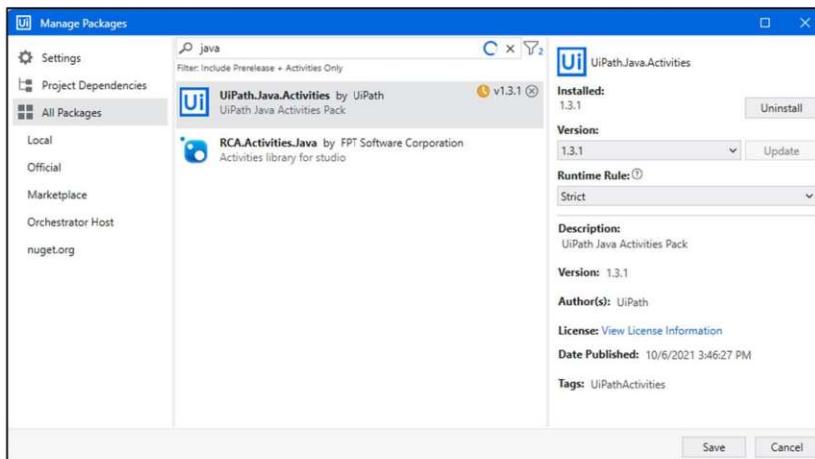
**Step 1:** Open UiPath Studio. In the Ribbon Panel go to the Manage Package.

**Step 2:** Select All Packages. A list of activities package will appear.

**Step 3:** Search Java, UiPath.Java.Activities will appear. Click on install.

**Step 4:** Java Plugin is installed.

**Output:**



**ii. Mail Plugin**

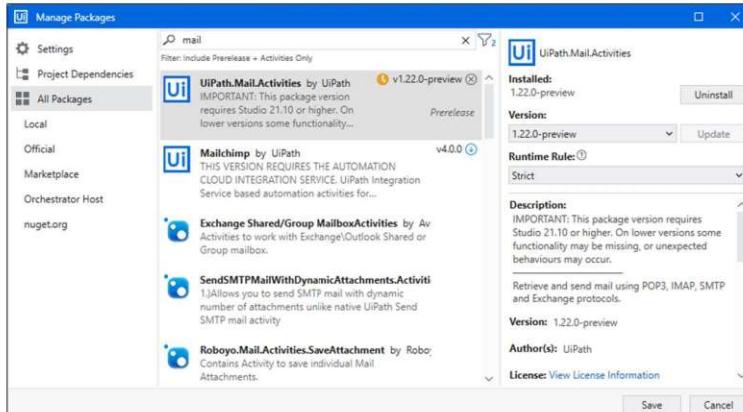
**Steps: -**

**Step 1:** Open UiPath Studio. In the Ribbon Panel go to the Manage Package.

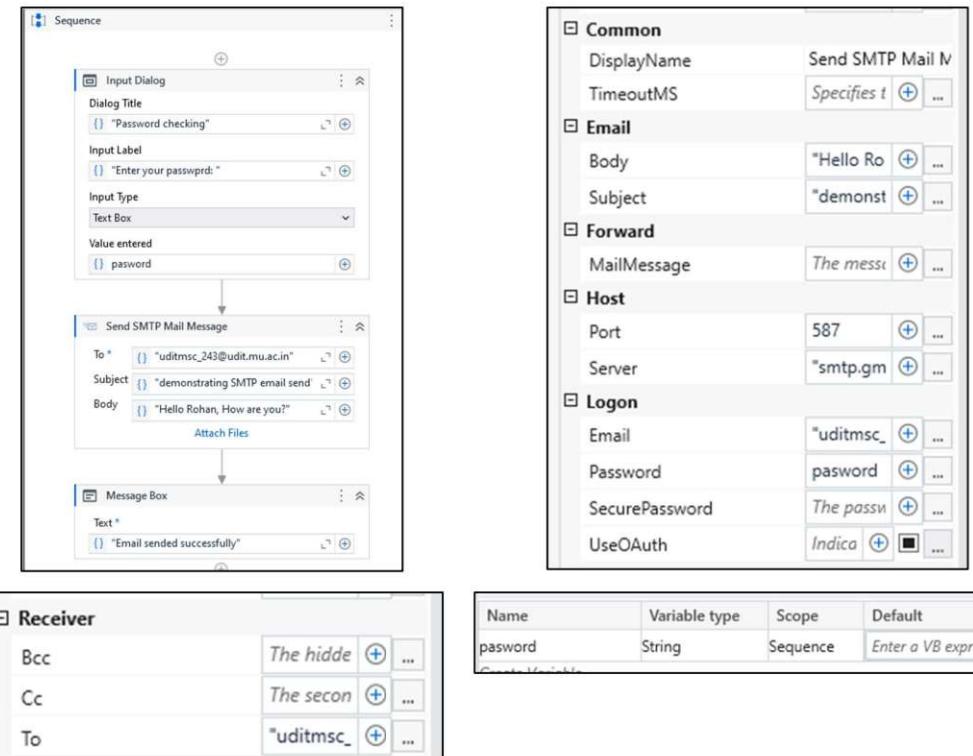
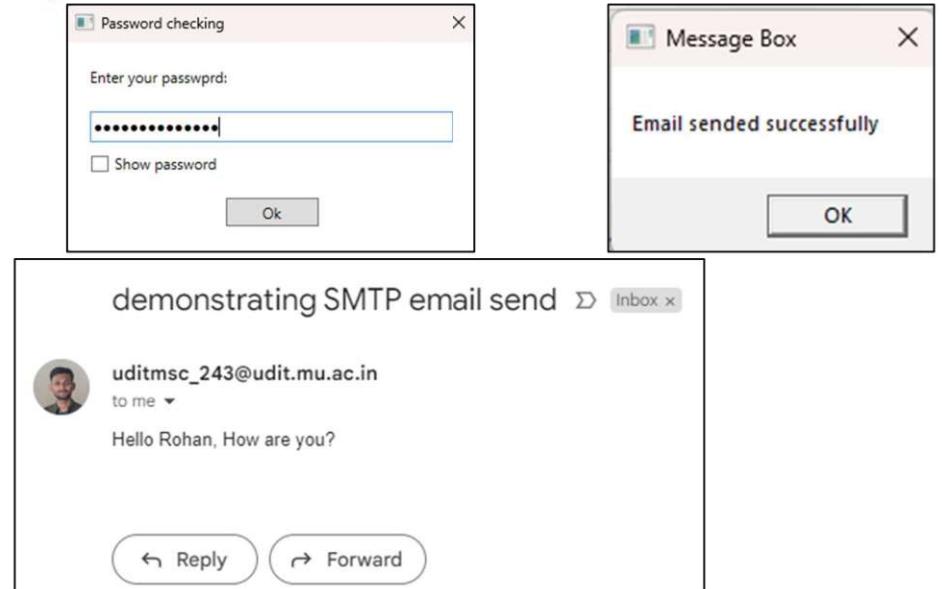
**Step 2:** Select All Packages. A list of activities package will appear.

**Step 3:** Search mail UiPath.Mail.Activities will appear. Click on install

**Step 4:** Mail Plugin is installed.



**Step 6:** Add Input dialog box and create variable password. Add “Send SMTP Mail Message” inside the sequence workflow. Enter the recipient’s email address, subject line and message. Enter the password, port number, mail server name in the properties panel.

**Step 7: Run**

### iii. PDF Plugin

**Steps:** -

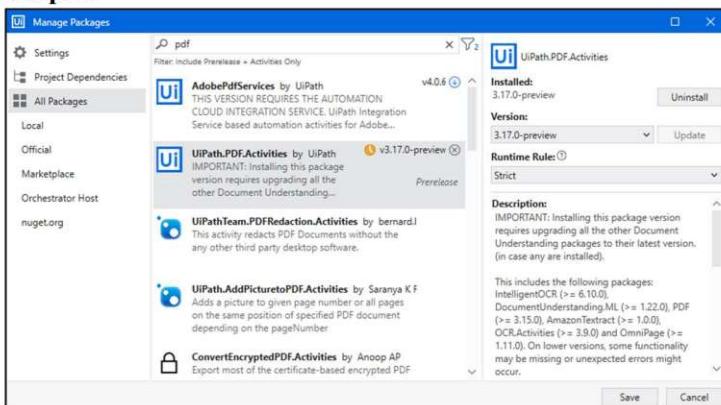
**Step 1:** Open UiPath Studio. In the Ribbon Panel go to the Manage Package.

**Step 2:** Select All Packages. A list of activities package will appear.

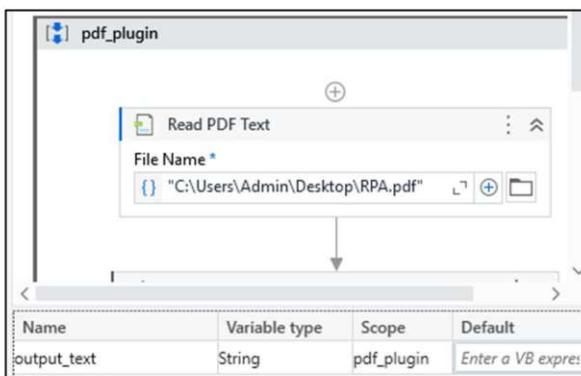
**Step 3:** Search PDF, UiPath.PDF.Activities will appear. Click on install.

**Step 4:** PDF Plugin is installed.

**Output:**



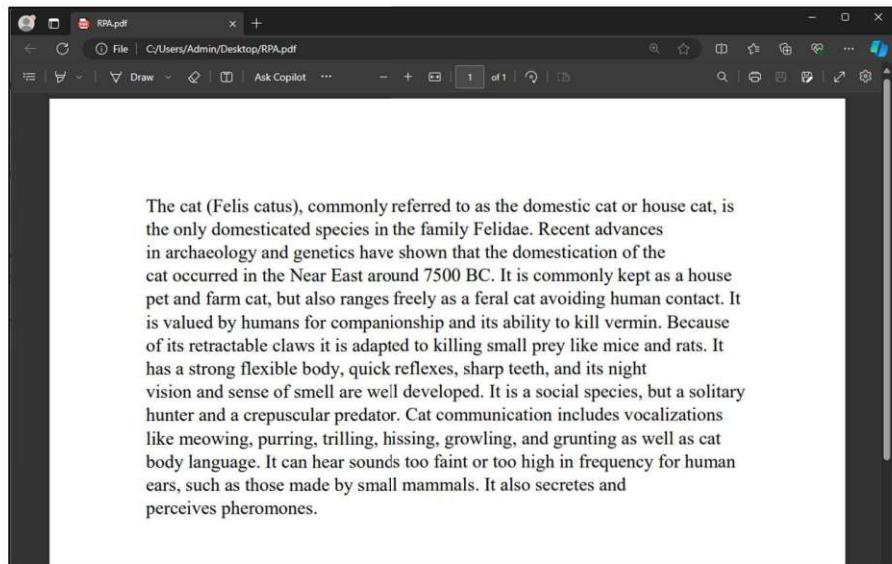
**Step 5:** Drag and drop sequence activity. Drag and drop “Read PDF Text”. Enter the file location of the PDF to read from. Create and assign an output variable.



**Step 6:** Add “Write Line” in Activity. Enter the output\_text.



**Step 7:** Click on the Run button and see the Results.

**Output:**A screenshot of the RPA application's output log window. The title bar says 'Output'. The log shows the following entries:

- Debug started for file: pdf plugin
- pract\_8 execution started
- The cat (*Felis catus*), commonly referred to as the domestic cat or house cat, is the only domesticated species in the family Felidae. Recent advances in archaeology and genetics have shown that the domestication of the cat occurred in the Near East around 7500 BC. It is commonly kept as a house pet and farm cat, but also ranges freely as a feral cat avoiding human contact. It is valued by humans for companionship and its ability to kill vermin. Because of its retractable claws it is adapted to killing small prey like mice and rats. It has a strong flexible body, quick reflexes, sharp teeth, and its night vision and sense of smell are well developed. It is a social species, but a solitary hunter and a crepuscular predator. Cat communication includes vocalizations like meowing, purring, trilling, hissing, growling, and grunting as well as cat body language. It can hear sounds too faint or too high in frequency for human ears, such as those made by small mammals. It also secretes and perceives pheromones.
- pract\_8 execution ended in: 00:00:00

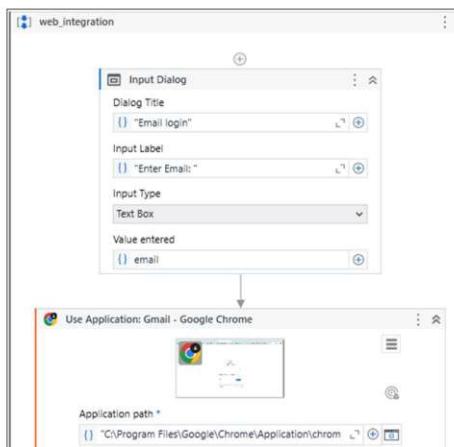
#### iv. Web Integration

**Steps:** -

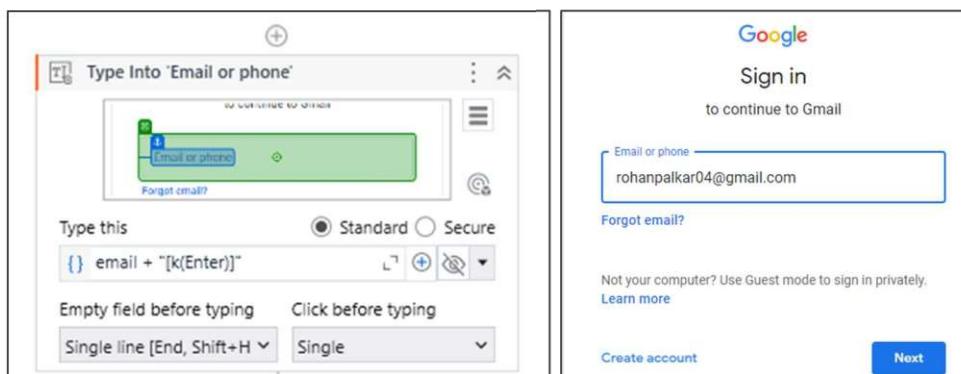
**Step 1:** Select sequence activity

**Step 2:** Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create a variable and specify the variable in the Result property of the Input dialog box.

**Step 3:** Drag and drop “Use Browser/ Application” inside the sequence workflow. Indicate the screen you want to include in the workflow.



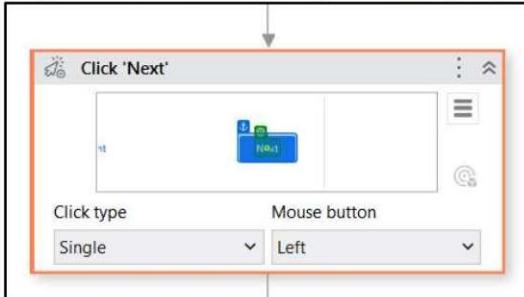
**Step 5:** Drag and “Type Into” Activity inside the sequence workflow. Indicate the Element you want to click on and Click on Save & Close.



**Step 6:** Check the IsPassword property. Select the Secure Radio Button. Set the variable as Secure String using the code – “**new System.Net.NetworkCredential(String.Empty, password).SecurePassword**”.

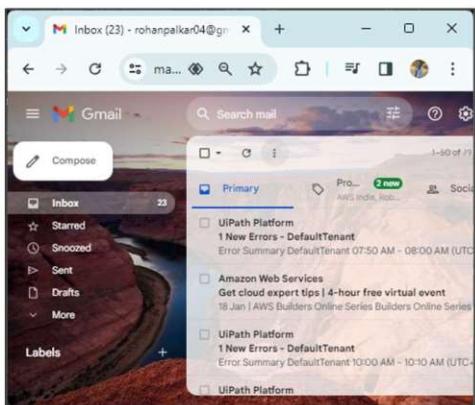
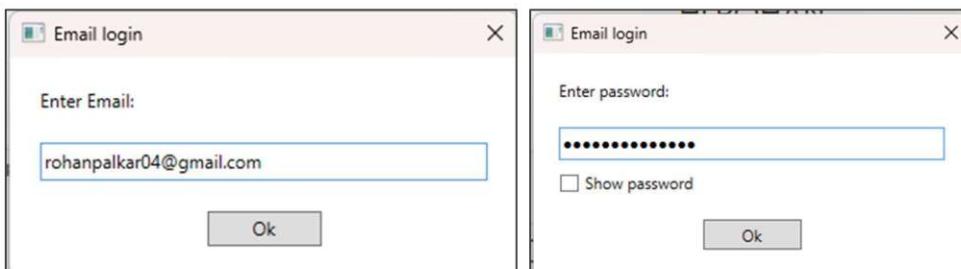
The screenshot shows the UiPath Studio interface. At the top left is the configuration for an 'Input Dialog' with the title 'Email login' and an 'Enter password:' label. At the top right is the configuration for a 'Type Into' step with the title 'Enter your password', set to 'Secure' mode and using a 'New System.Net.NetworkCredential(String)' value. Below these is a step labeled 'IsPassword' with a checked checkbox, indicating a decision point in the process.

**Step 7:** Add “Click” Activity and Indicate the “Next” button.



**Step 8:** Click the Run button and see the result.

**Output:**



### v. Excel Plugin

#### Steps: -

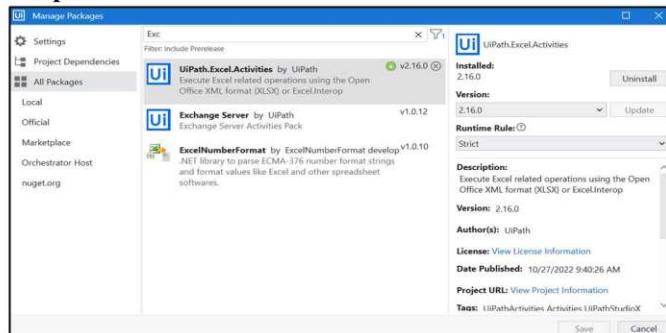
**Step 1:** Open UiPath Studio. In the Ribbon Panel go to the Manage Package.

**Step 2:** Select All Packages. A list of activities package will appear.

**Step 3:** Search Excel, UiPath.Excel.Activities will appear. Click on install.

**Step 4:** Excel Plugin is installed.

#### Output:



- **Read Cell**

#### Steps: -

**Step 1:** Drag and drop the Sequence Activity.

**Step 2:** Drag and drop Excel Process Scope Activity in the Sequence Activity.

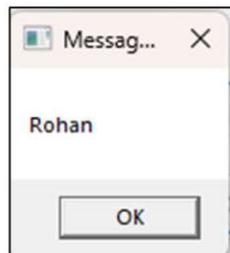
**Step 3:** In Excel Process Scope drag and drop the Read Cell Workbook Activity.

**Step 4:** Create an excel file with some data and save it. Give a desired path of excel file in the Read Cell Workbook. Also give the “sheet name” (Sheet1) and assign the cell you want to read (“B2”). Create a variable cellvalue by pressing ctrl+k. In the output field of Rad cell Activity write created variable: cellvalue

**Step 5:** Add Message Box Activity and connect it to Read Cell Workbook. In the Text field, type variable “cellvalue” created in Step 5.

**Step 6:** Run.

Sr. no.	Name	Address
1	Rohan	Ratnagiri
2	Priya	Dadar
3	Vijay	Bandra



#### vi. Word Plugin

##### A) Read text

**Steps:-**

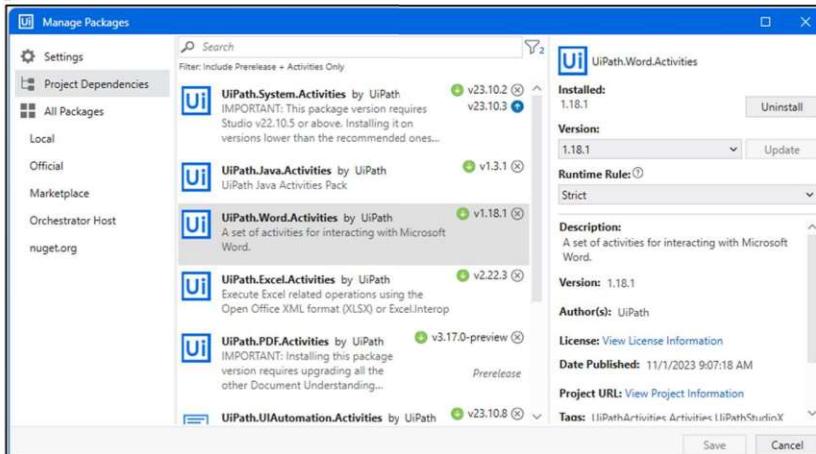
**Step 1:** Open UiPath Studio. In the Ribbon Panel go to the Manage Package.

**Step 2:** Select All Packages. A list of activities package will appear.

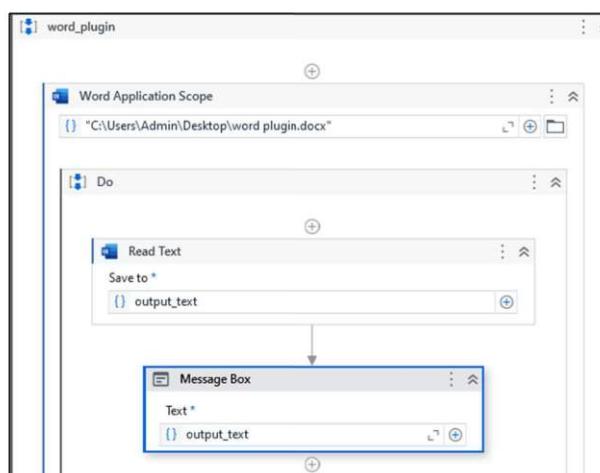
**Step 3:** Search word, UiPath.Word.Activities will appear. Click on install.

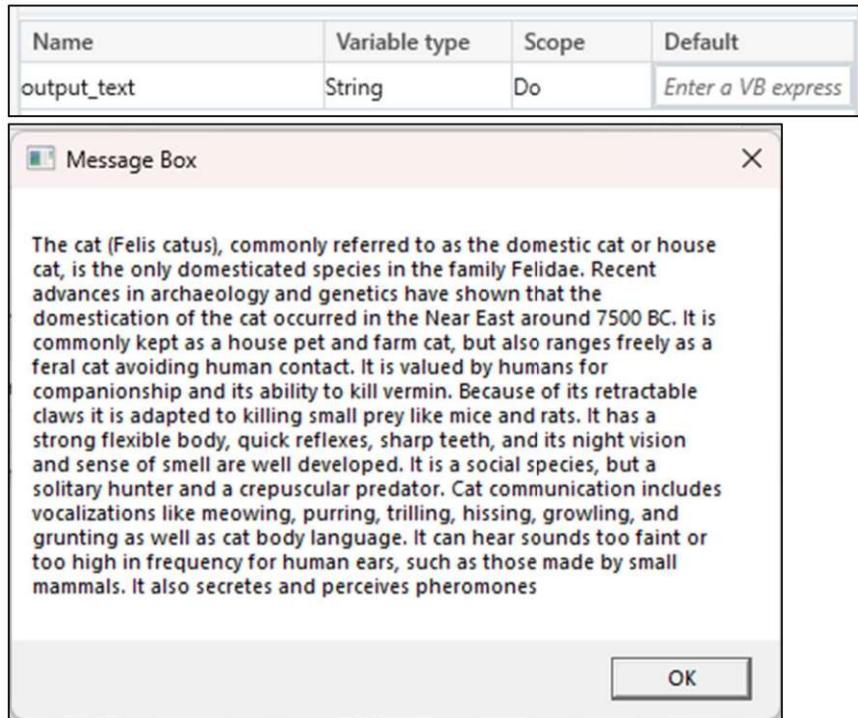
**Step 4:** Mail Plugin is installed.

**Output:**



**Example:**



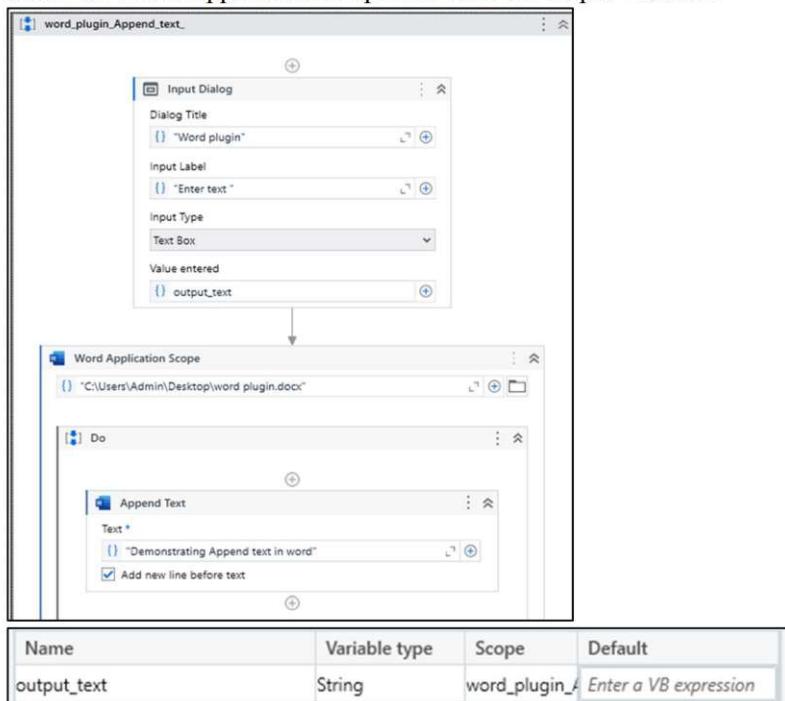


### B) Append Text

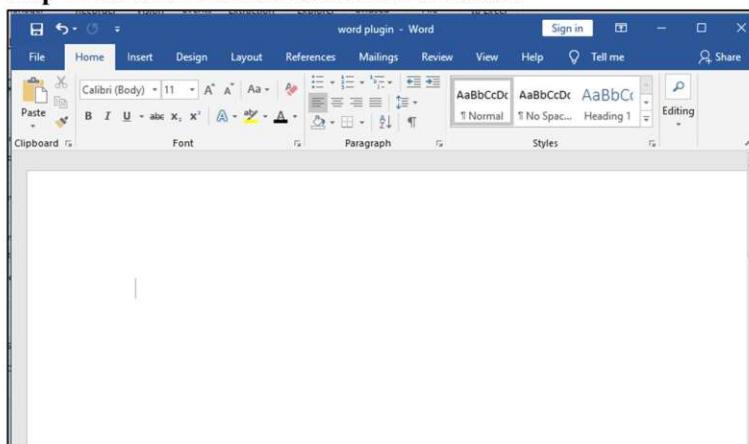
**Step 1:** Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create variables and specify the variables in the Result property of the Input dialog box.

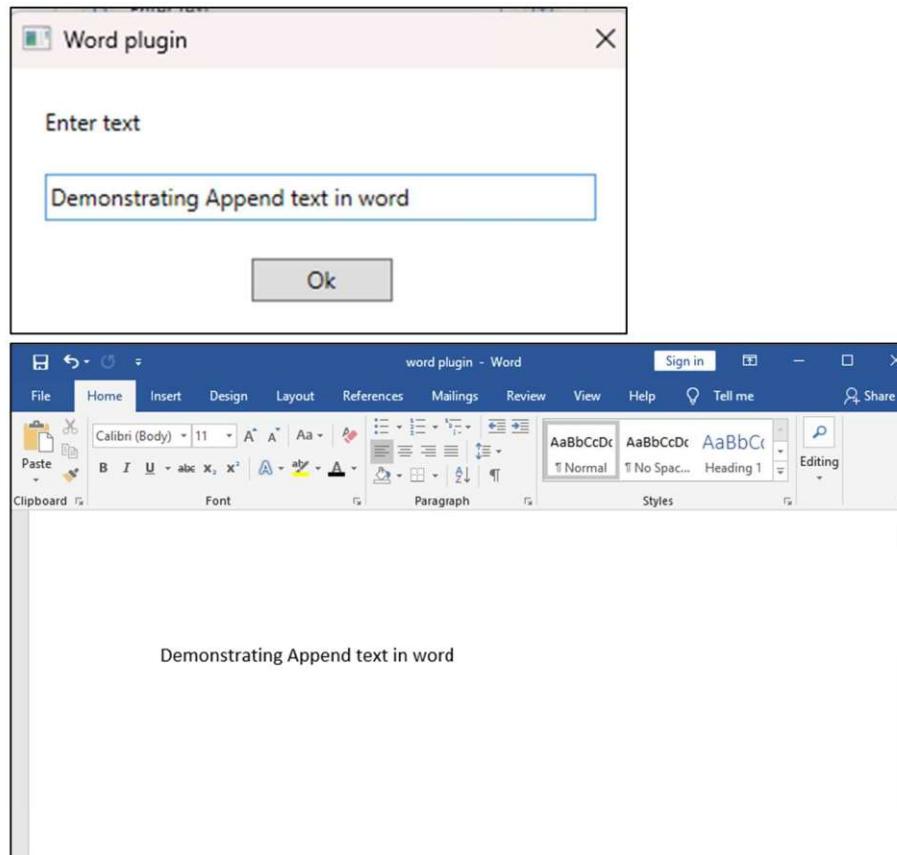
**Step 2:** Search for “Word Application Scope” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Enter the Target File location.

**Step 3:** Search for “Append Text” in the Search panel of the Activities panel. Drag and drop the activity inside the Word Application Scope and enter the output variable.



**Step 4:** Click the Run button and see the result.





### vii. Credential Plugin

**Steps:** -

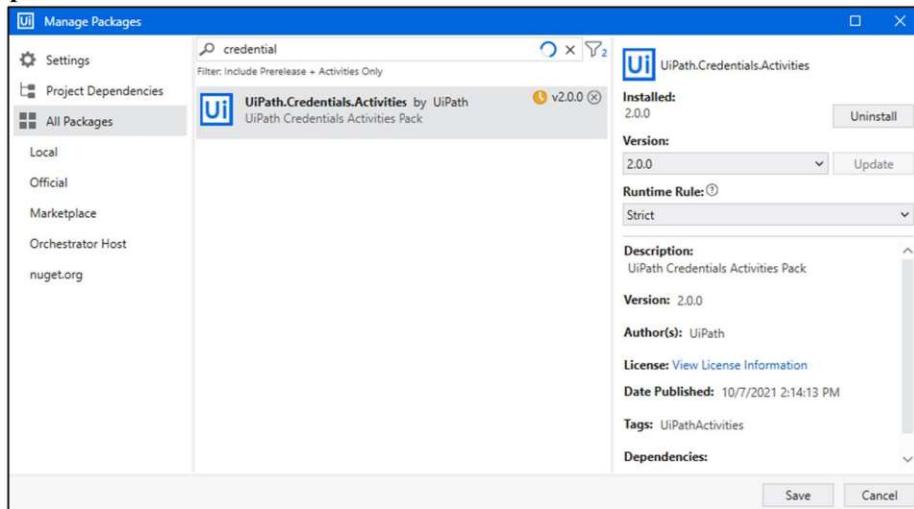
**Step 1:** Open UiPath Studio. In the Ribbon Panel go to the Manage Package.

**Step 2:** Select All Packages. A list of activities package will appear.

**Step 3:** Search Credentials, UiPath.Credentials.Activities will appear. Click on install.

**Step 4:** Credentials Plugin is installed.

**Output:**

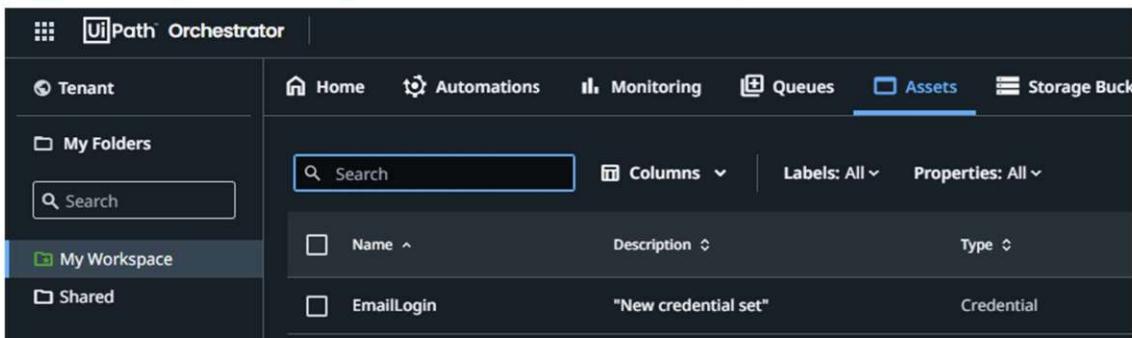


#### [a] Set Credential

**Step 1:** Drag and drop “Sequence” in the Activity.

**Step 2:** Create a new Credential in Orchestrator.

(<https://cloud.uipath.com/uomydvuvoo/DefaultTenant/orchestrator>)



**Step 3:** Drag and drop two Input dialog boxes inside the Sequence. Set one input Dialog box for the username and with output variable as “email” and the other input Dialog box for the Password with the output variable as “pwd” and isPassword Property checked.

The screenshot shows the configuration of two input dialogs and a variable table.

- Input Dialog 1:** Dialog Title: "Credential Management", Input Label: "Enter username:", Input Type: Text Box, Value entered: email.
- Input Dialog 2:** Dialog Title: "Credential Management", Input Label: "Enter Password:", Input Type: Text Box, Value entered: pwd.
- Variable Table:**

Name	Variable type	Scope	Default
email	String	set credential	Enter a VB expression
pwd	String	set credential	Enter a VB expression

**Step 4:** Drag and drop the “Set Credential” activity inside the Sequence. Select the Orchestrator Folder Path and the Credential name. Enter the Username and Password Variables.

The screenshot shows the configuration of the Set Credential activity.

- Orchestrator Folder Path: rohanpalkar04@gmail.com's workspace
- Credential Name: EmailLogin
- Username: email
- Password: pwd

**Step 5:** Drag and drop “Message Box” activity inside the body and enter the output statement.

The screenshot shows the configuration of the Message Box activity.

- Text: "New credential set"

**Step 6:** Click the Run button and see the result.

The screenshot displays four windows from a Robotic Process Automation (RPA) application:

- Credential Management (Top Left):** A window titled "Credential Management" asking for a "username". The input field contains "Rohan", and there is a checked checkbox for "Show password". A button labeled "Ok" is at the bottom.
- Credential Management (Top Right):** A window titled "Credential Management" asking for a "password". The input field shows masked text ("\*\*\*\*\*") and an unchecked checkbox for "Show password". A button labeled "Ok" is at the bottom.
- Message Box (Middle Left):** A window titled "Message Box" displaying the message "New credential set" and an "OK" button.
- Edit Asset: EmailLogin (Bottom):** A window titled "Edit Asset: EmailLogin" under "My Workspace > Assets". It shows "General details" and "Asset value".
  - General details:** "Asset name\*" is "EmailLogin", "Type" is "Credential".  
"Description" is "New credential set".
  - Asset value:** A note states: "When the global value is enabled every user will receive it, unless specifically overridden in the table below." It shows "Username\*" as "Rohan" and "Password\*" as masked text ("\*\*\*\*\*").

**[b] Get Credential:**

**Step 1:** Drag and drop “Sequence” in the Activity

**Step 3:** Drag and drop “Get Credential” activity inside the Sequence. Select the Orchestrator Folder Path and the Credential name. Create new variables for username and password and map the Username and Password Outputs.

**Step 4:** Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.

Name	Variable type	Scope	Default
email	String	Get_credentials	Enter a VB expression
password	SecureString	Get_credentials	Enter a VB expression

**Step 5:** drag and drop “Type Into” Activity inside the sequence workflow. Indicate the Element you want to click on and Click on Save & Close.

The screenshot shows a 'Sign In' page from Kaggle. At the top, it says 'kaggle' and 'Sign In'. Below that is a 'EMAIL / USERNAME' input field containing 'Enter your email address or username'. Below it is a 'PASSWORD' input field with a placeholder 'Enter password' and a visibility icon. There are links for 'Forgot Username or Password' and 'Sign In'. A 'Back' button is on the left. The 'EMAIL / USERNAME' field is highlighted with a red border.

**Type Into 'Enter your'**

EMAIL / USERNAME  
Enter your email address or username

Type this: Standard Secure  
Code: {} email + "[k(Enter)]"

Empty field before typing Click before typing  
Single line [End, Shift+H] Single

**Step 10:** Select the Secure Radio Button. Set the variable as Secure String using the code – “new System.Net.NetworkCredential(String.Empty, password).SecurePassword”.

The screenshot shows the configuration for the 'PASSWORD' 'Type Into' activity. The 'Secure' radio button is selected. The 'Type this' section contains the code: 'new System.Net.NetworkCredential(String.Empty, password).SecurePassword'. The 'PASSWORD' input field is highlighted with a green border.

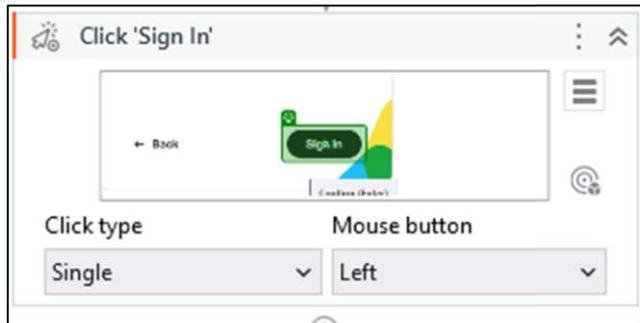
**Type Into 'PASSWORD'**

EMAIL / USERNAME  
Enter password

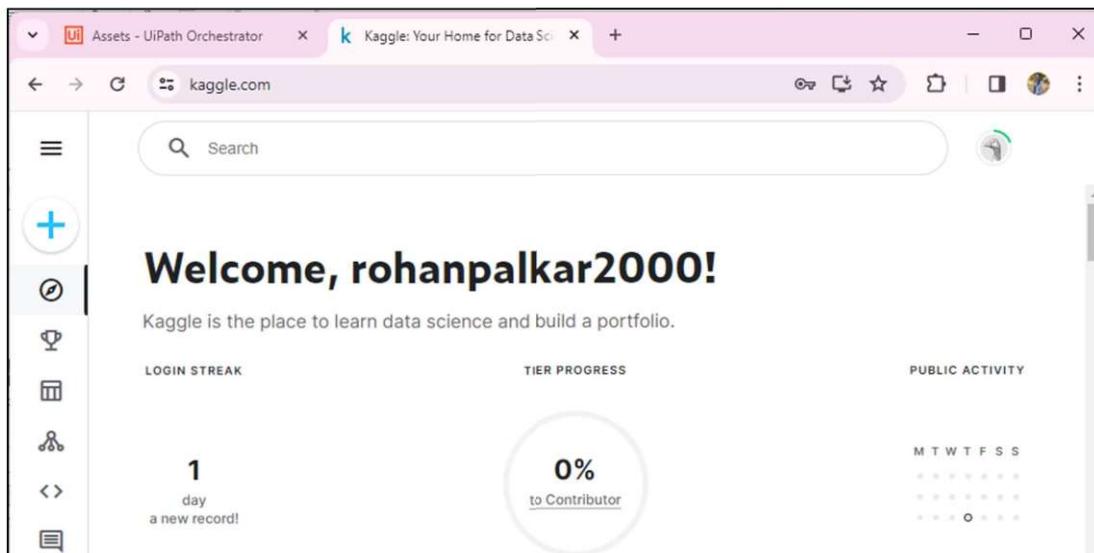
Type this: Secure  
Code: {} new System.Net.NetworkCredential(String.Empty, password).SecurePassword

Empty field before typing Click before typing  
Single line [End, Shift+H] Single

**Step 11:** Search for “Click” Activity in the Activities Panel and drag it inside the sequence. Indicate the “Sign in” button.



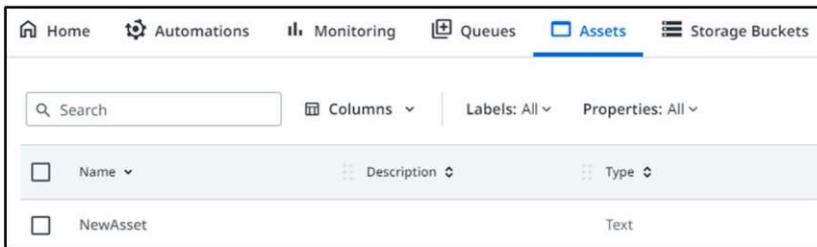
**Step 12:** Click the Run Button and see the results.



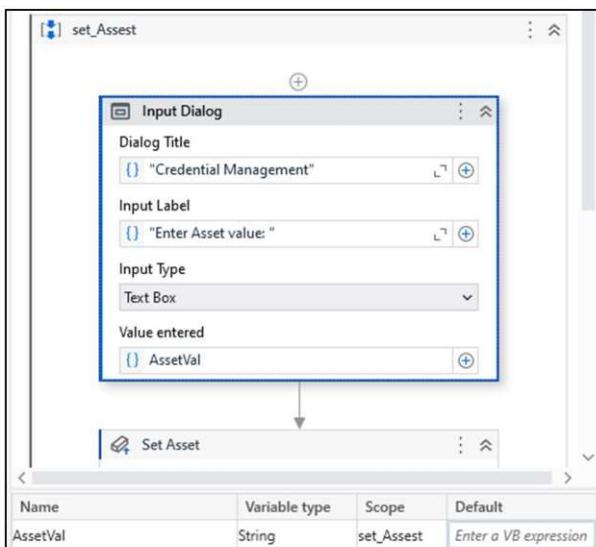
**[c] Set Asset:**

**Step 2:** Drag and drop “Sequence” Activity .

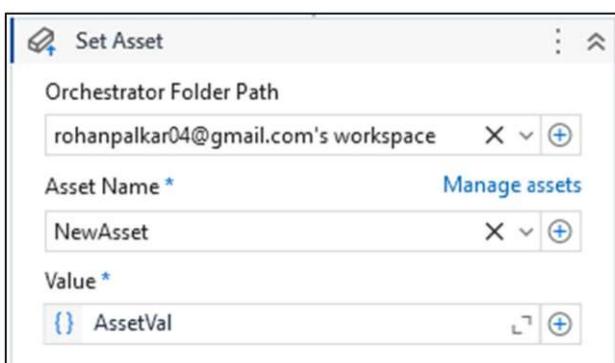
**Step 3:** Create a new Asset in Orchestrator.



**Step 4:** Add “Input Dialog Box” inside the Sequence. Create a new variable to store Asset Value.



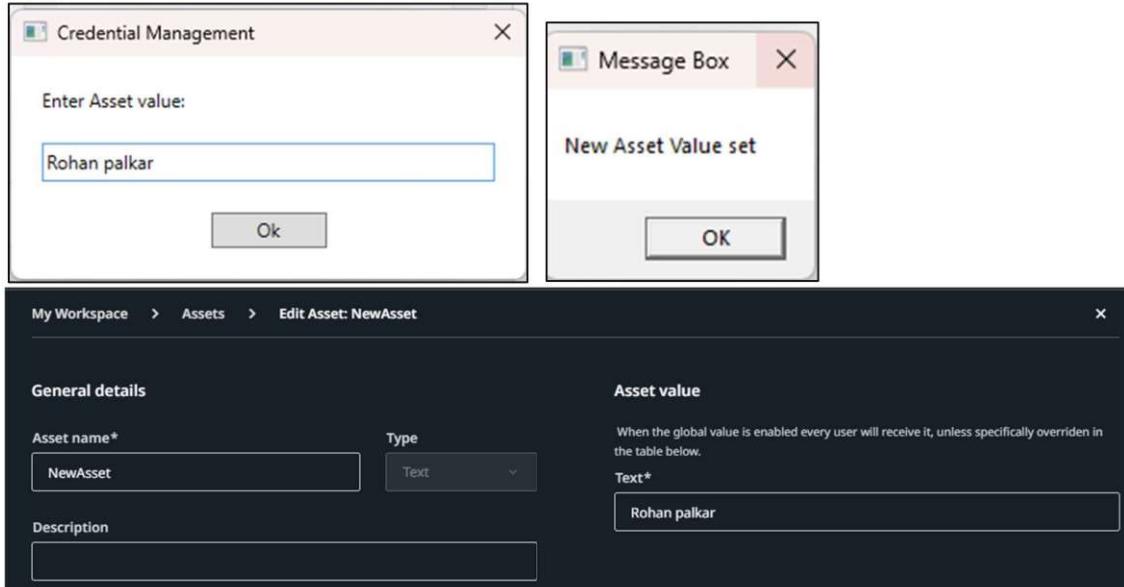
**Step 5:** Drag and drop “Set Asset” activity inside the Sequence. Select the Orchestrator Folder Path and the Asset name. Enter the Asset Value Variable.



**Step 6:** Drag and drop “Message Box” activity inside the body and enter the output statement.



**Step 7:** Click the Run button and see the result.

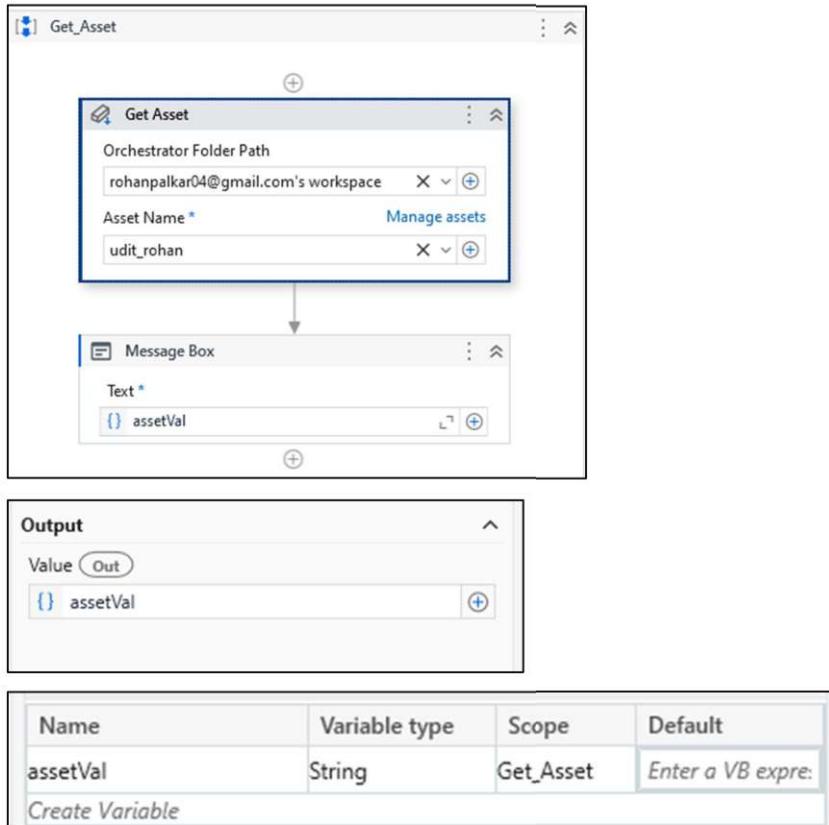


**[d] Get Asset**

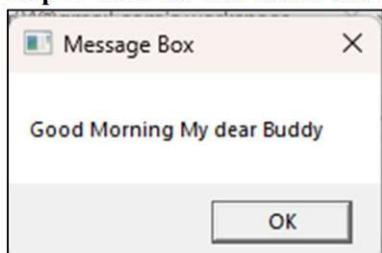
**Step 1:** Drag and drop “Sequence” Activity.

**Step 3:** Drag and drop “Get Asset” activity inside the Sequence. Select the Orchestrator Folder Path and the Asset name. Create new variables for Asset Value and map Get Asset Output.

**Step 4:** Drag and drop “Message Box” activity inside the body and enter the output variable.



**Step 7:** Click the Run button and see the result.



## PRACTICAL NO. 9

### A. Aim: Automate the process of Send Mail Event.

Steps: -

**Step 3:** Drag and drop a sequence activity.

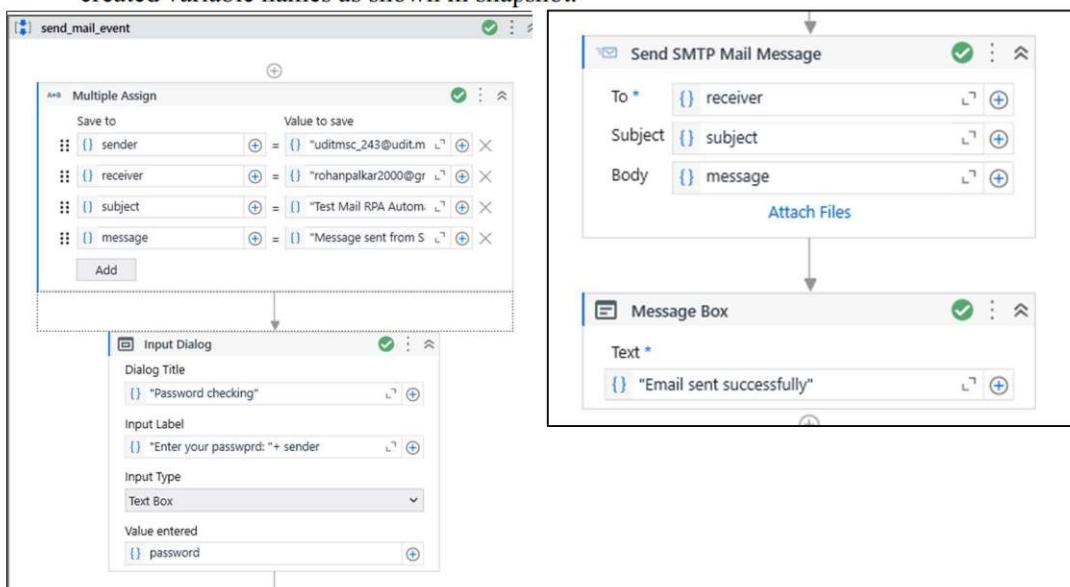
**Step 4:** Create five variables: - sender, receiver, password, subject, body.

**Step 5:** Add Multiple Assign activity under sequence activity.

**Step 6:** Then assign value to variables as shown in the snapshot.

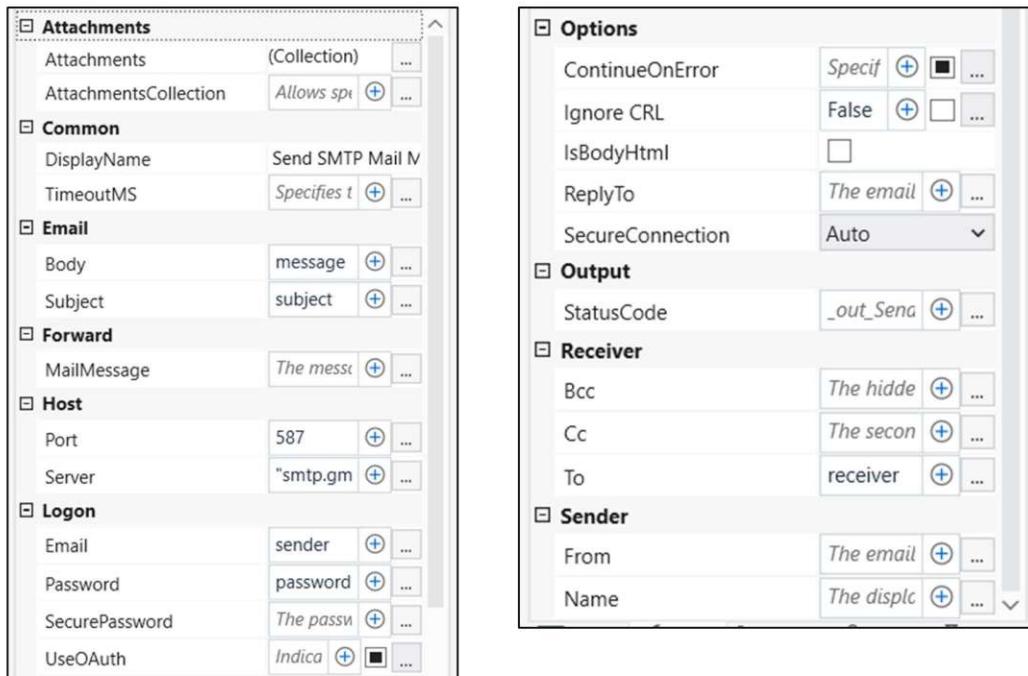
**Step 7:** Add Input Dialog activity below multiple assign activity to get the password of sender's email from user.

**Step 8:** Take send SMTP Mail Message activity and in text boxes enter the previously created variable names as shown in snapshot.



Name	Variable type	Scope	Default
receiver	String	send_mail_event	Enter a VB expression
subject	String	send_mail_event	Enter a VB expression
message	String	send_mail_event	Enter a VB expression
sender	String	send_mail_event	"uditmsc_243@udit.mu.ac.in"
pwd	SecureString	send_mail_event	Enter a VB expression
password	String	send_mail_event	Enter a VB expression

**Step 9:** Then in properties panel of SMTP Mail Message activity fill the text boxes of Email, Host, Logon and Receiver as shown in following snapshot.



**Step 10:** At last drag and drop Message Box activity to check the mail is sent.

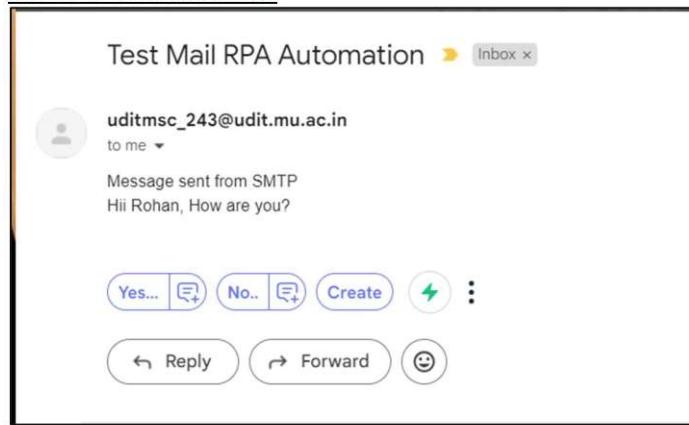
**Step 11:** Debug file.

#### Output:

Enter the password of sender's email:



Receiver's Email Inbox:



**B. Aim: Automate the process of launching an assistant bot on keyboard event**

**Hot Key**

**Steps: -**

**Steps: -**

**Step 1:** Open UiPath Studio.

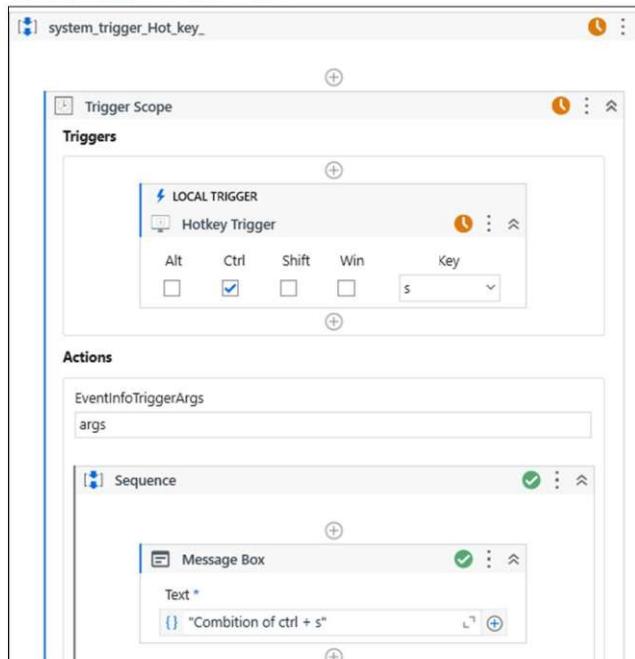
**Step 2:** Start a BlankProcess. Give the BlankProcess a name.

**Step 3:** Drag and drop a Sequence Activity.

**Step 4:** Add Trigger Scope Activity. In the Trigger Action drag and drop a Hotkey Trigger.

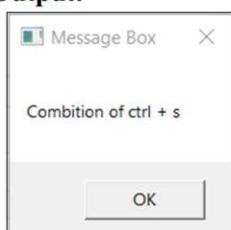
**Step 5:** Select ctrl + s.

**Step 6:** For Actions drag and drop the Message Box Activity. In the text field type “Combination of ctrl + s”.



**Step 7:** Run. (After run click ctrl+s)

**Output:**



**C. Aim: Demonstrate the Exception Handling in UiPath Studio.**

Steps: -

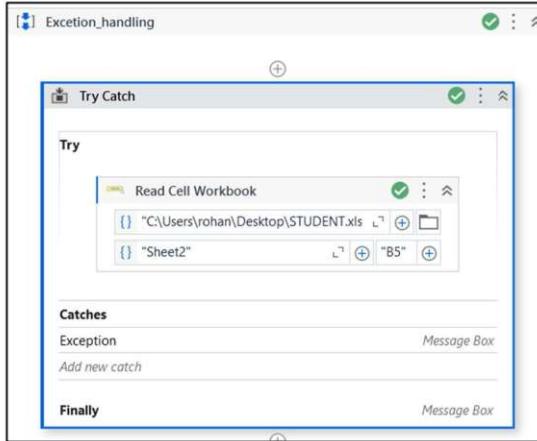
**Step 1:** Open UiPath Studio.

**Step 2:** Start a BlankProcess. Give the BlankProcess a name

**Step 3:** Drag and drop Sequence Activity.

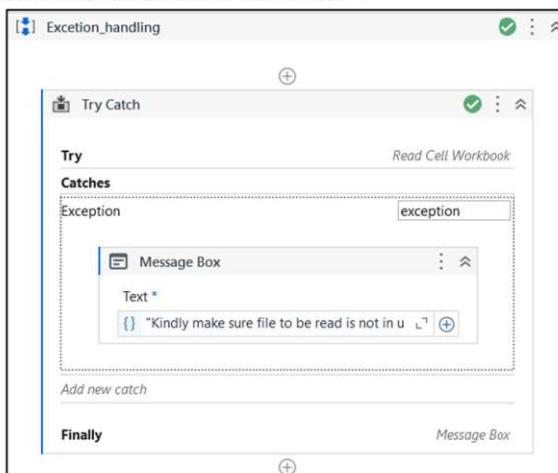
**Step 4:** Now drag and drop Try Catch Activity from the Activity Panel in the Sequence Activity.

**Step 5:** In Try Action take a Read Cell Workbook Activity. Create an excel file and save it. Give a desired path of excel file and assign sheet name “Sheet1”. Also assign cell value(“B6”). Create a variable output by pressing ctrl + k in property panel.

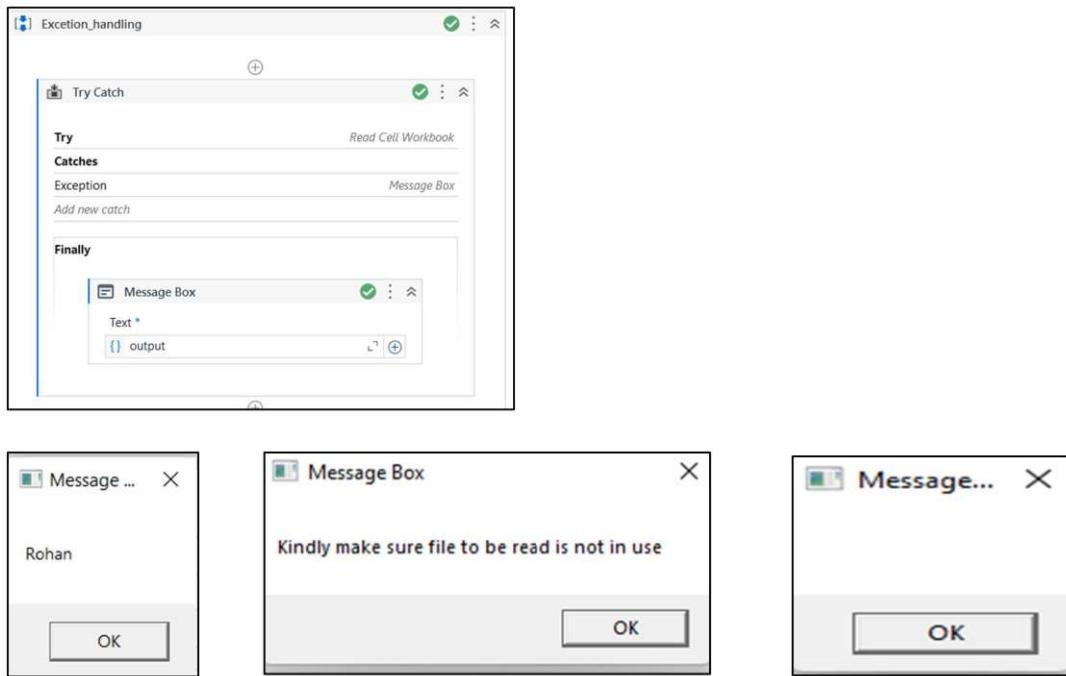


**Step 6:** In Catches Action select System.Exception from the list of exceptions.

**Step 7:** Drag and drop Message Box in Catch Action and in the text field type “Kindly make sure file to be read is not in use”.



**Step 8:** In Finally Action drag and drop the Message Box Activity. In the text field type the variable output created in Step 5.



## PRACTICAL NO. 10

**A. Aim:** Automate the process of logging and taking screenshots in UiPath Studio.

**Steps:** -

**Step 1:** Open UiPath Studio.

**Step 2:** Start a BlankProcess. Give the BlankProcess a name

**Step 3:** Drag and drop Sequence Activity.

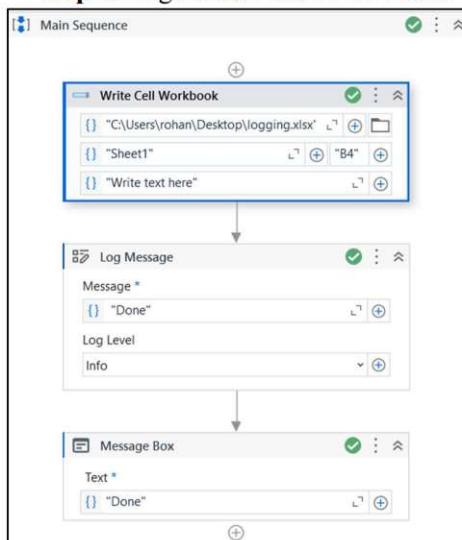
**Step 4:** Now drag and drop Write Cell Workbook Activity from the Activity Panel in the Sequence Activity.

**Step 5:** Create an excel file and save it. Give a desired path of excel file and assign sheet name. Also assign cell value("B4"). In the text property type anything you want.

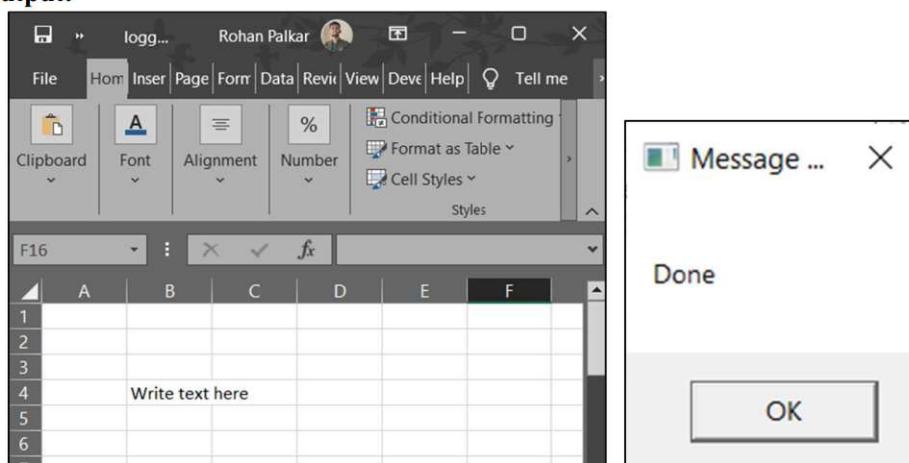
**Step 6:** Take a Log Message Activity in the Sequence Activity and connect it with the Write Cell Workbook Activity. In the log level select "Info" from the drop-down list and in Text field type "Done".

**Step 7:** Run.

**Step 8:** Logs details can be viewed in Open Logs in Debug option of Ribbon Panel.



**Output:**



### B. Aim: Automate any process of using State Machine

Steps: -

**Step 1:** Open UiPath Studio.

**Step 2:** Start a BlankProcess. Give the BlankProcess a name

**Step 3:** Drag and drop Flowchart Activity.

**Step 4:** There are two activities specific to State Machines. They are State and Final State

**Step 5:** The State activity consists of three sections Entry, Exit, and Transitions, while the Final State only contains Entry.

**Step 6:** State activity: Transitions contain three sections Trigger, Condition, and Action.

**Step 7:** Connect three state activity along with final activity.

**Step 8:** Name the three states activity as IDLE, COOLING, HEATING.

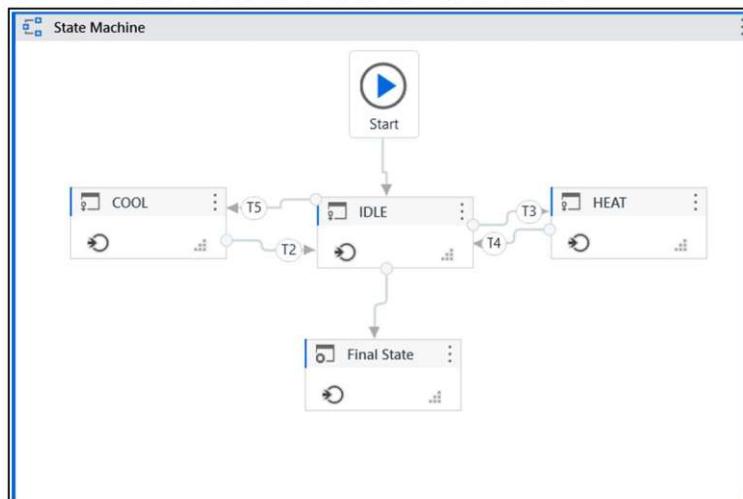
**Step 9:** Name the final activity as Power Off.

**Step 10:** Connect IDLE to COOLING and vice versa. A transition T1 from IDLE to COOLING is named as DT < CT and transition T2 from COOLING to IDLE is named as Reached.

**Step 11:** Connect IDLE to HEATING and vice versa. A transition T3 from IDLE to HEATING is named as DT > CT and transition T4 from HEATING to IDLE is named as Reached.

**Step 12:** Connect IDLE to Power Off. A transition T5 from IDLE to Power Off is named as Exit.

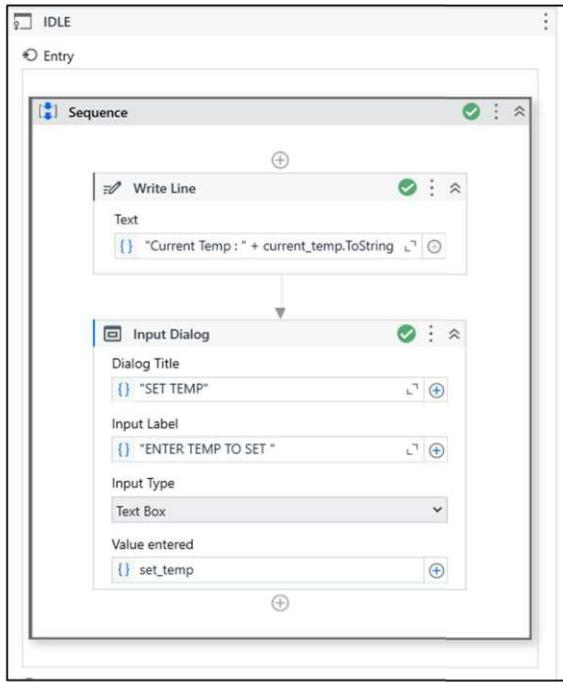
**Step 13:** Create a variables of type integer(Int32) as Current\_Temp and Desired\_Temp. Set the default value as 24 for Current\_Temp and save it. Create another variable of type Boolean as IDLE and set the defaukt value as True and save it.



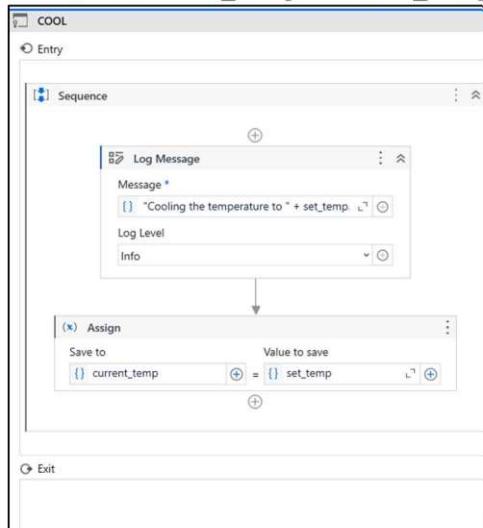
**Step 14:** In IDLE state for Entry drag and drop WriteLine Activity. In the text field type “Current\_Temp is ” + Current\_Temp.ToString + “Degree Celsius”.

**Step 15:** Connect an Input Dialog Box Activity to the WriteLine Activity. Give a dialog title, for Input Lable type “Enter Desired Temperature, 0 to exit”. Type Desired\_Temp for value entered field.

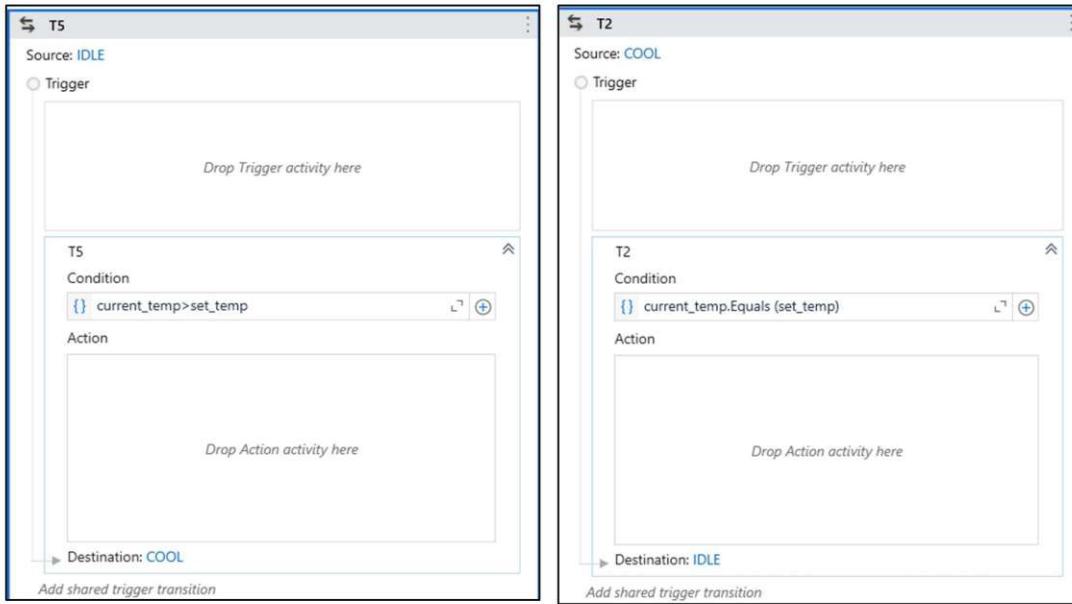
**Step 16:** Now take If Activity under Input Dialog Box. Set the condition as Desired\_temp < 1 and drag and drop Assign Activity in the then part. Set IDLE = False for Assign Activity. Drag and drop Multiple Assign Activity for else part. Assign first value as Desired\_Temp = if(Desired\_Temp < 15,15,Desired\_Temp). Assign second value as Desired\_Temp = if(Desired\_Temp > 30,30,Desired\_Temp).



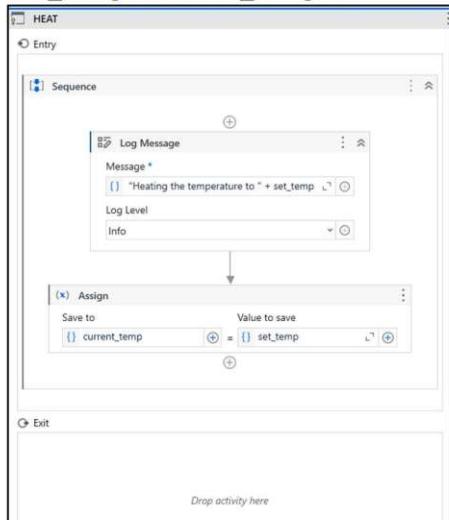
**Step 17:** In COOLING state for Entry drag and drop WriteLine Activity. In the text field type “Cooling your Space”. Connect an Assign Activity to the WriteLine Activity. Set the value as Current\_Temp = Desired\_Temp field.



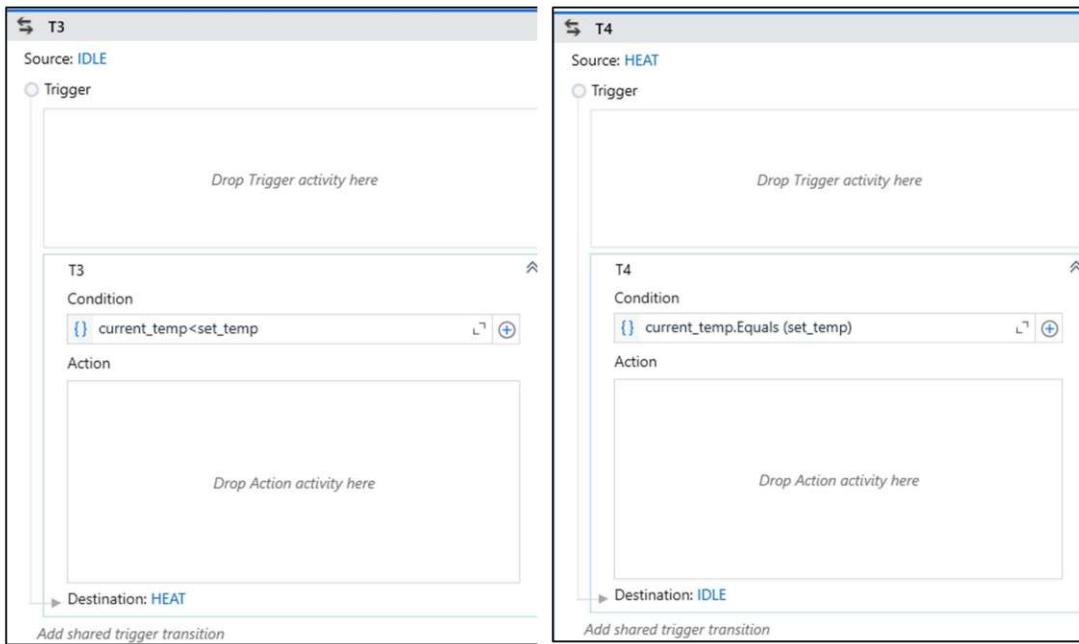
**Step 18:** The transition DT<CT set the condition as Desired\_Temp<Current\_Temp. Also for transition Reached set the condition as Current\_Temp.Equals(Desired\_Temp).



**Step 19:** In HEATING state for Entry drag and drop WriteLine Activity. In the text field type “Heating your Space”. Connect an Assign Activity to the WriteLine Activity. Set the value as Current\_Temp = Desired\_Temp field.



**Step 20:** The transition DT>CT set the condition as Desired\_Temp>Current\_Temp. Also for transition Reached set the condition as Current\_Temp.Equals(Desired\_Temp).



**Step 21:** For the transition Exit set condition IDLE.Equals(False).

**Step 22:** In Power Off state for Entry drag and drop WriteLine Activity. In the text field type "Shutting Down your AC". Hit the Run Button.

**Final State Configuration:**

- Entry:** Log Message
- Message:** "User Opted to Exit"
- Log Level:** Info

**User Input Dialog:**

SET TEMP

ENTER TEMP TO SET

Ok

**Output Log:**

- Output
- Search
- Debug started for file: state machine
- pract\_10 execution started
- Current Temp : 20
- Heating the temperature to 30
- Current Temp : 30
- Cooling the temperature to 16
- Current Temp : 16
- Cooling the temperature to 8
- Current Temp : 8
- Heating the temperature to 26
- Current Temp : 26

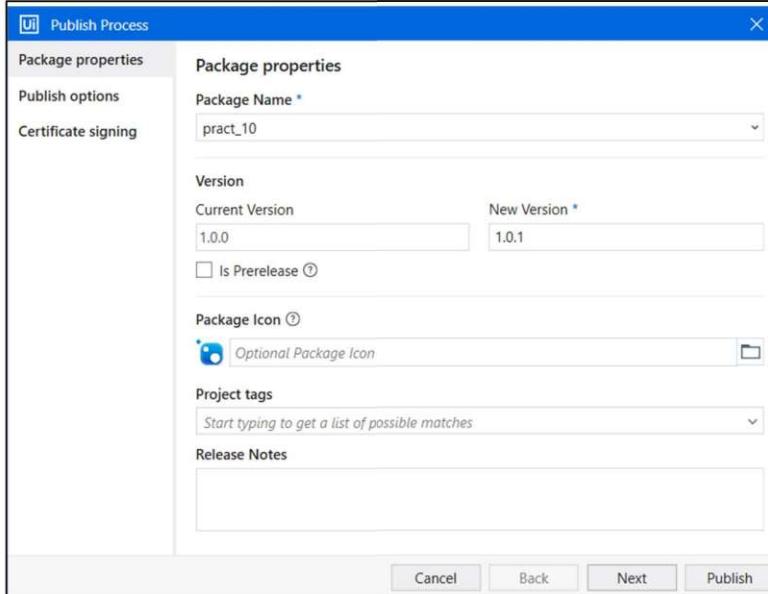
**C. Aim: Demonstrate the use of publish utility.**

**Steps:** -

**Step 1:** First, open UiPath Studio, create a new project, and give it an appropriate name.

**Step 2:** Go to the Design in the Ribbon and click on the Publish button.

**Step 3:** A dialog box will appear rename your project, get updates to the new version, etc. Then click on publish.



**Step 4:** Now check whether the project has been published successfully or not.

**Step 5:** If the workflow has been published successfully, then a dialog box will appear containing all the necessary data required to run that workflow from Orchestrator.

**Output:**

