

University of Mumbai

PRACTICAL JOURNAL – ELECTIVE III



PSIT3P4a

Robotic Process Automation

SUBMITTED BY

Karkera Prateek Ramesh

SEAT NO 30102

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR QUALIFYING

M.Sc. (I.T.) PART-II (SEMESTER – III) EXAMINATION

2022-2023

Department of Information Technology

**3RD FLOOR, DR. SHANKAR DAYAL SHARMA BHAVAN, IDOL
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SANTACRUZ (E), MUMBAI – 400098.**

University of Mumbai



Department of Information Technology

Certificate

This is to certify that Mr. **Karkera Prateek Ramesh** Seat No. **30102** studying in **Master of Science in Information Technology Part II Semester III** has satisfactorily completed the Practical of **PSIT3P4a Robotic Process Automation** as prescribed by University of Mumbai, during the academic year **2022-23**.

Signature

Guide

Signature

External Examiner
Examined by

Signature

Head of the Department
Certified by

College Seal

Date:

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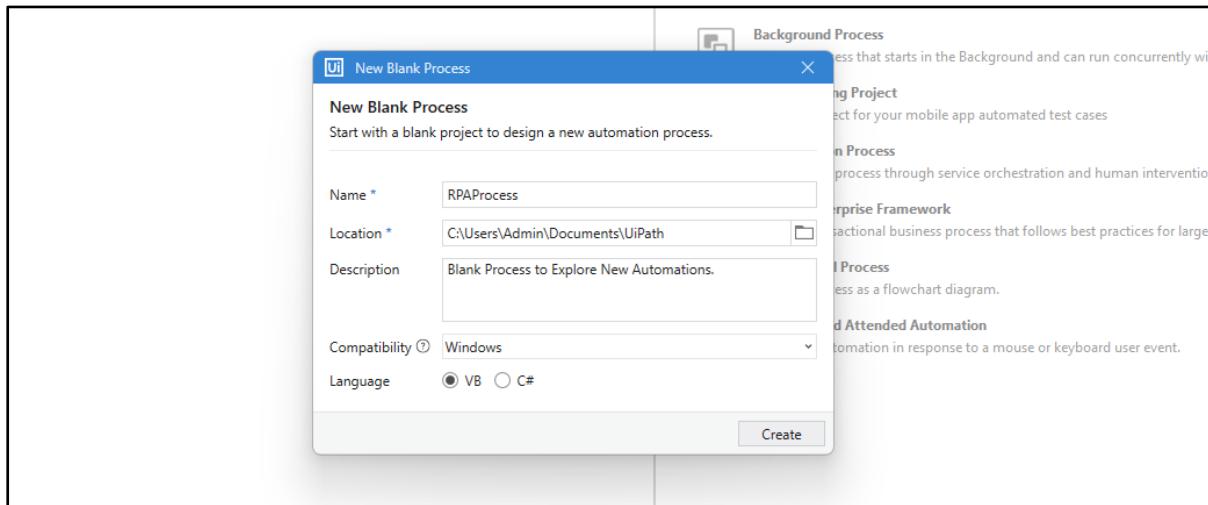
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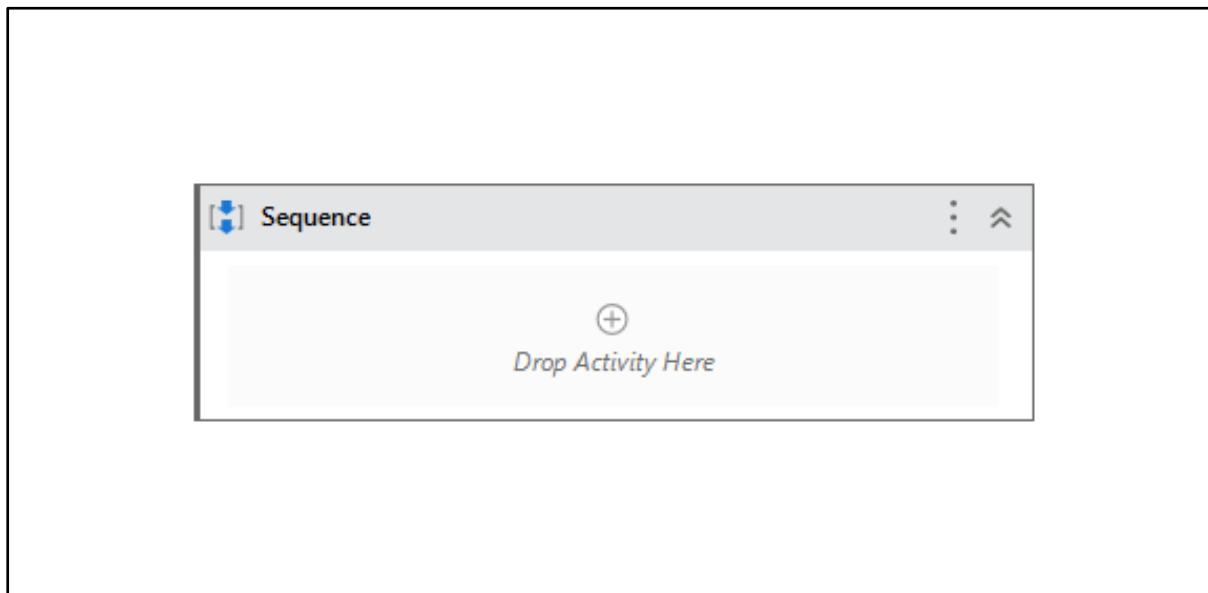
PRACTICAL 1

[A] AIM: Create a simple sequence-based project.

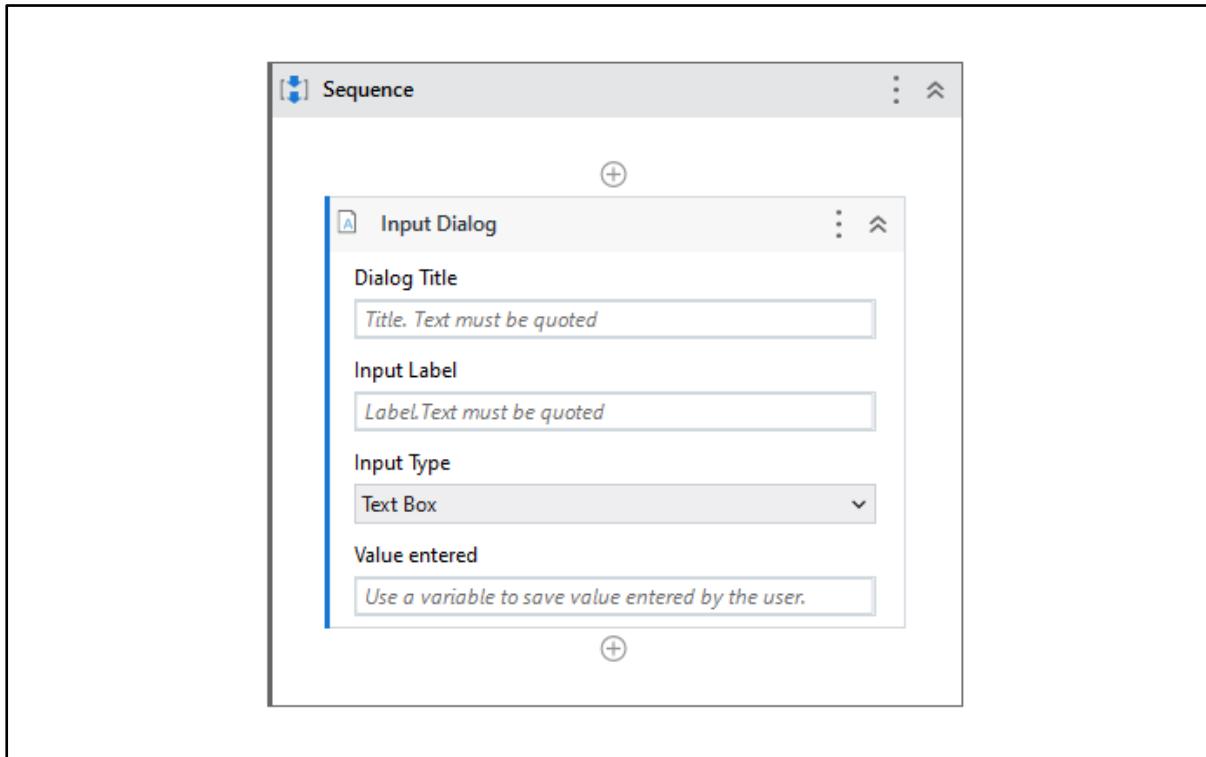
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



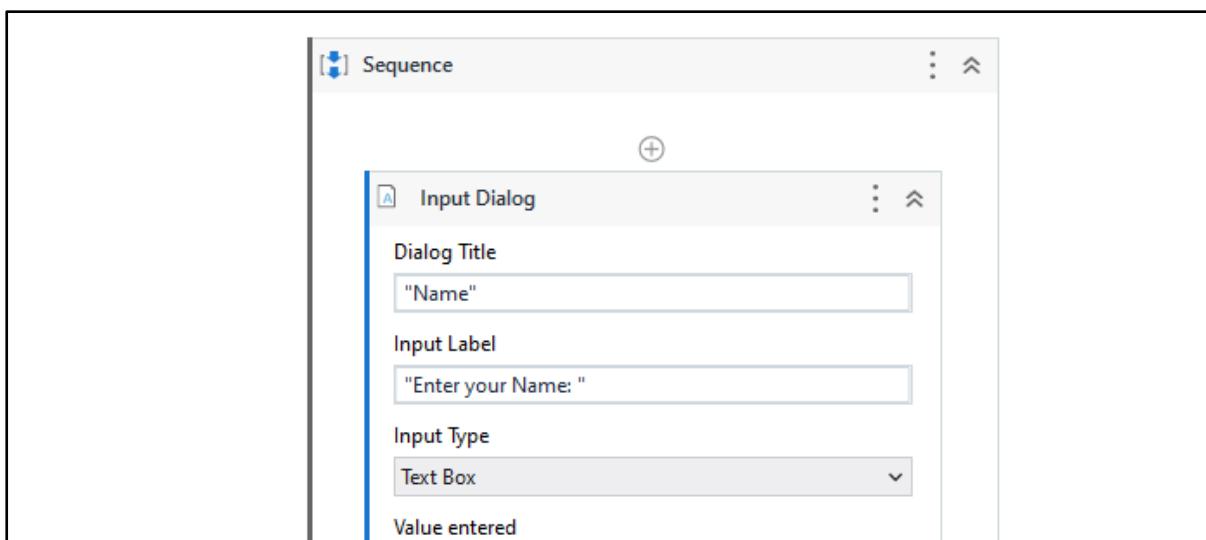
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



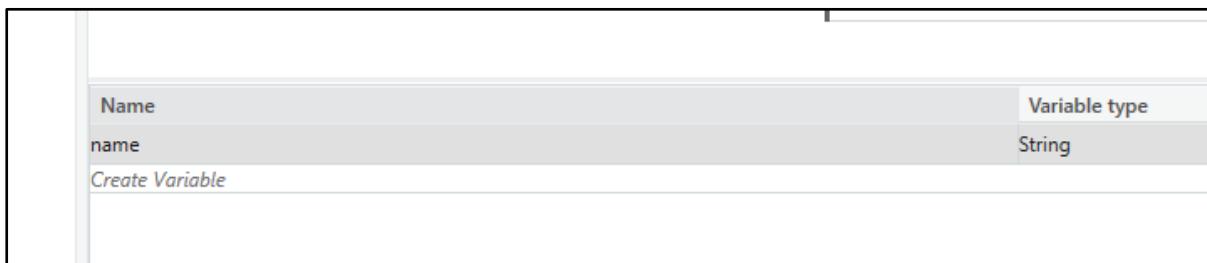
Step 3: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop the Input dialog activity inside the Sequence.



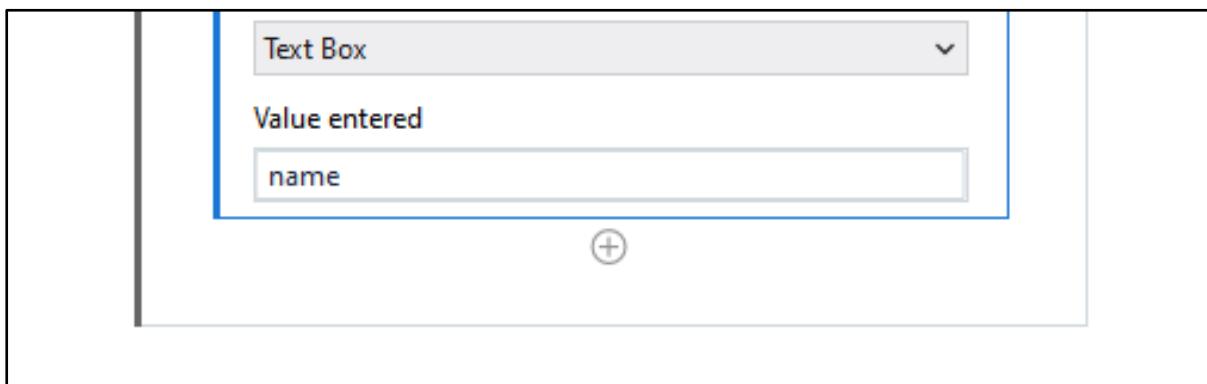
Step 4: Write the appropriate message on the Label of this Input dialog.



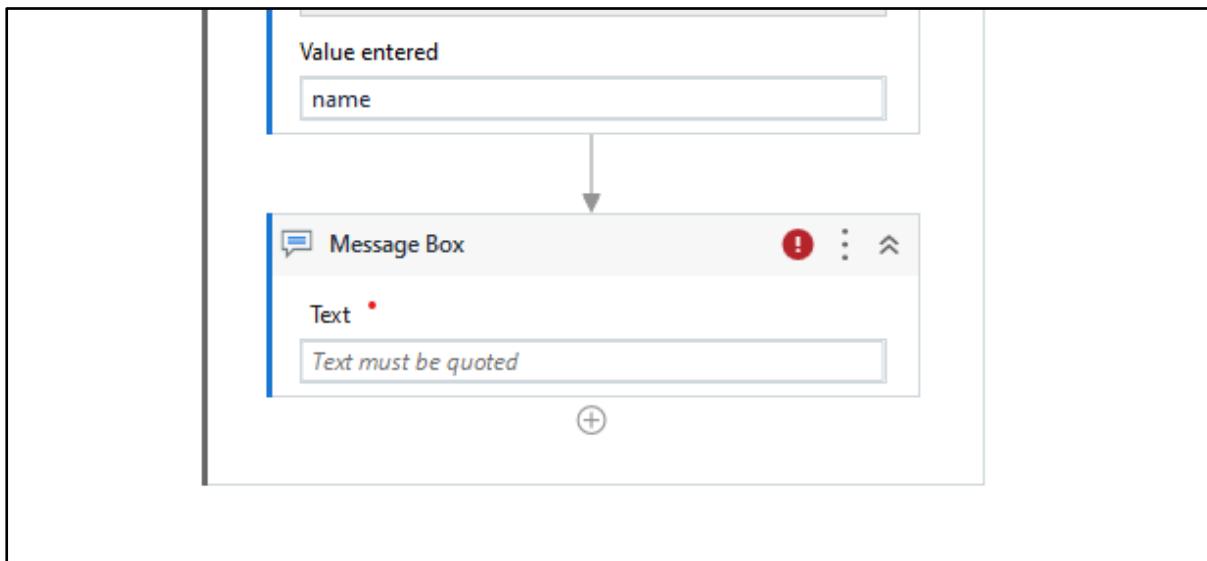
Step 5: Create a variable and give it the desired name.



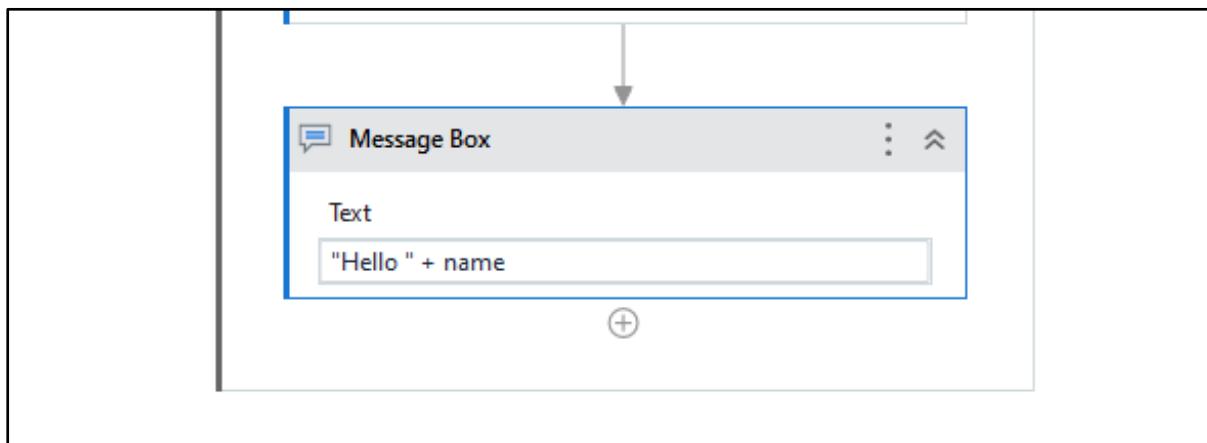
Step 6: Specify the variable in the Result property of the Input dialog box.



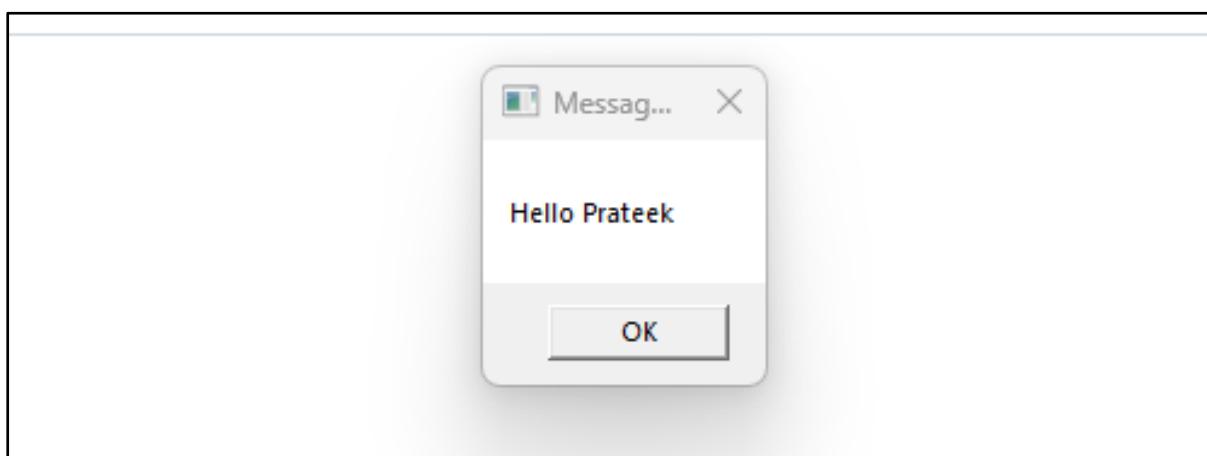
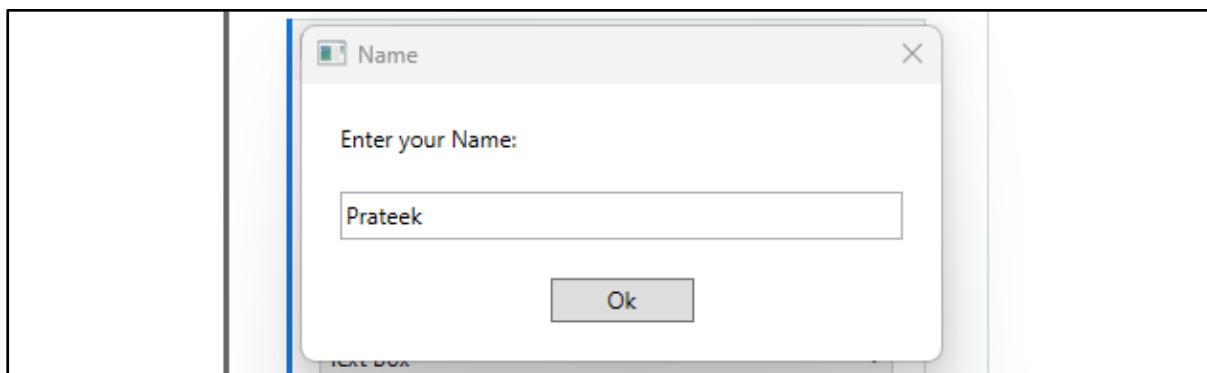
Step 7: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop the Message Box activity inside the Sequence.



Step 8: Specify the variable name that we have created in the Text area of the Message box.



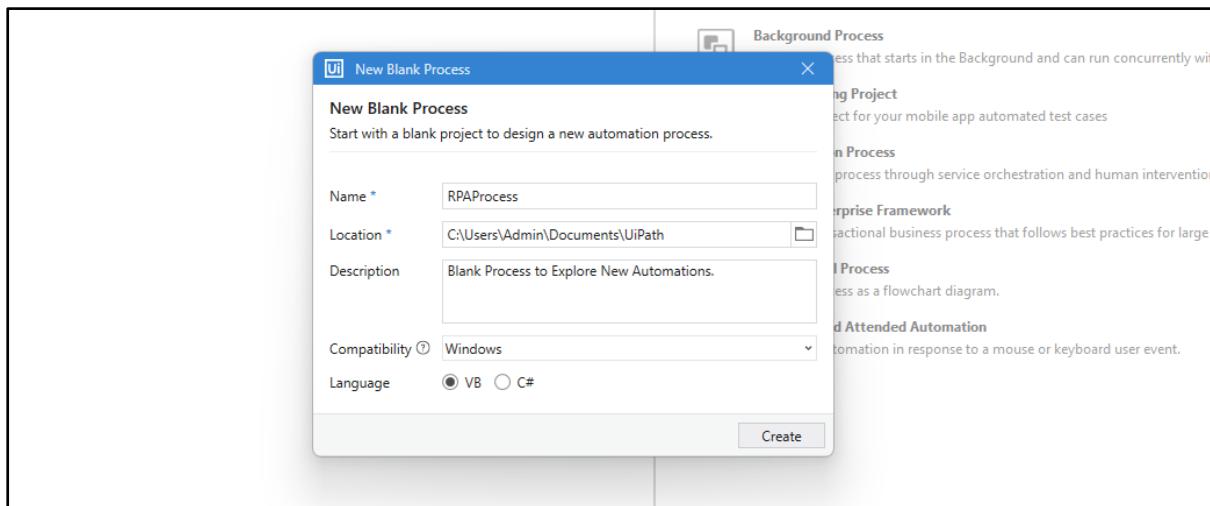
Step 9: Click the Run button and see the result.



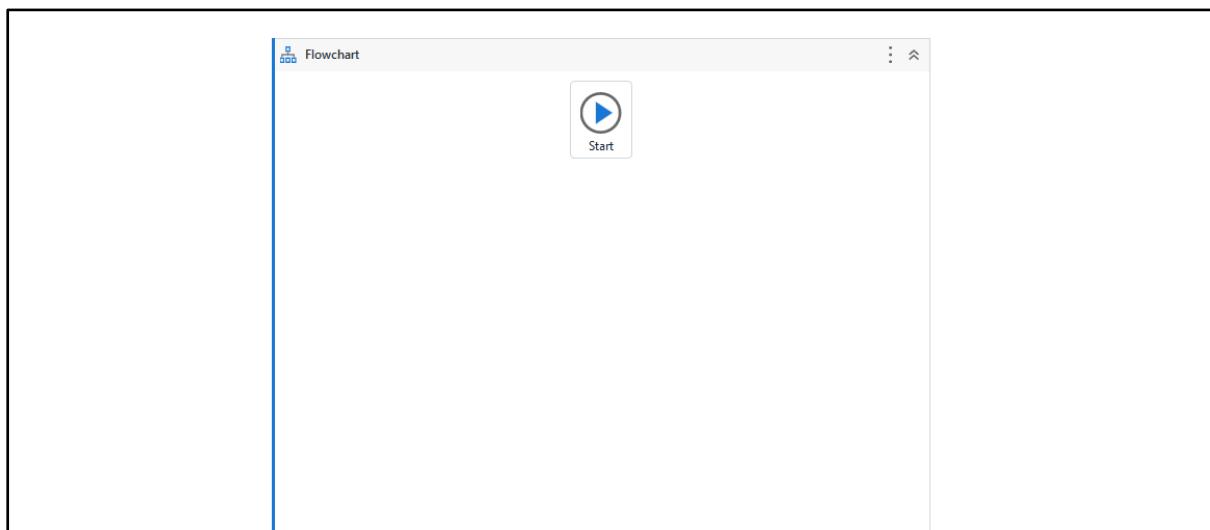
Conclusion: The practical to create a simple sequence-based project was performed successfully.

[B] AIM: Create a flowchart-based project.

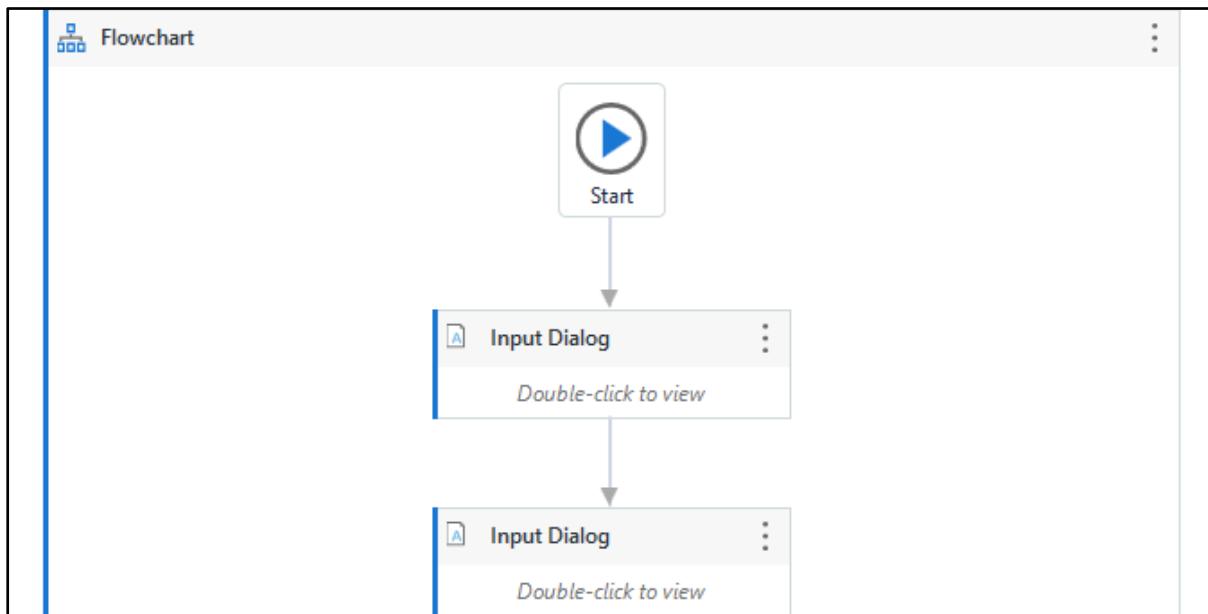
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



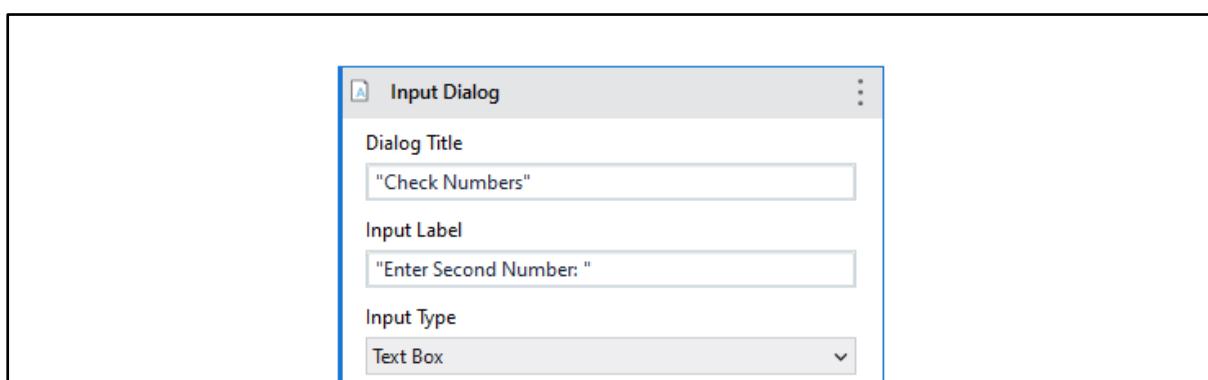
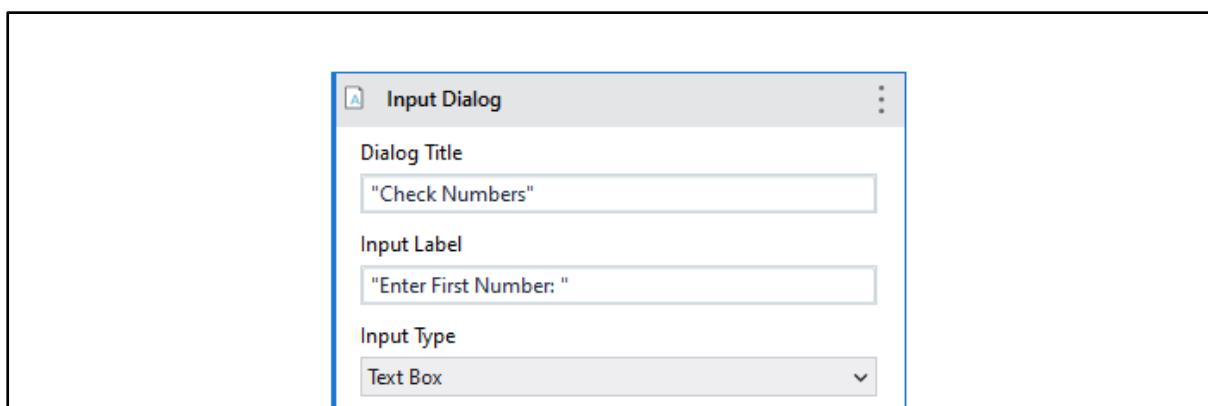
Step 2: Search for “Flowchart” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop two Input dialog activities inside the Flowchart.



Step 4: Write the appropriate message on the Label of the Input dialogs.

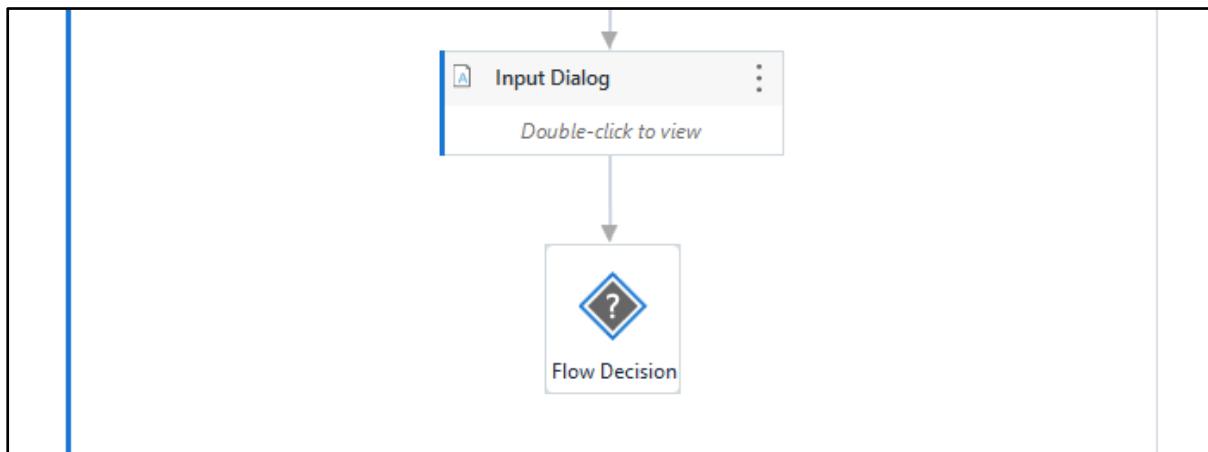


Step 5: Create variables and specify the variables in the Result properties of the Input dialog boxes.

<p>Input Label "Enter First Number: "</p> <p>Input Type Text Box</p> <p>Value entered a</p>			
Name	Variable type	Scope	Default
a	Int32	Flowchart1	Enter a VB exp
b	Int32	Flowchart1	Enter a VB exp
Create Variable			

<p>Input Label "Enter Second Number: "</p> <p>Input Type Text Box</p> <p>Value entered b</p>			
Name	Variable type	Scope	Default
a	Int32	Flowchart1	Enter a VB exp
b	Int32	Flowchart1	Enter a VB exp
Create Variable			

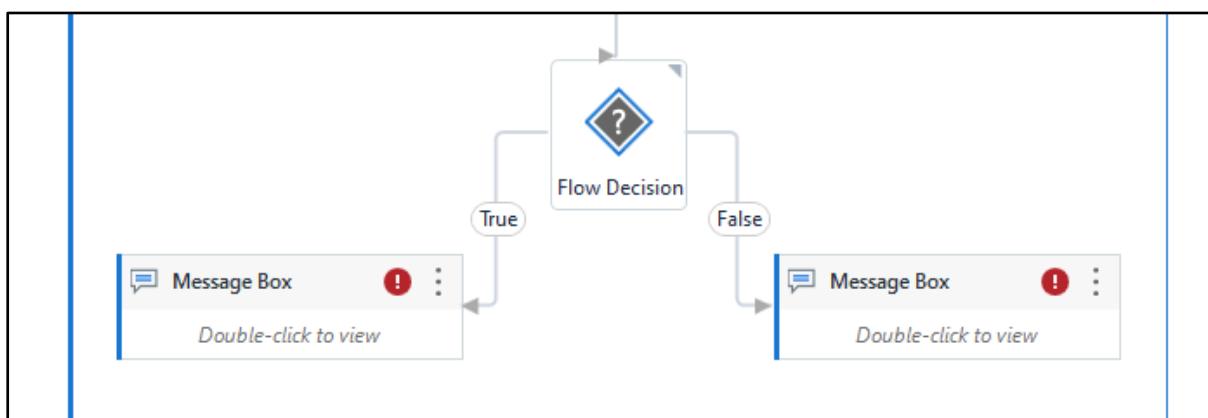
Step 6: Search for “Flow Decision” in the Search panel of the Activities panel. Drag and drop two Flow Decision Activity inside the Flowchart.



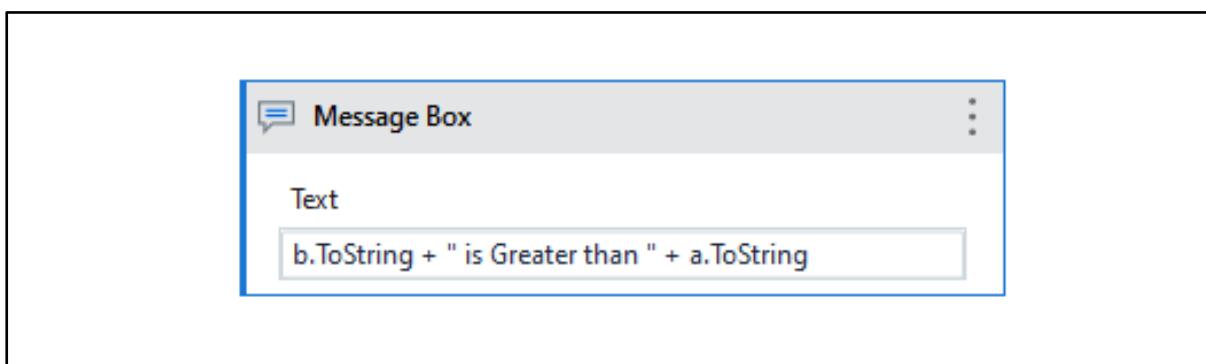
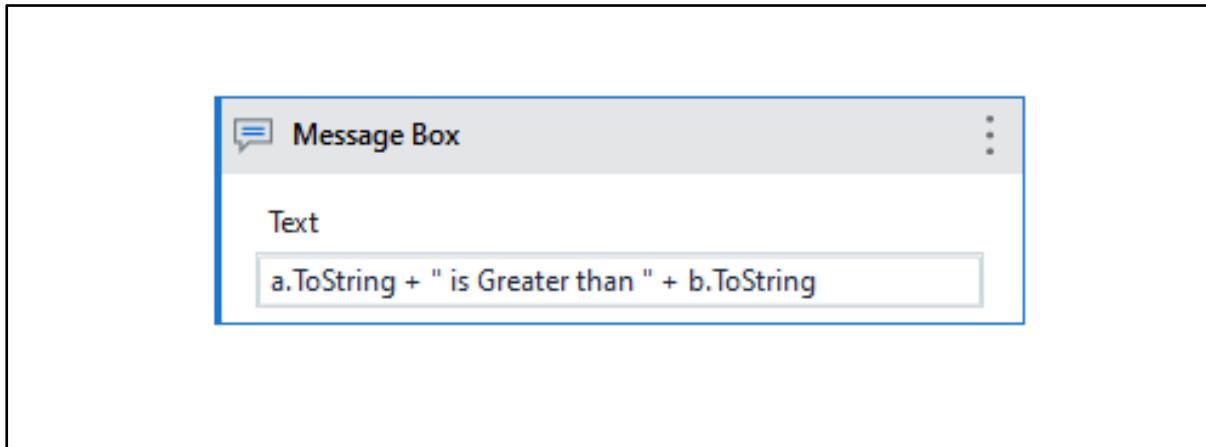
Step 7: Specify the condition for Flow Decision as “ $a > b$ ”.



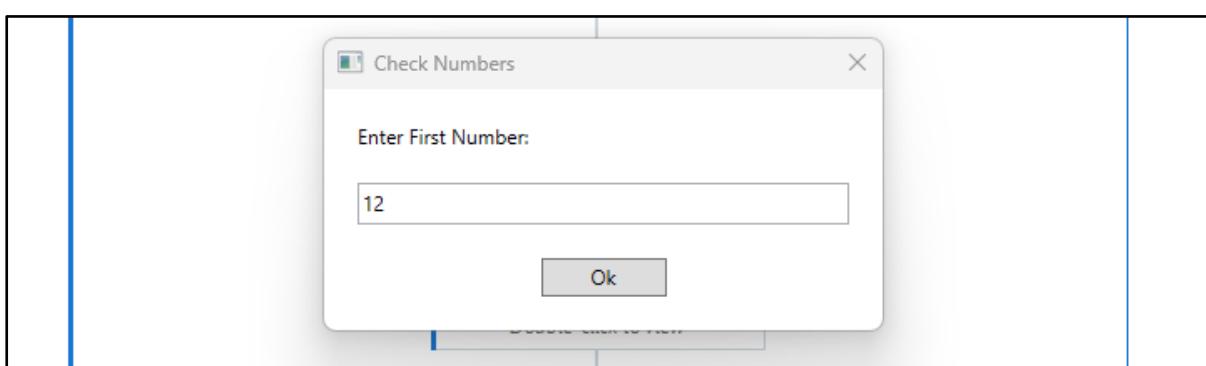
Step 8: Search for “Message Box” in the Search panel of the Activities panel. Drag and drop two Message Box activities inside the Flowchart, one on the True side and the other on the False side.

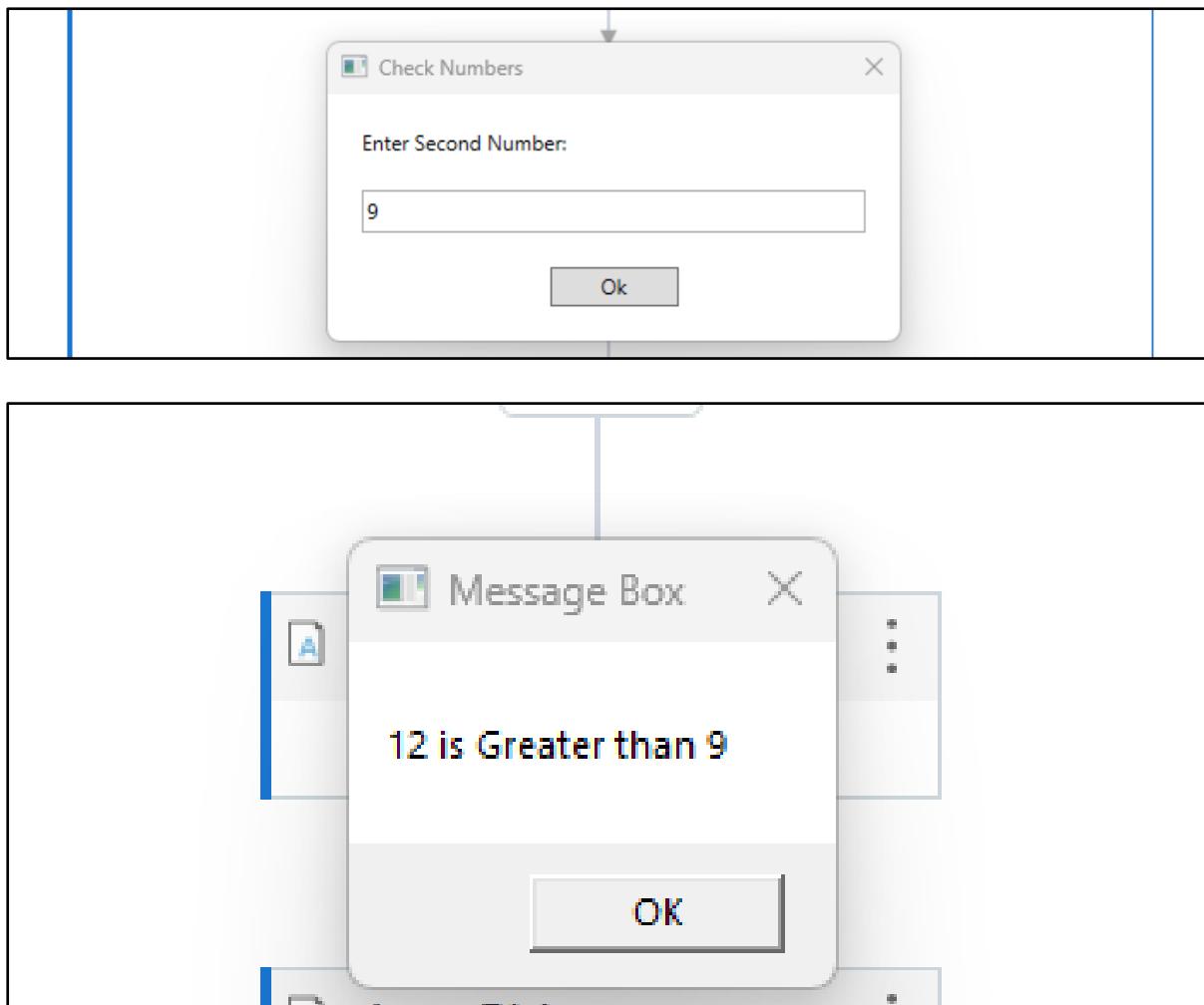


Step 9: Specify the True Condition in the Text area of the True Message box and the False Condition in the Text area of the False Message Box.



Step 10: Click the Run button and see the result.

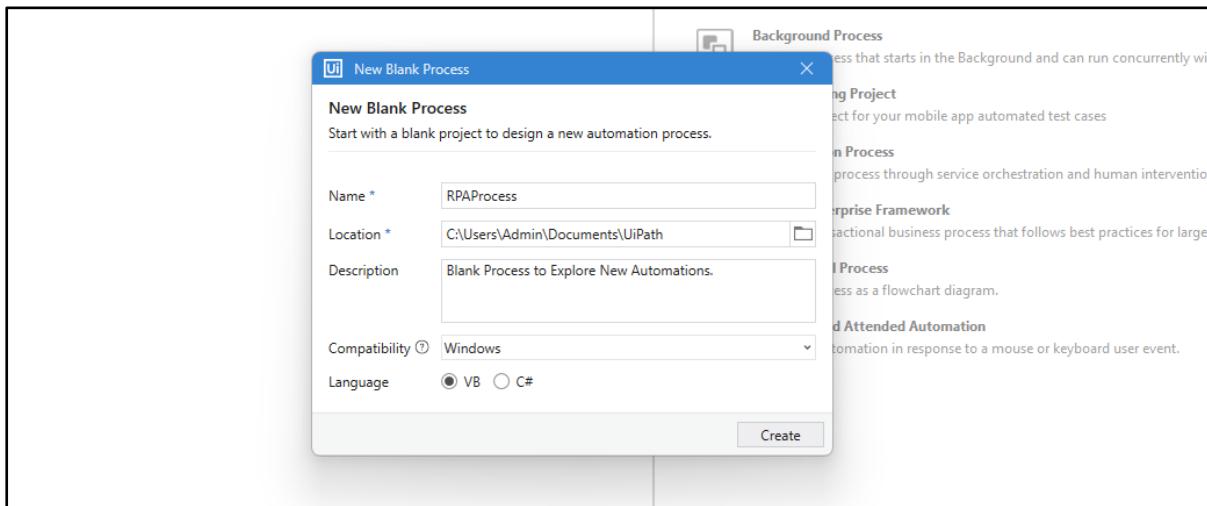




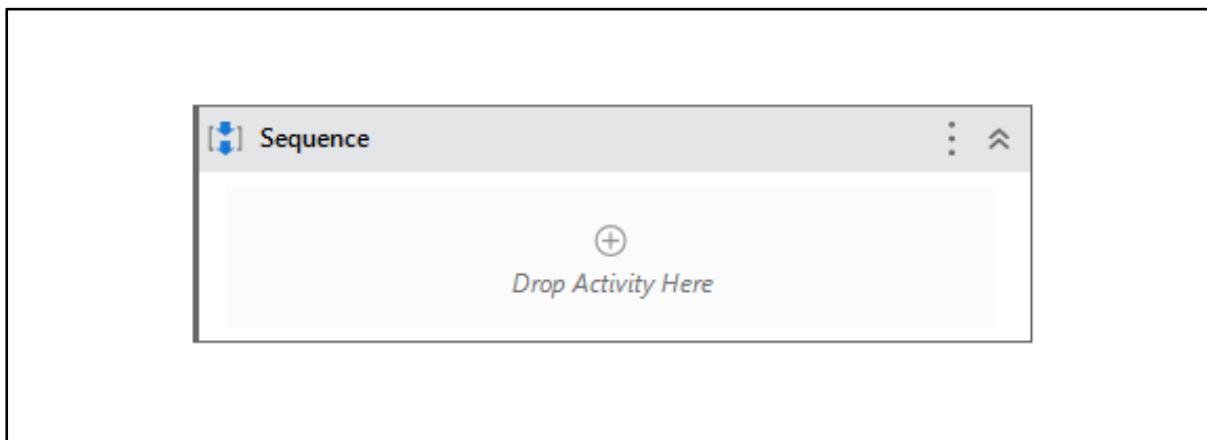
Conclusion: The practical to create a flowchart-based project was performed successfully.

[C] AIM: Create an UiPath Robot which can empty a folder in Gmail solely on basis of recording.

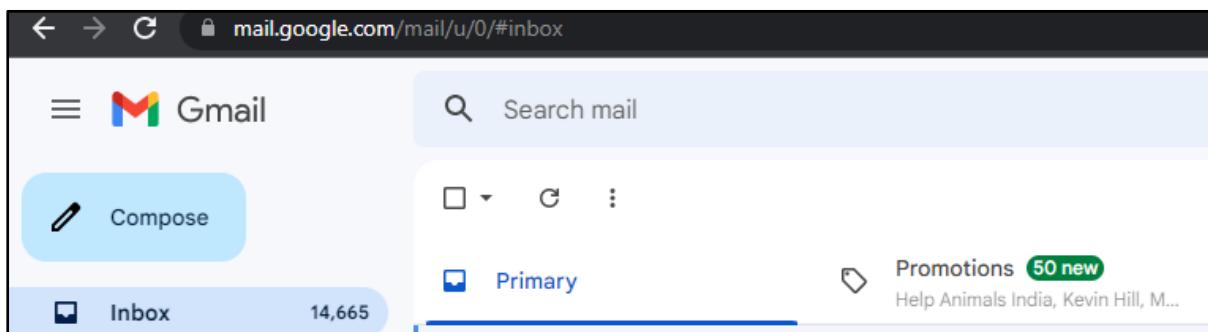
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



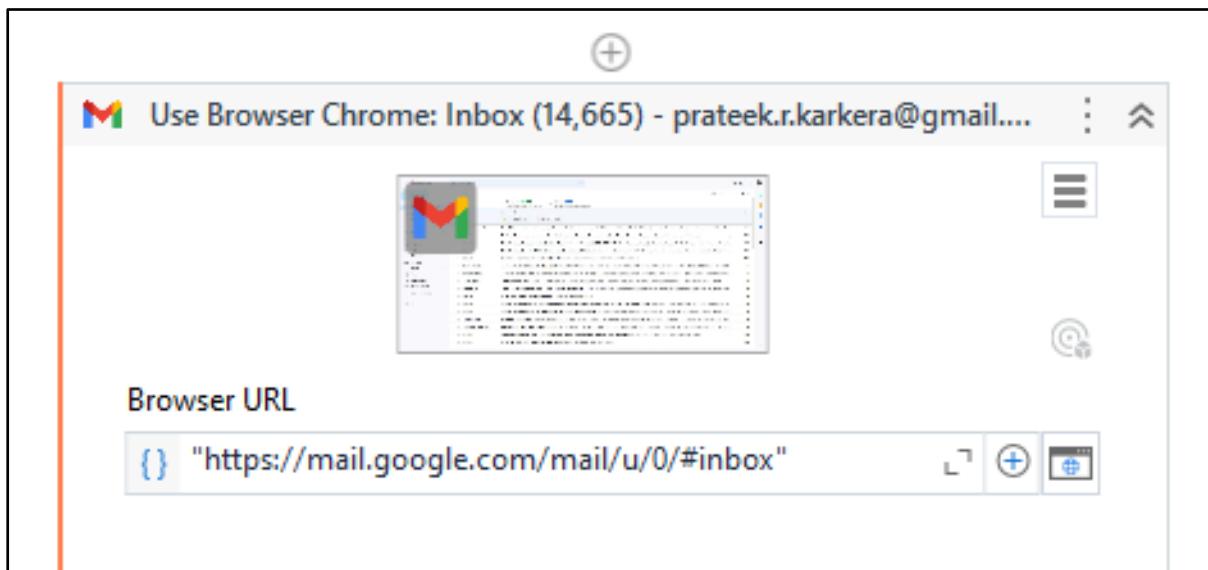
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



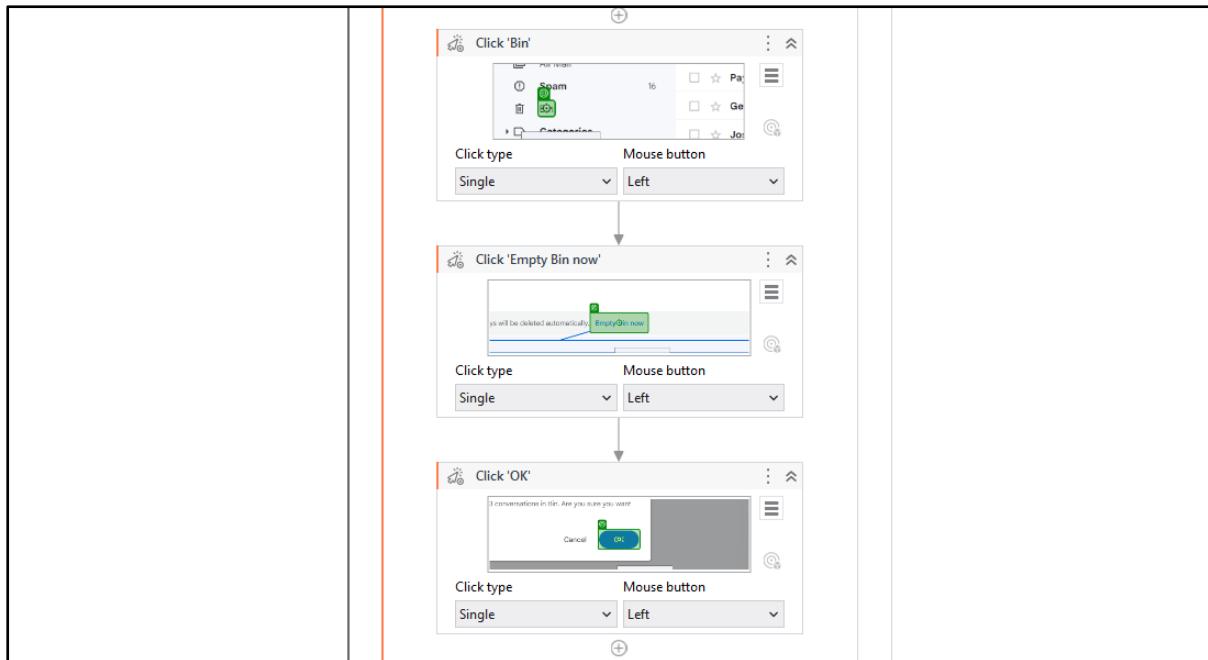
Step 3: Open Gmail.



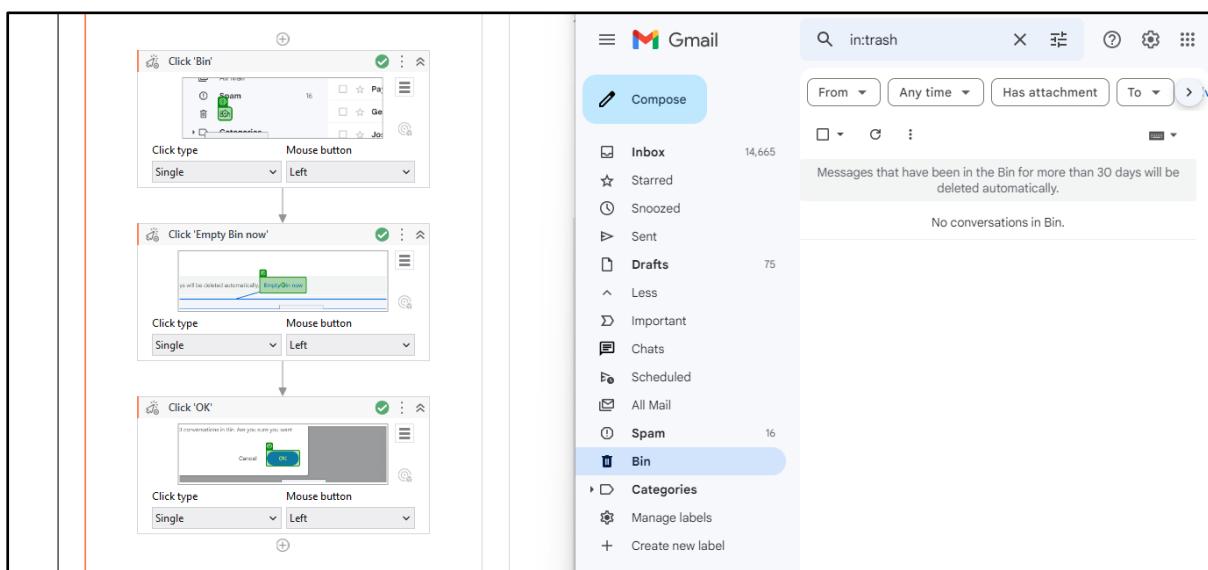
Step 4: Click on “App/ Web Recorder” Icon to record the following steps using the “Use Browser” Activity.



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.

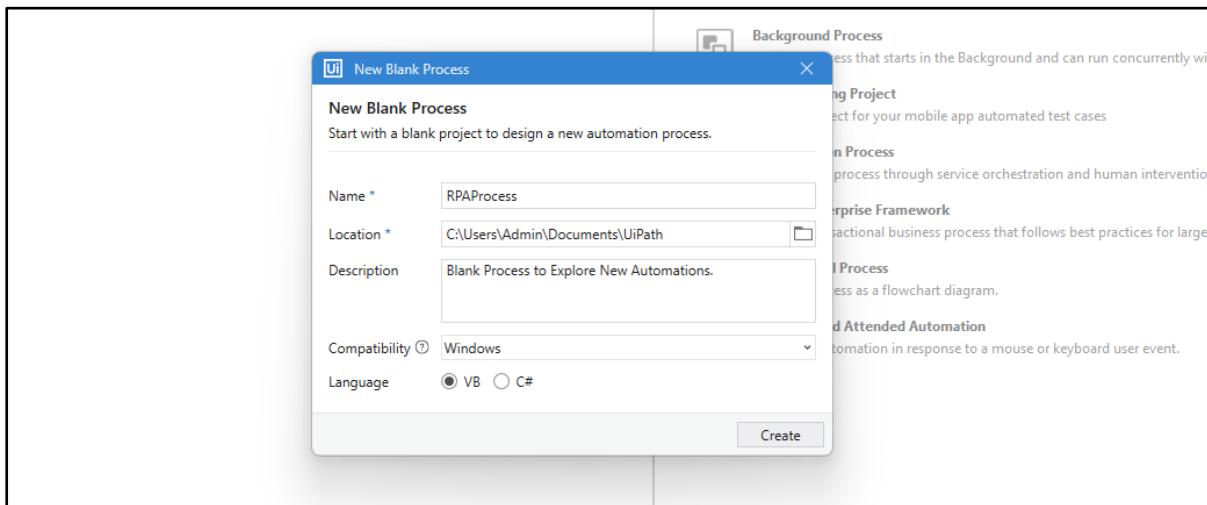


Conclusion: The practical to create an UiPath Robot which can empty a folder in Gmail solely on basis of recording was performed successfully.

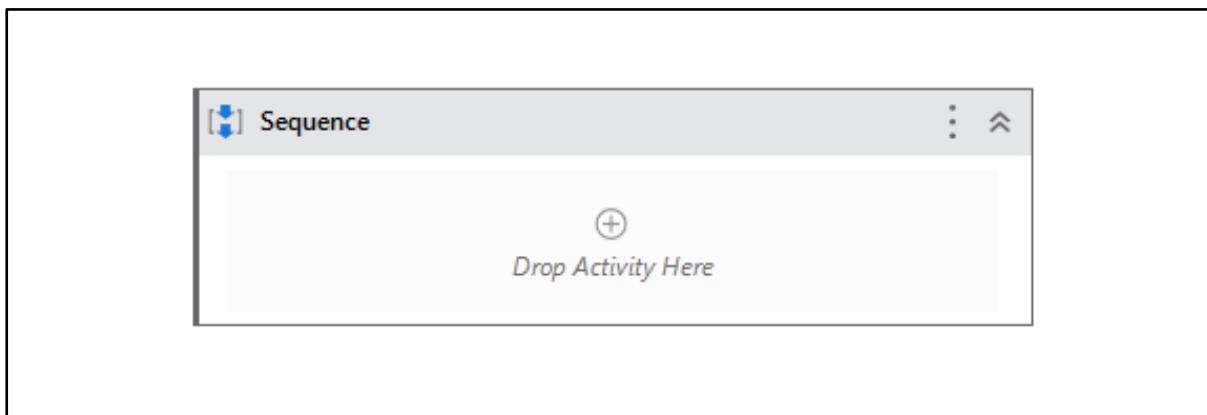
PRACTICAL 2

[A] AIM: Automate UiPath Number Calculation (Subtraction, Multiplication, Division of numbers).

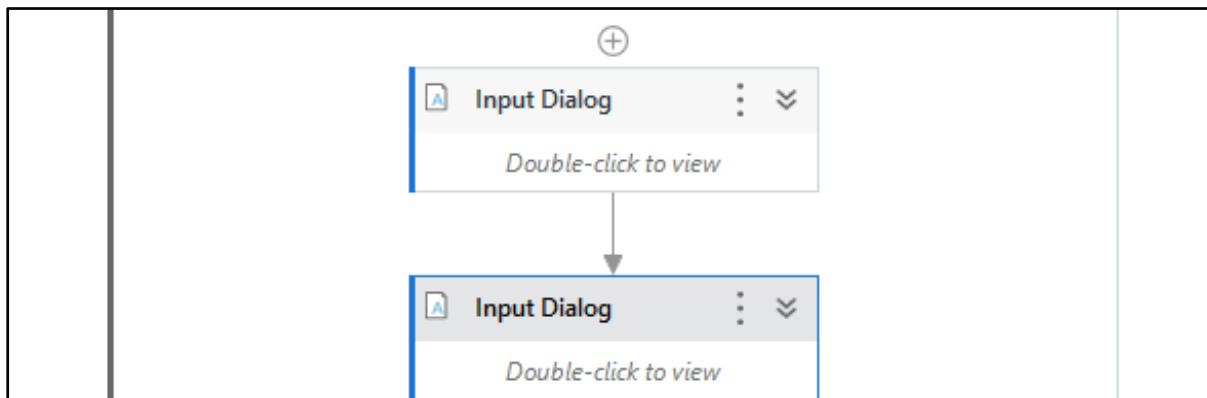
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop two Input dialog activities inside the Sequence.

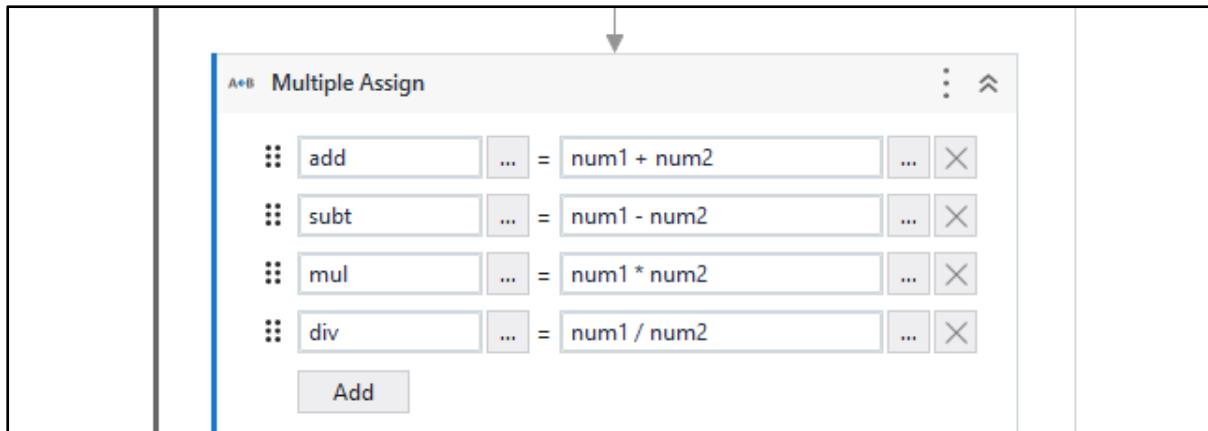


Step 4: Write the appropriate messages on the Labels of the Input dialogs. Create variables and specify the variables in the Result property of the Input dialog boxes.

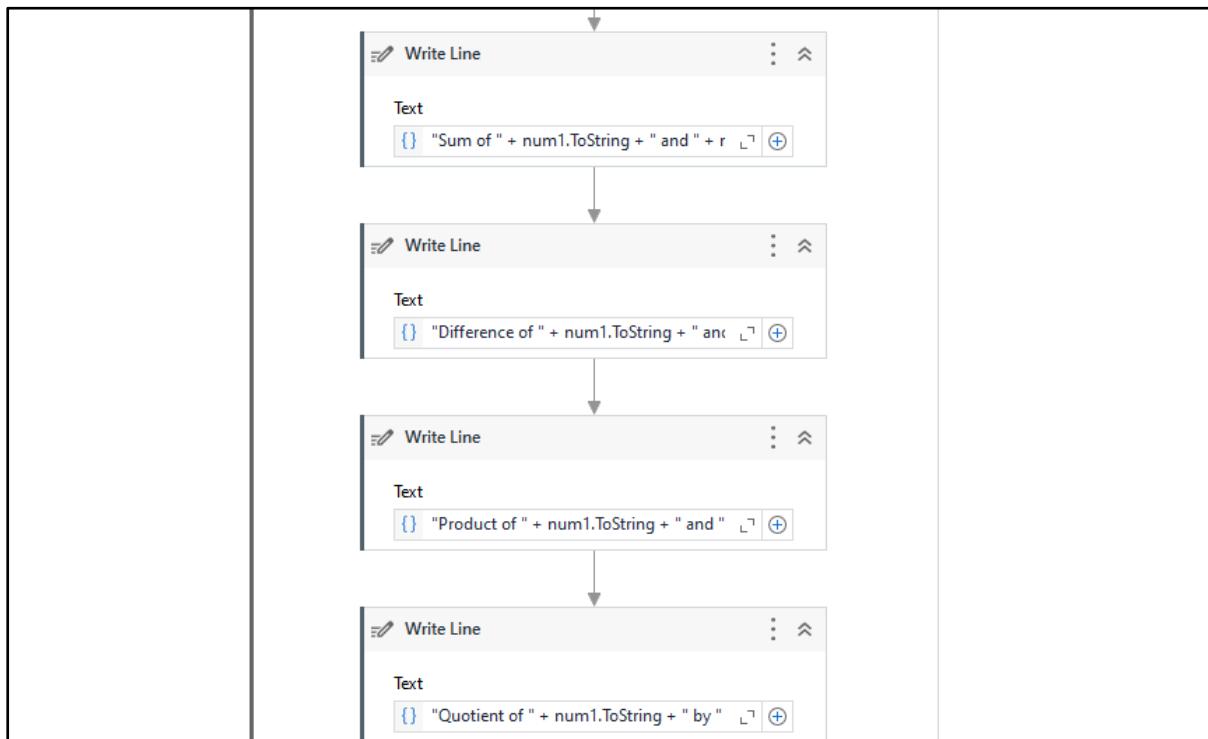
The screenshot displays two separate 'Input Dialog' configuration windows side-by-side. Both windows have the following settings:

- Dialog Title:** "Calculator"
- Input Label:** "Enter first number: "
- Input Type:** Text Box
- Value entered:** num1 (in the top window) or num2 (in the bottom window)

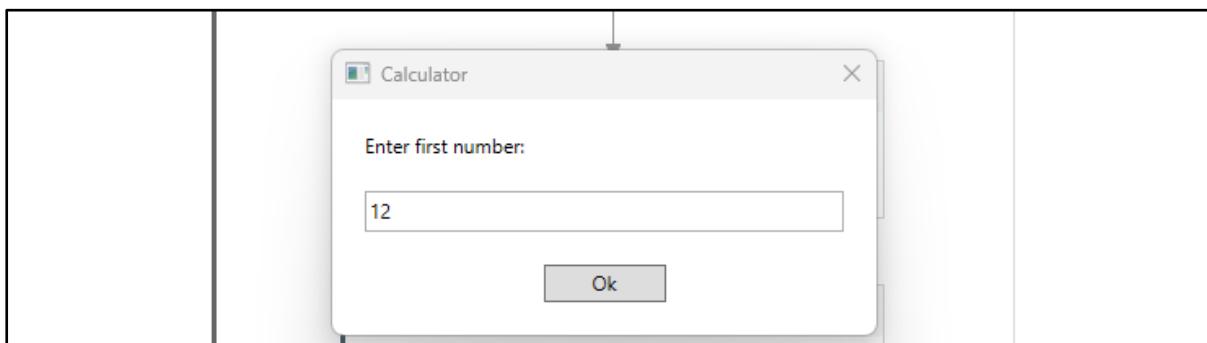
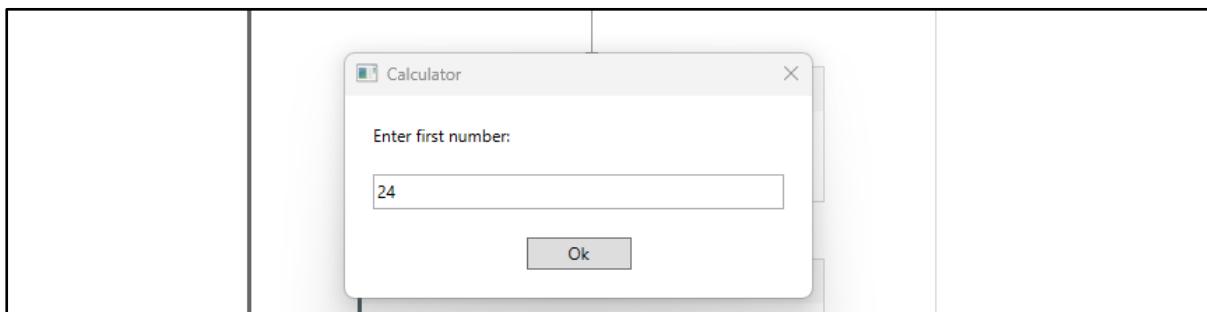
Step 5: Search for “Multiple Assign” in the Search panel of the Activities panel. Drag and drop the Multiple Assign activity inside the Sequence. Create and Assign variables for each of the Operations – Addition, Subtraction, Multiplication and Division.



Step 6: Search for “Write Line” in the Search panel of the Activities panel. Drag and drop the Write Line activity inside the Sequence. In the textbox of Write Line Activity type the output for each of the Operations – Addition, Subtraction, Multiplication and Division.



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

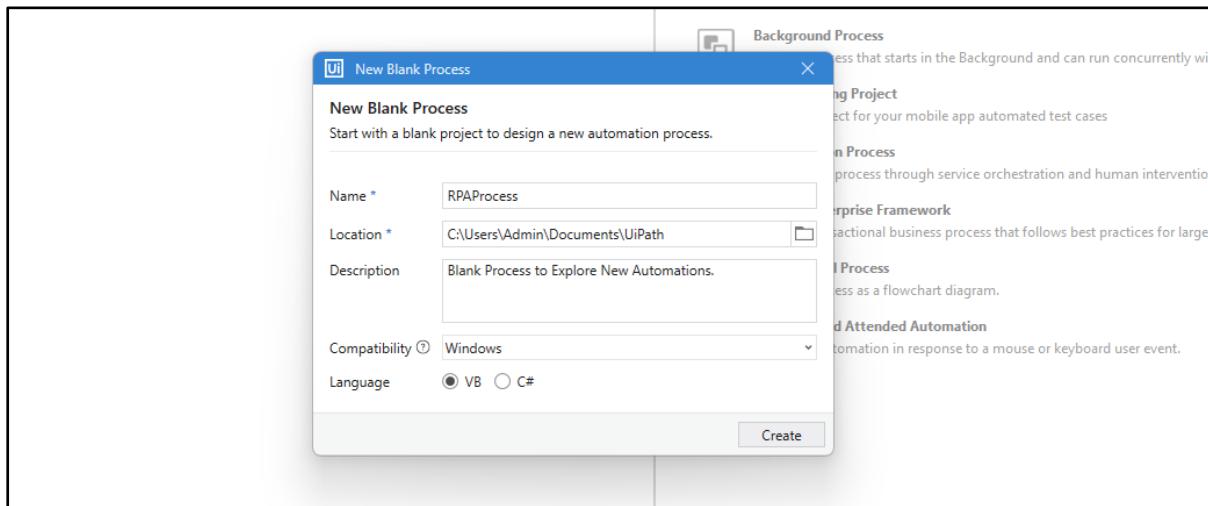


- ① RPA Process execution started
- ② Sum of 24 and 12 is: 36
- ③ Difference of 24 and 12 is: 12
- ④ Product of 24 and 12 is: 288
- ⑤ Quotient of 24 by 12 is: 2

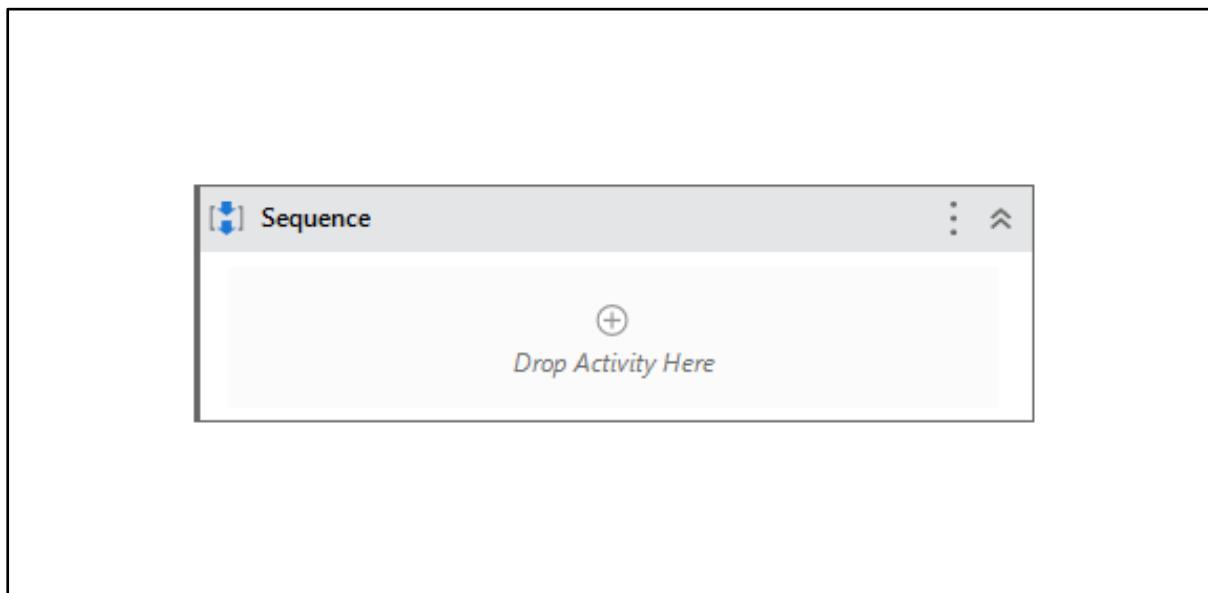
Conclusion: The practical to automate UiPath Number Calculation (Subtraction, Multiplication, Division of numbers) was performed successfully.

[B] AIM: Create an automation UiPath project using different types of variables (Integer, Double, Boolean, Array, String and Data Table)

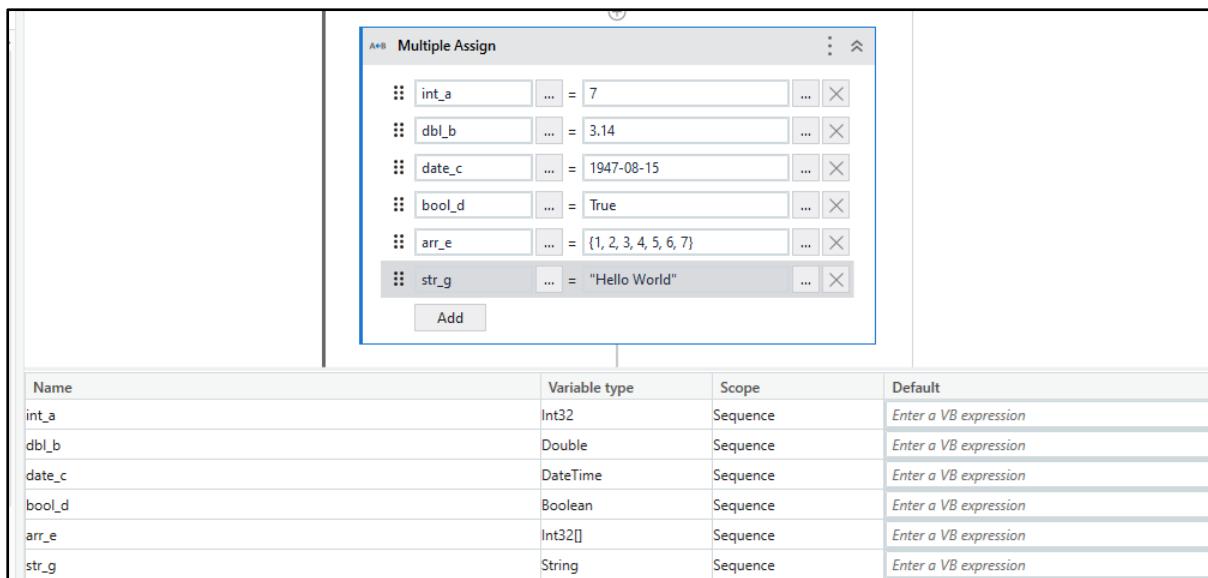
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



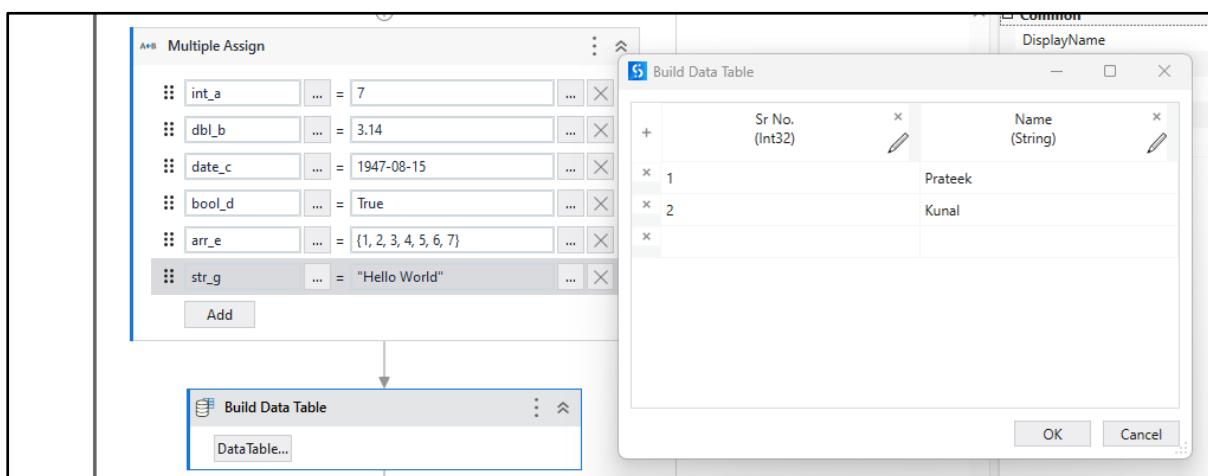
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Search for “Multiple Assign” in the Search panel of the Activities panel. Drag and drop the Multiple Assign activity inside the Sequence. Create and Assign variables for each of the data types – Integer, Double, DateTime, Boolean, Array, String and Data Table.



Step 4: Search for “Build Data Table” in the Search panel of the Activities panel. Drag and drop the Build Data Table activity inside the Sequence. Build the Data Table by clicking on the “DataTable” button and enter the values for the Data Table.



Step 5: Create a variable to store the output of the Data Table and specify assign the Output property of the Build Data Table activity with this variable.



Step 6: Search for “Write Line” in the Search panel of the Activities panel. Drag and drop the Write Line activity inside the Sequence. In the textbox of Write Line Activity type the output for each of the Operations – Integer, Double, DateTime, Boolean, Array, String and Data Table.





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

- ① The DataType of 7 is: System.Int32
- ② The DataType of 3.14 is: System.Double
- ③ The DataType of 08/15/1947 00:00:00 is: System.DateTime
- ④ The DataType of True is: System.Boolean
- ⑤ The DataType of System.Int32[] is: System.Int32[]
- ⑥ The DataType of Hello World is: System.String
- ⑦ The DataType of TableName is: System.Data.DataTable

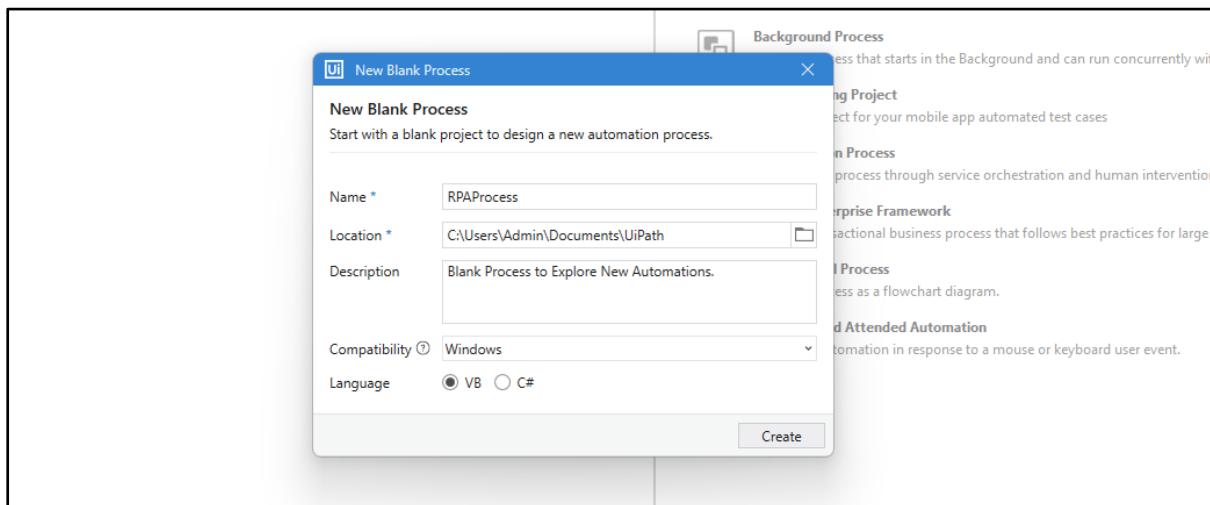
Conclusion: The practical to create an automation UiPath project using different types of variables (number, Boolean, generic, array, data table) was performed successfully.

PRACTICAL 3

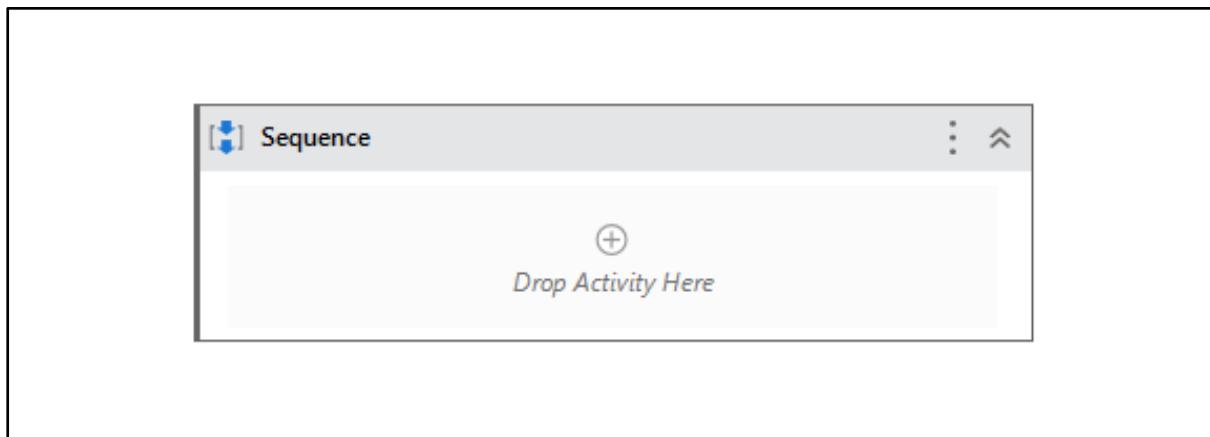
[A] AIM: Create an automation UiPath Project using decision statements.

I] If Statement

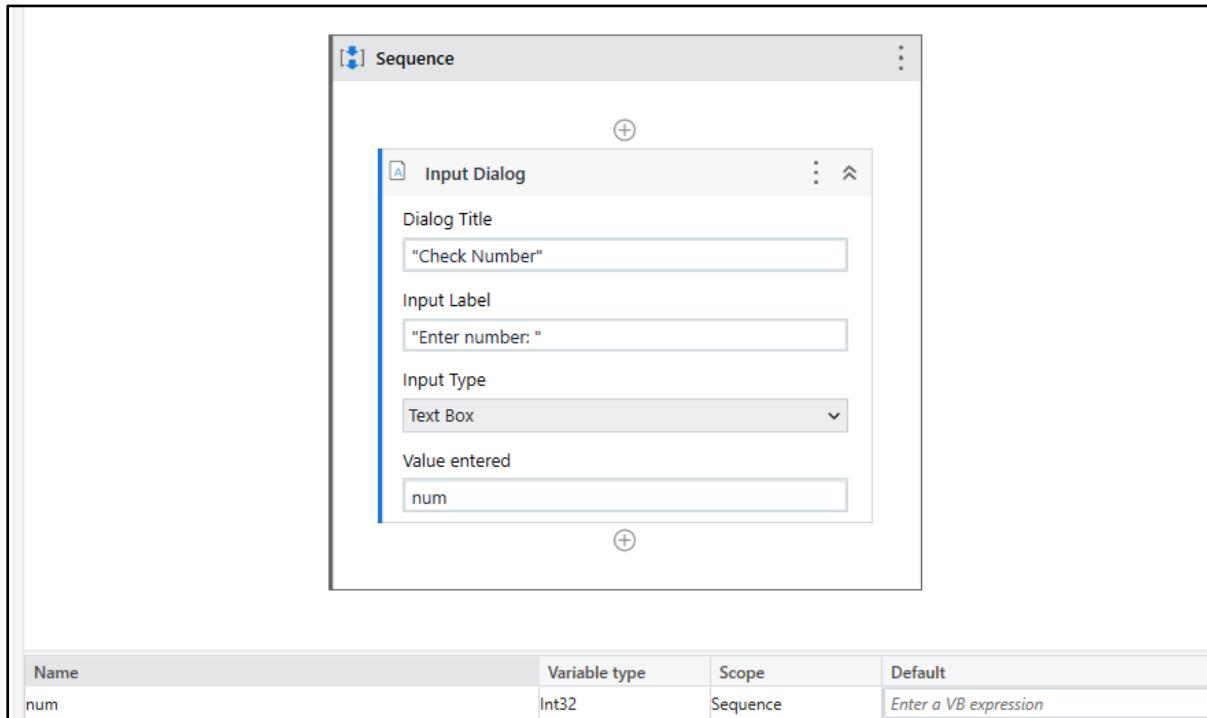
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



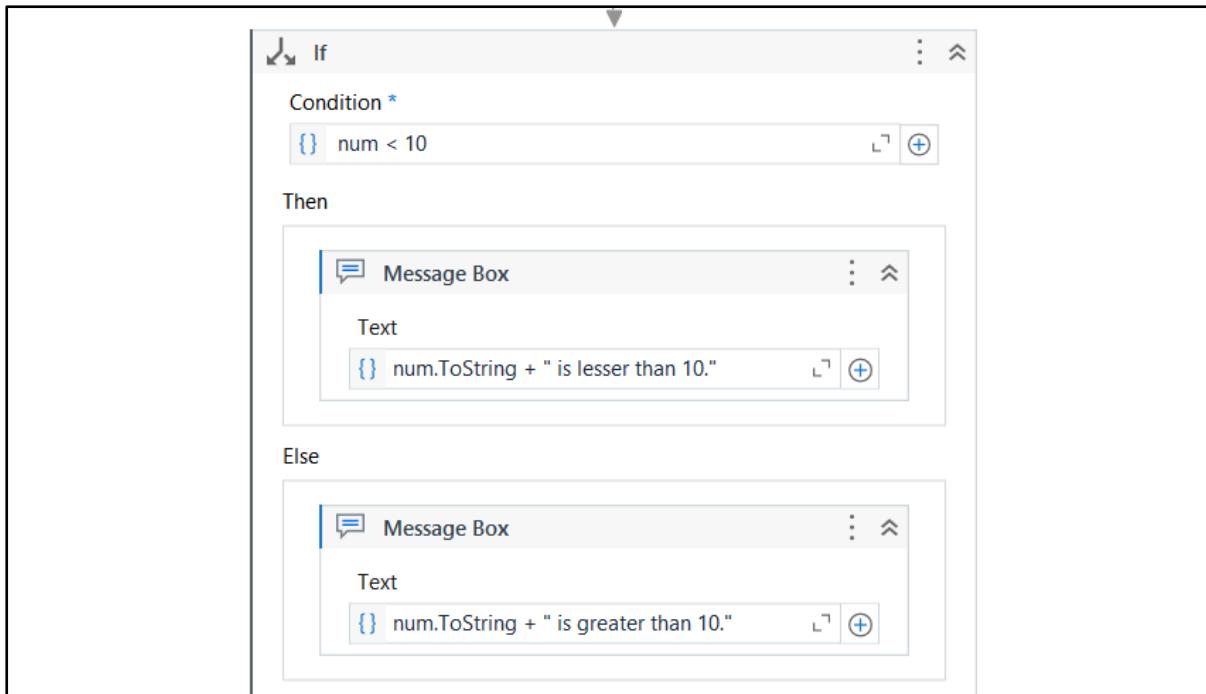
Step 3: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create a variable and specify the variable in the Result property of the Input dialog box.



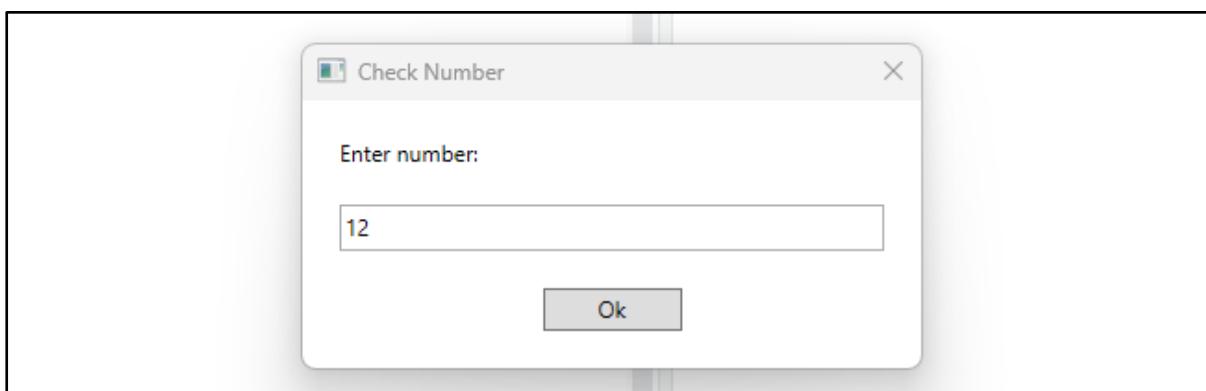
Step 4: Search for “If” in the Search panel of the Activities panel. Drag and drop the If activity inside the Sequence. In the condition part, enter the condition for Decision Statement.

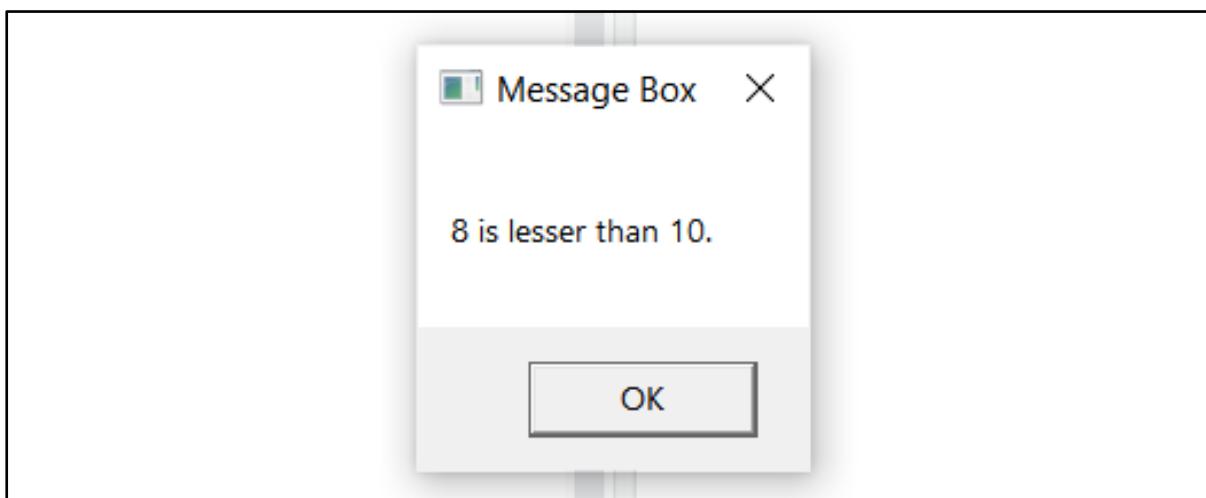
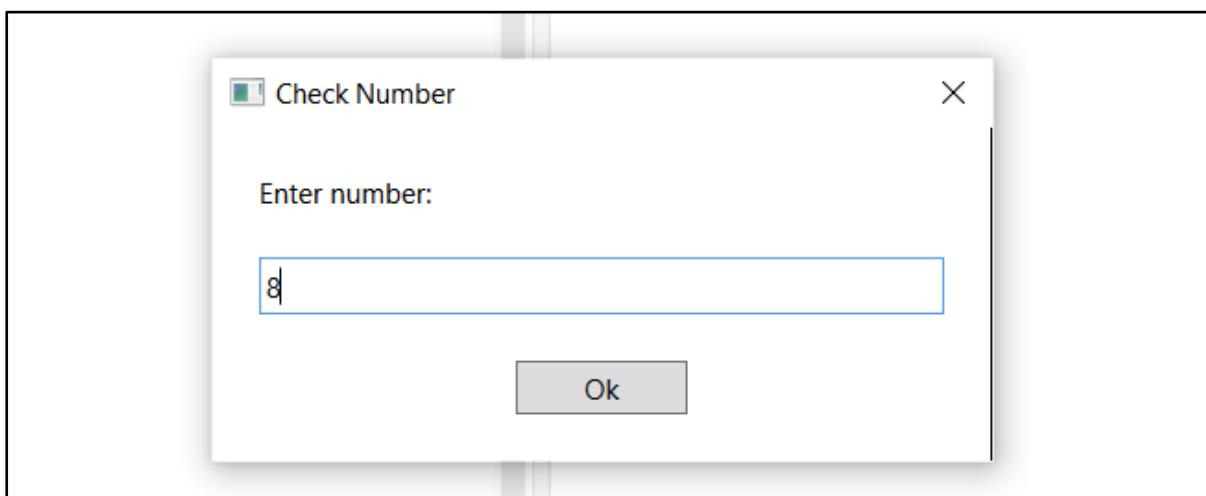
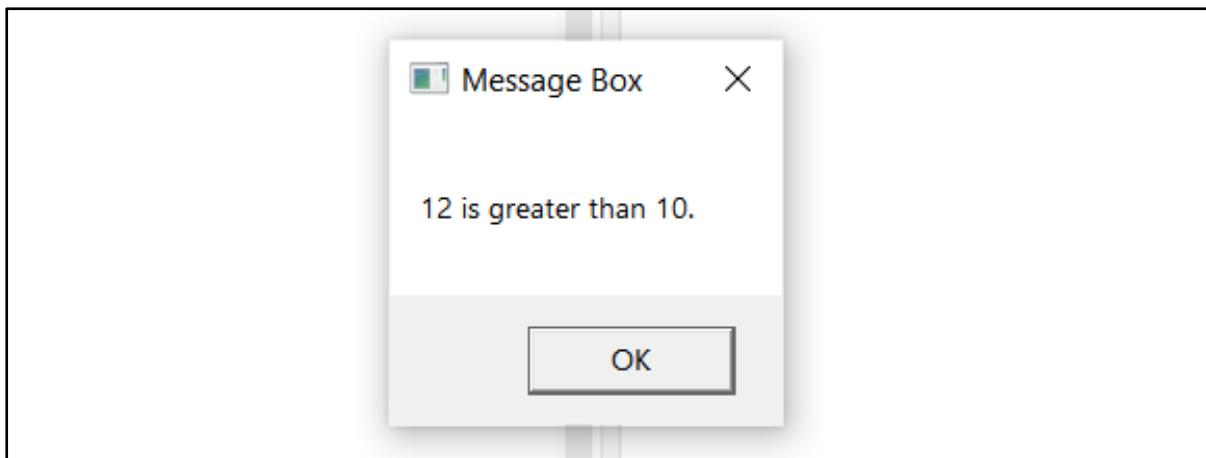


Step 5: Search for “Message Box” in the Search panel of the Activities panel. Drag and drop two Message Box activities inside the If Activity. In the Then section, enter the output if the condition is True and in the Else section, enter the output if the condition is False.



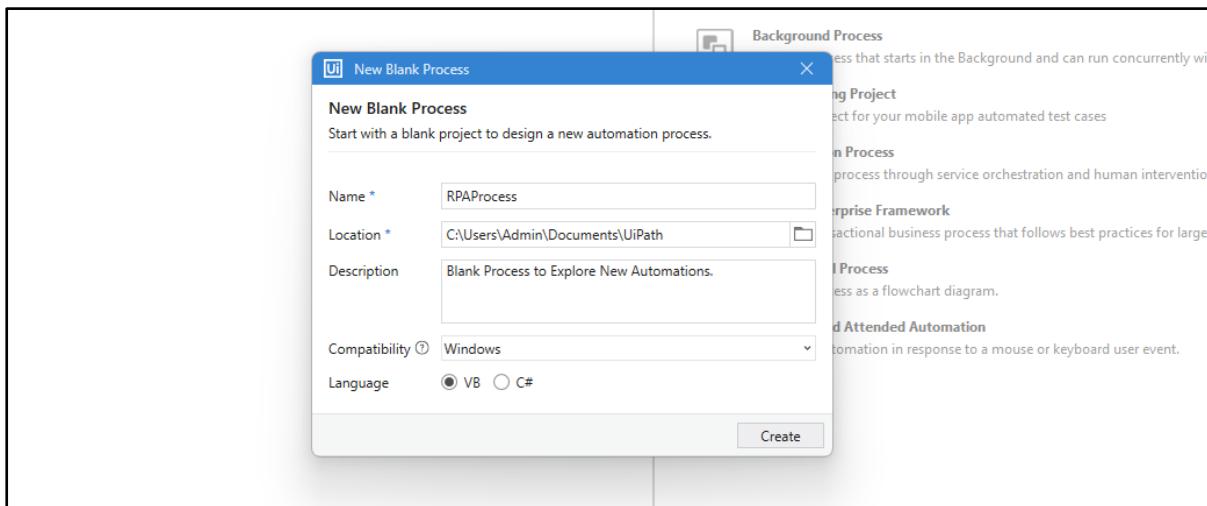
Step 6: Click the Run button and see the result.



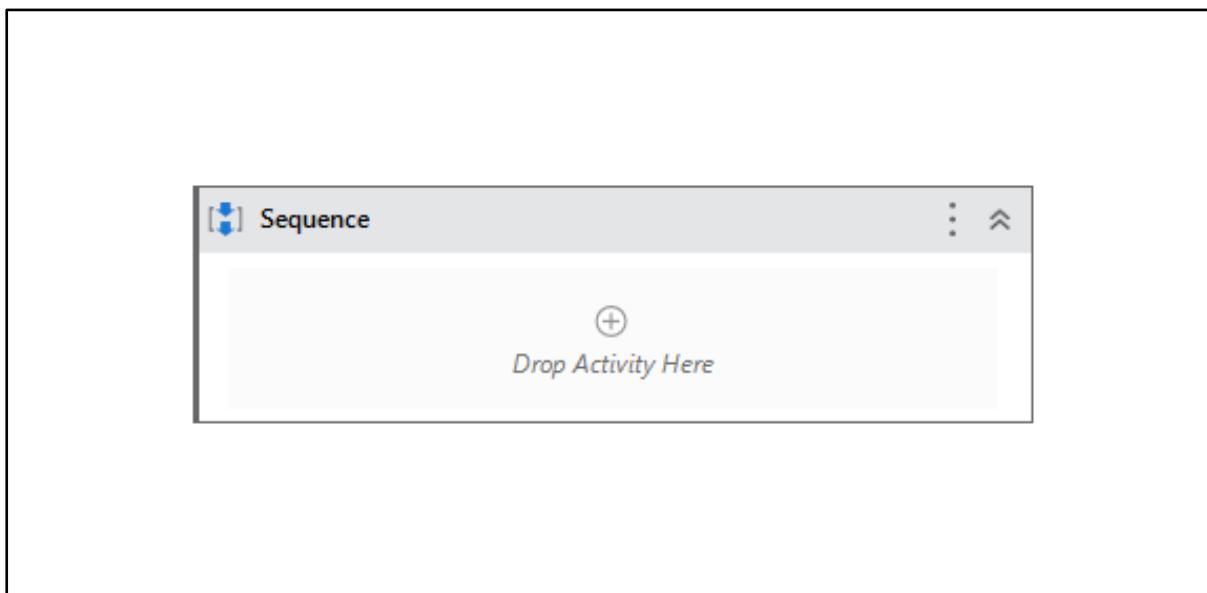


II] Switch Case

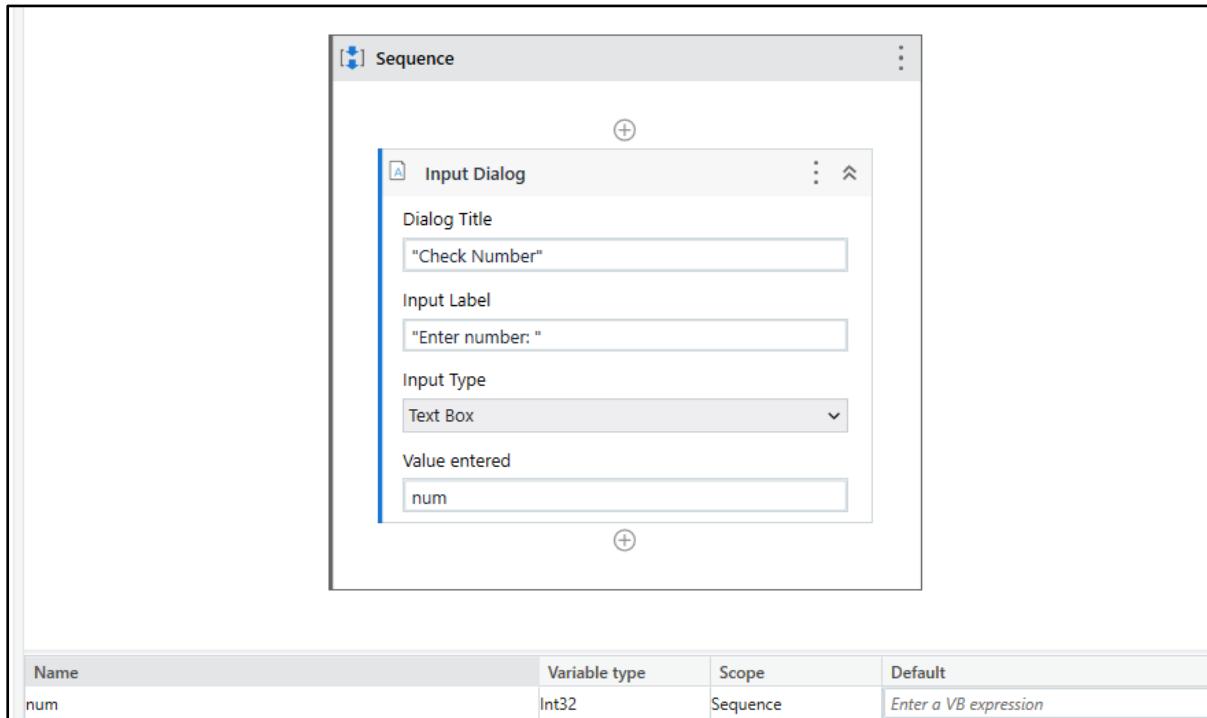
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



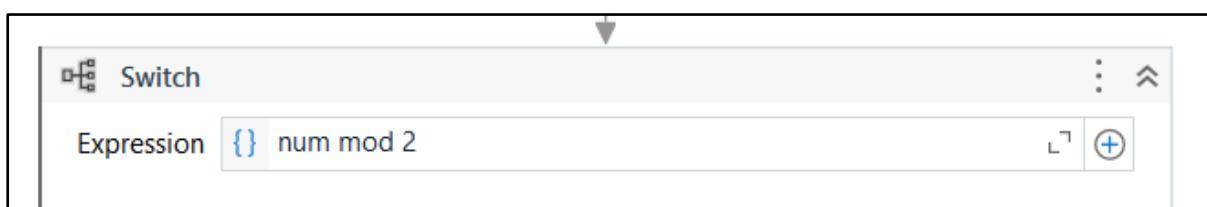
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



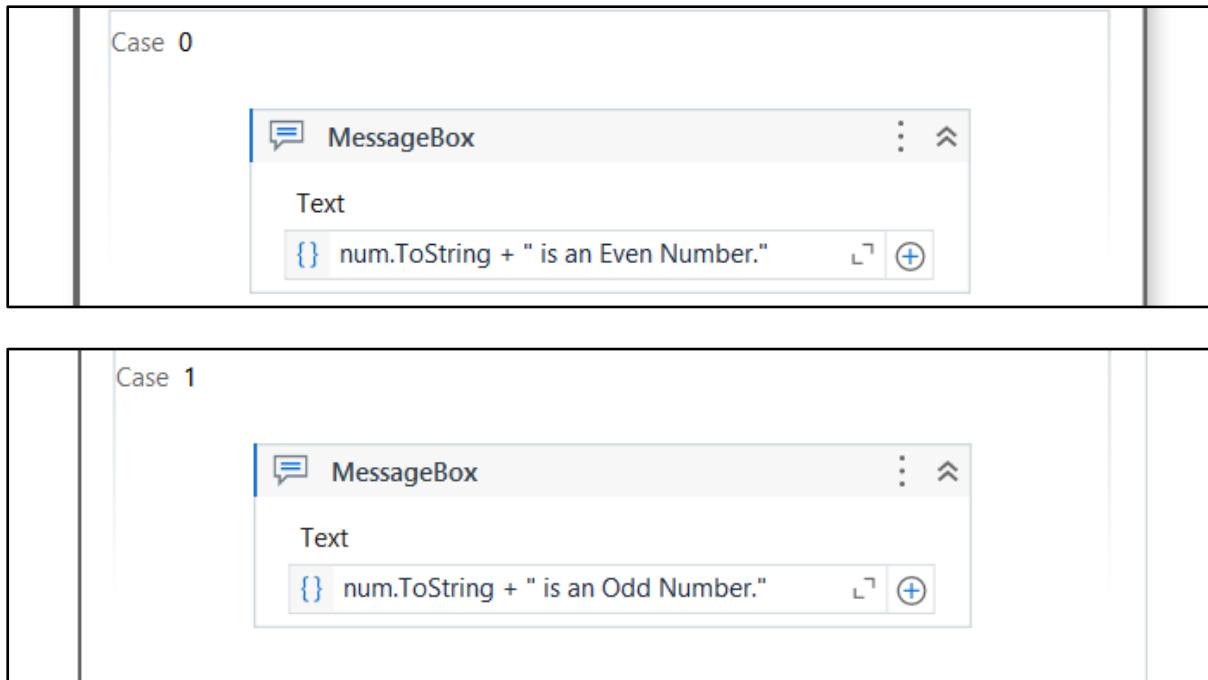
Step 3: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create a variable and specify the variable in the Result property of the Input dialog box.



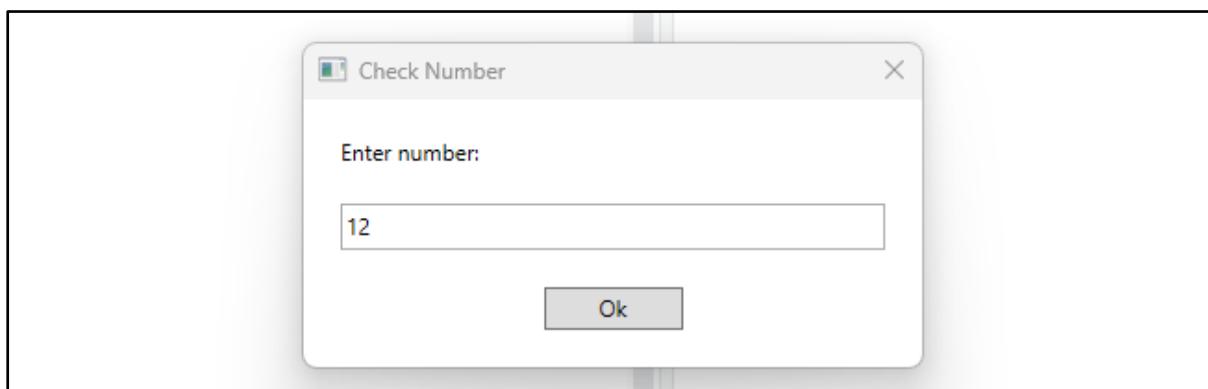
Step 4: Search for “Switch” in the Search panel of the Activities panel. Drag and drop the Switch activity inside the Sequence. In the condition part, enter the condition for Decision Statement.

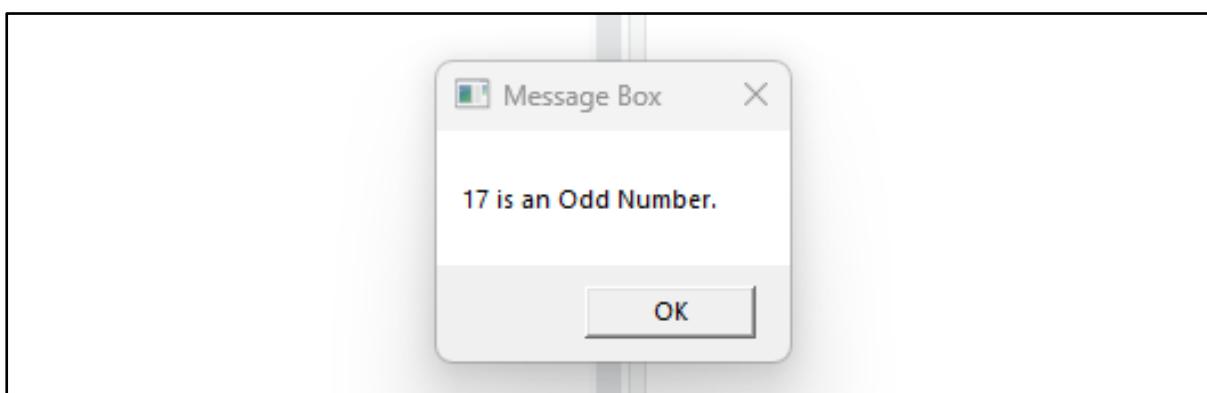
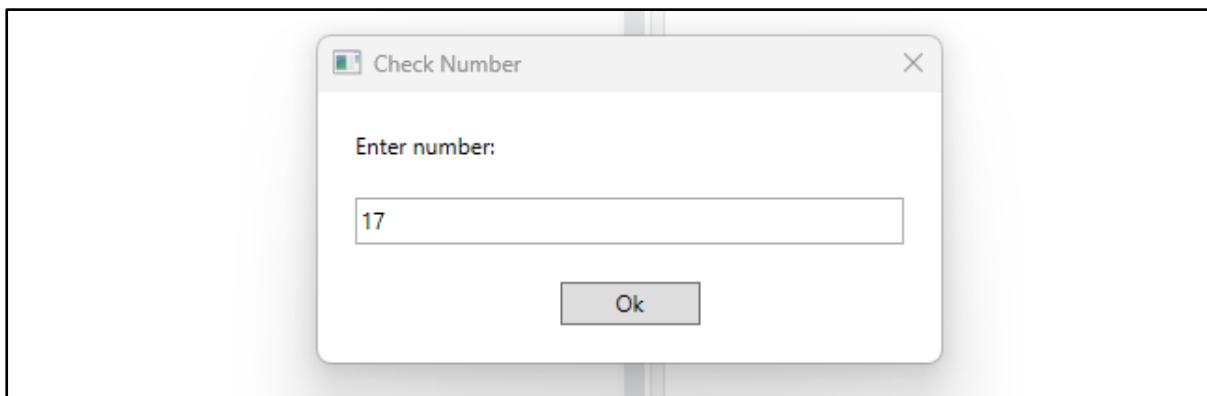
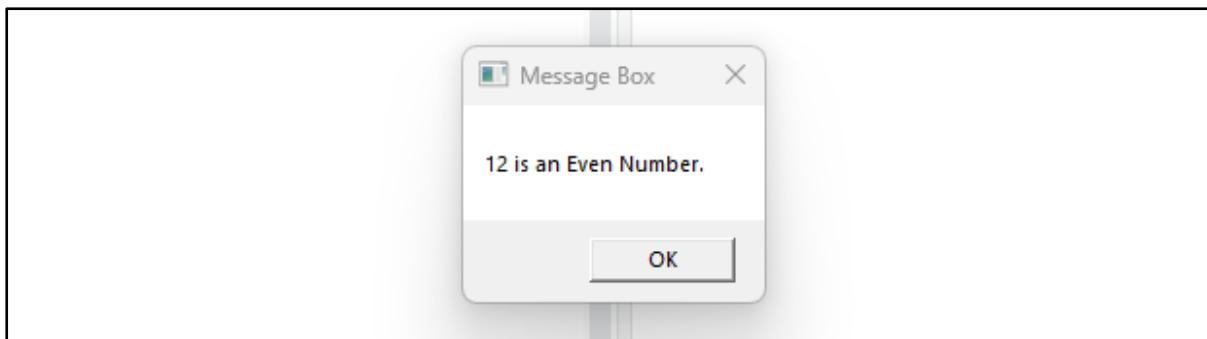


Step 5: Create two cases 0 and 1. Search for “Message Box” in the Search panel of the Activities panel. Drag and drop two Message Box activities inside the Activity. In the Case 0 section, enter the output for Case 0 and in the Case 1 section, enter the output for Case 1.



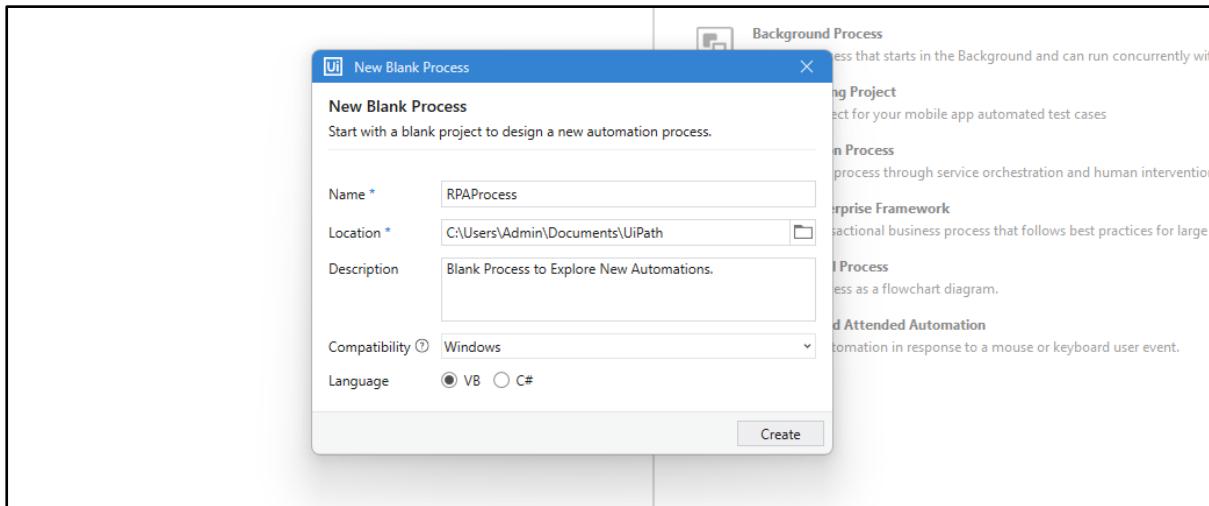
Step 6: Click the Run button and see the result.



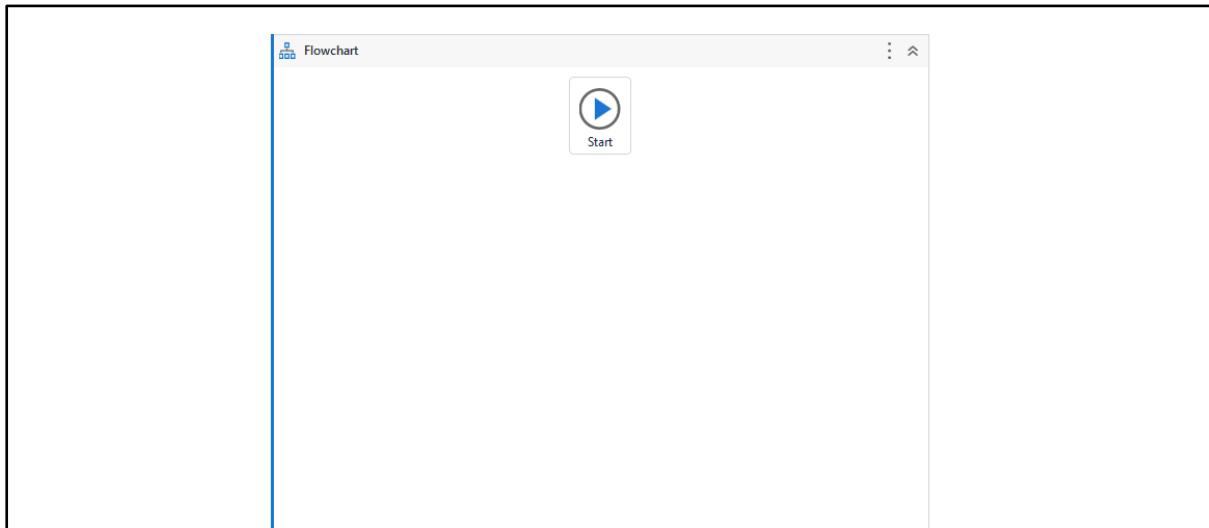


III] Flow Decision

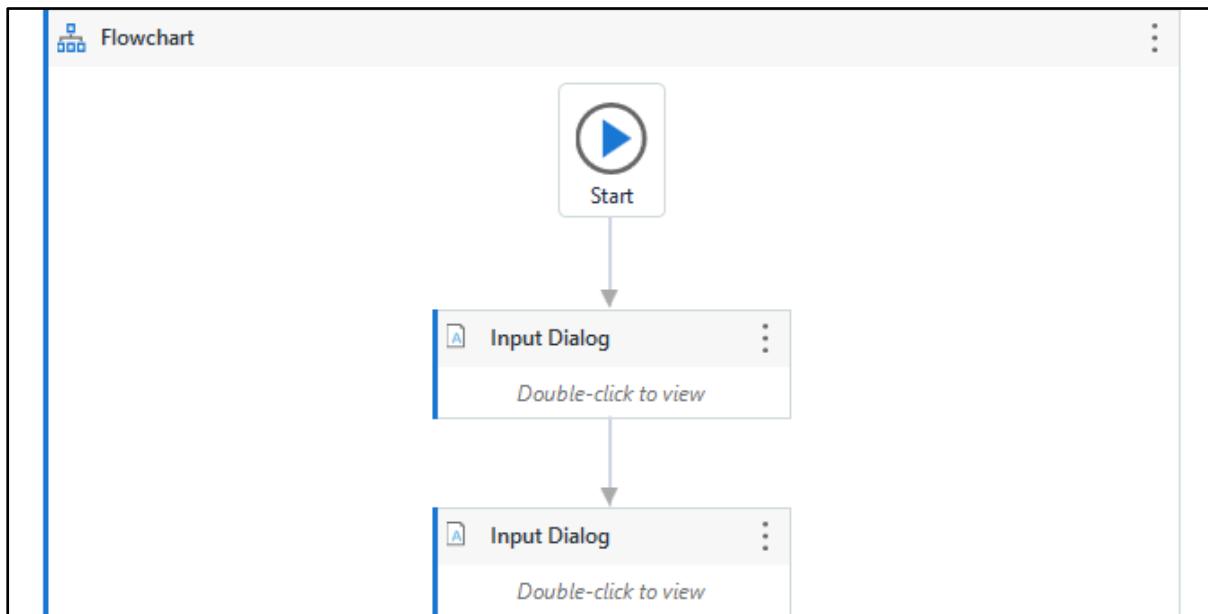
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



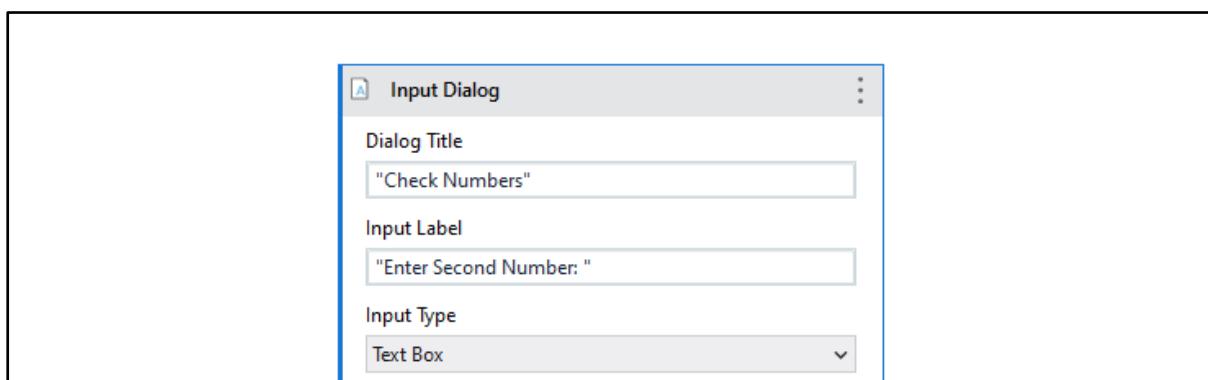
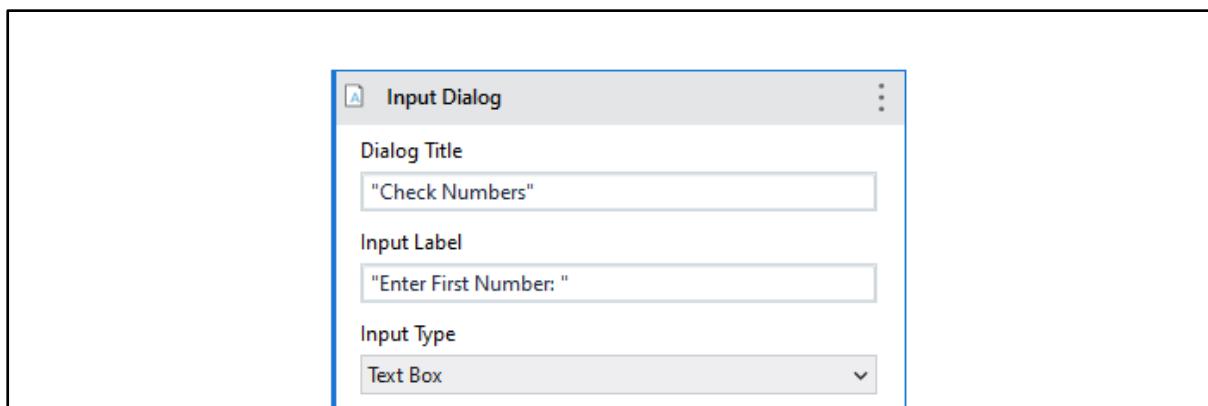
Step 2: Search for “Flowchart” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop two Input dialog activities inside the Flowchart.



Step 4: Write the appropriate message on the Label of the Input dialogs.

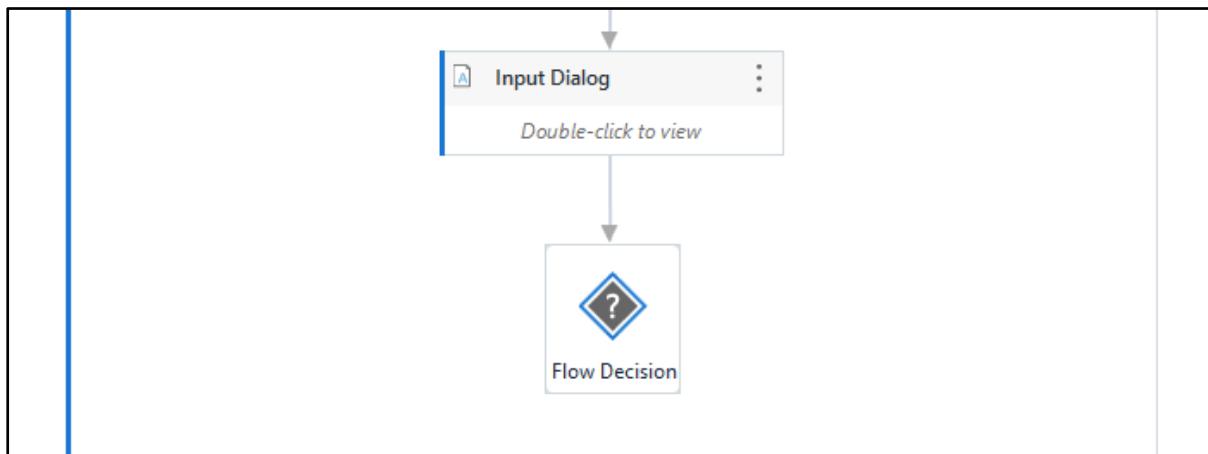


Step 5: Create variables and specify the variables in the Result properties of the Input dialog boxes.

<p>Input Label "Enter First Number: "</p> <p>Input Type Text Box</p> <p>Value entered a</p>			
Name	Variable type	Scope	Default
a	Int32	Flowchart1	Enter a VB exp
b	Int32	Flowchart1	Enter a VB exp
Create Variable			

<p>Input Label "Enter Second Number: "</p> <p>Input Type Text Box</p> <p>Value entered b</p>			
Name	Variable type	Scope	Default
a	Int32	Flowchart1	Enter a VB exp
b	Int32	Flowchart1	Enter a VB exp
Create Variable			

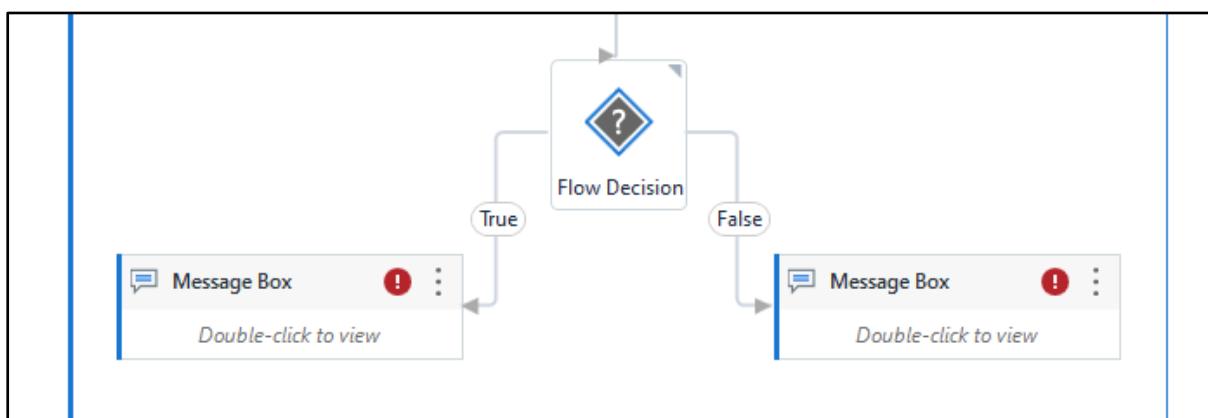
Step 6: Search for “Flow Decision” in the Search panel of the Activities panel. Drag and drop two Flow Decision Activity inside the Flowchart.



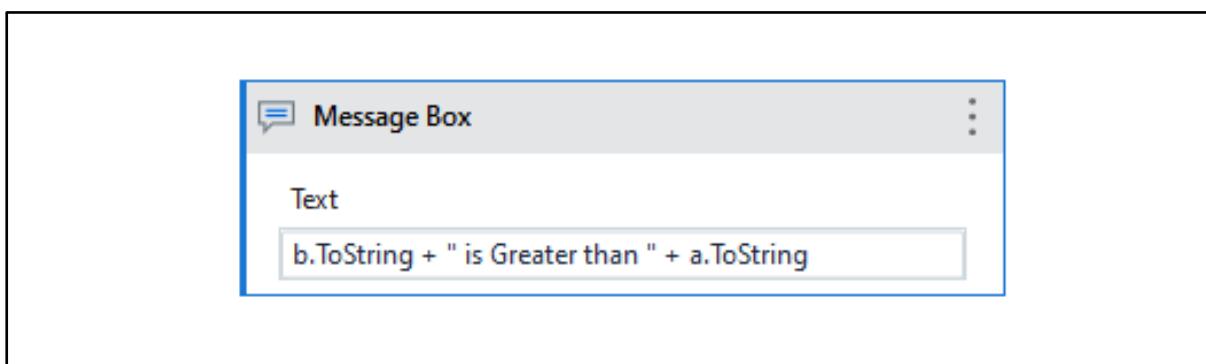
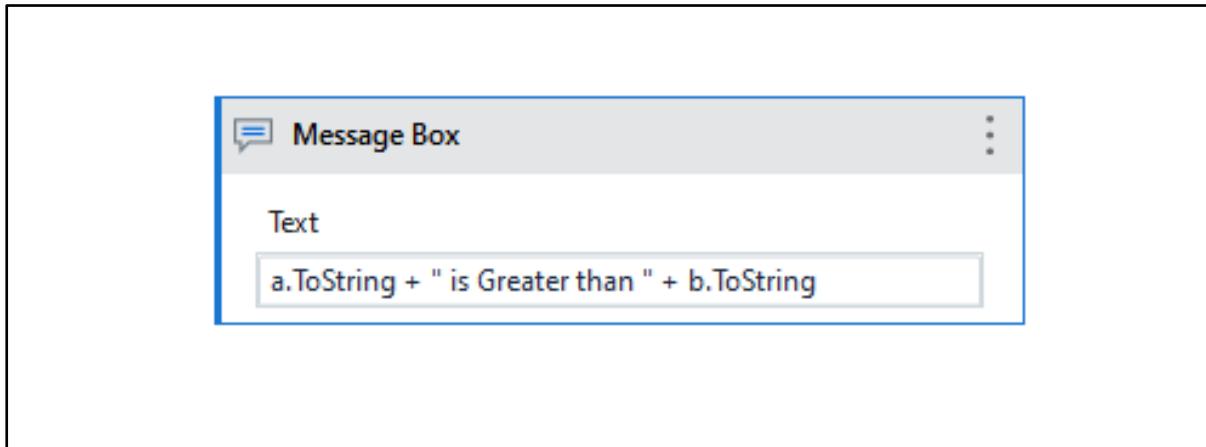
Step 7: Specify the condition for Flow Decision as “ $a > b$ ”.



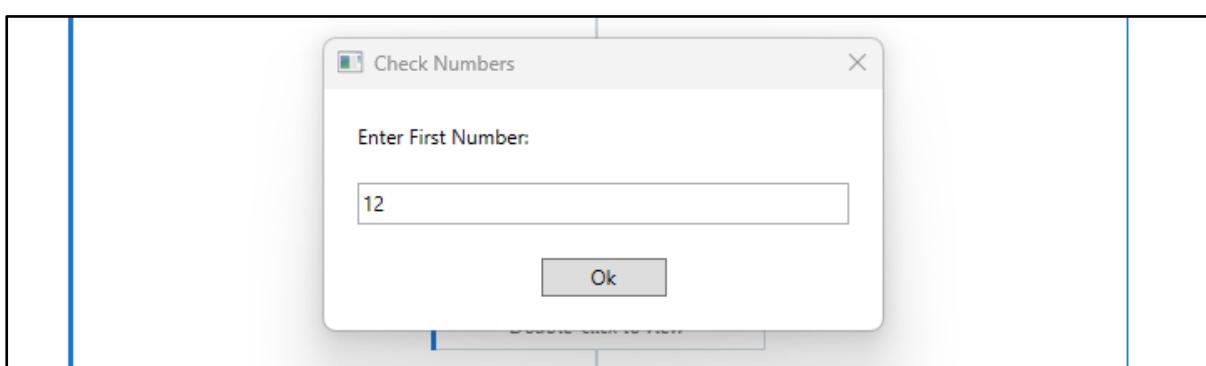
Step 8: Search for “Message Box” in the Search panel of the Activities panel. Drag and drop two Message Box activities inside the Flowchart, one on the True side and the other on the False side.

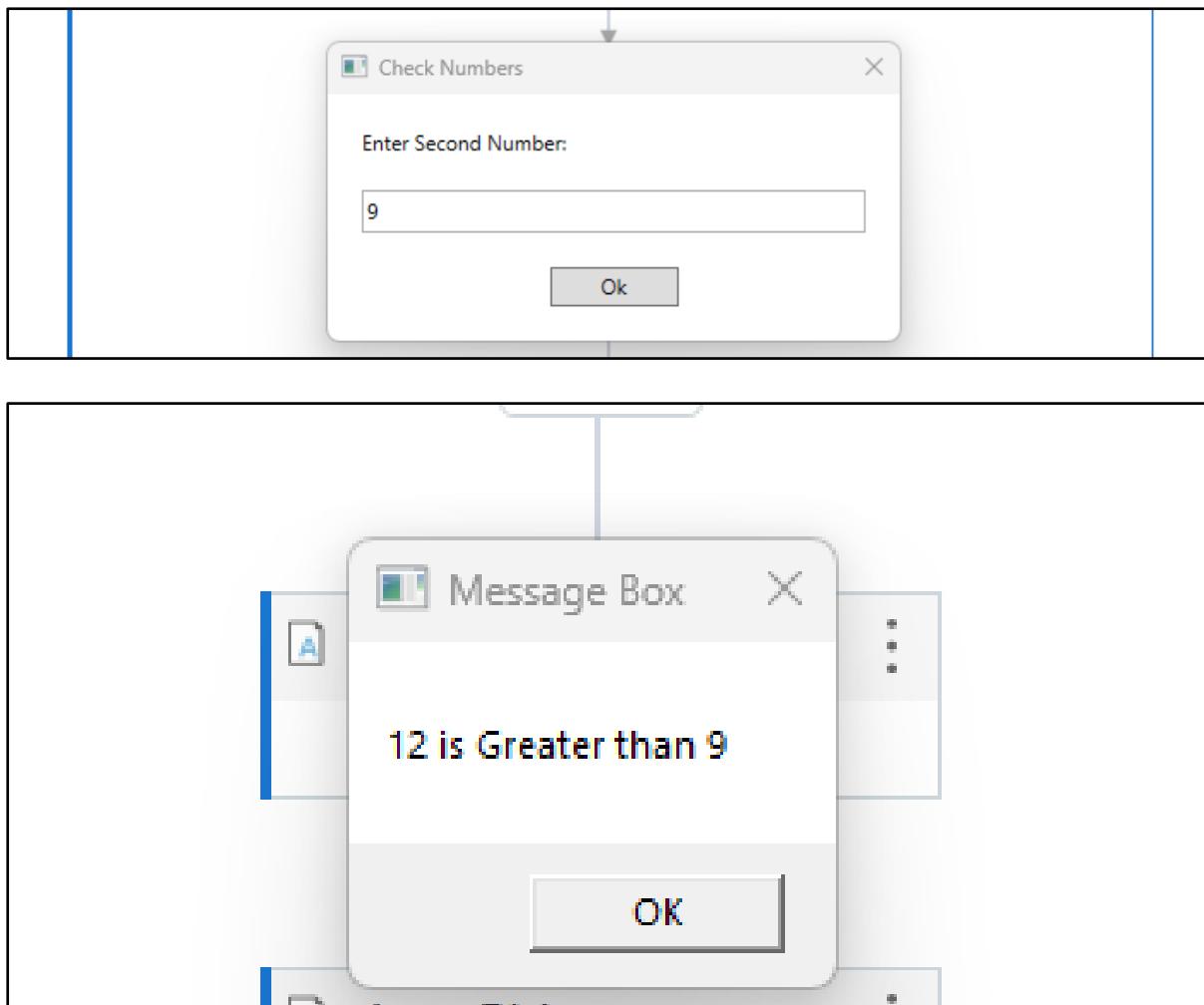


Step 9: Specify the True Condition in the Text area of the True Message box and the False Condition in the Text area of the False Message Box.



Step 10: Click the Run button and see the result.



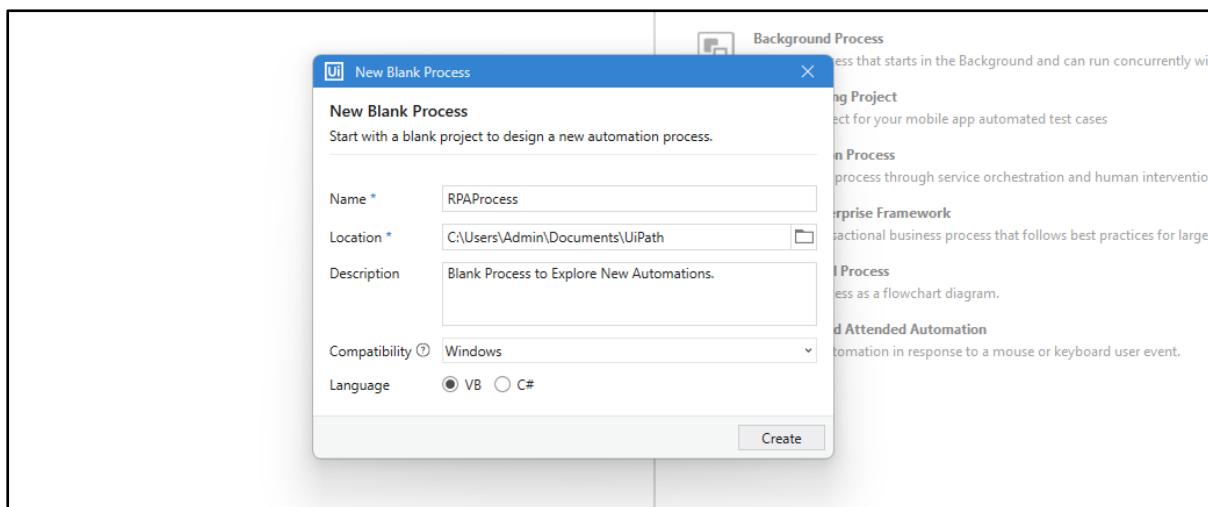


Conclusion: The practical to create an automation UiPath Project using decision statements was performed successfully.

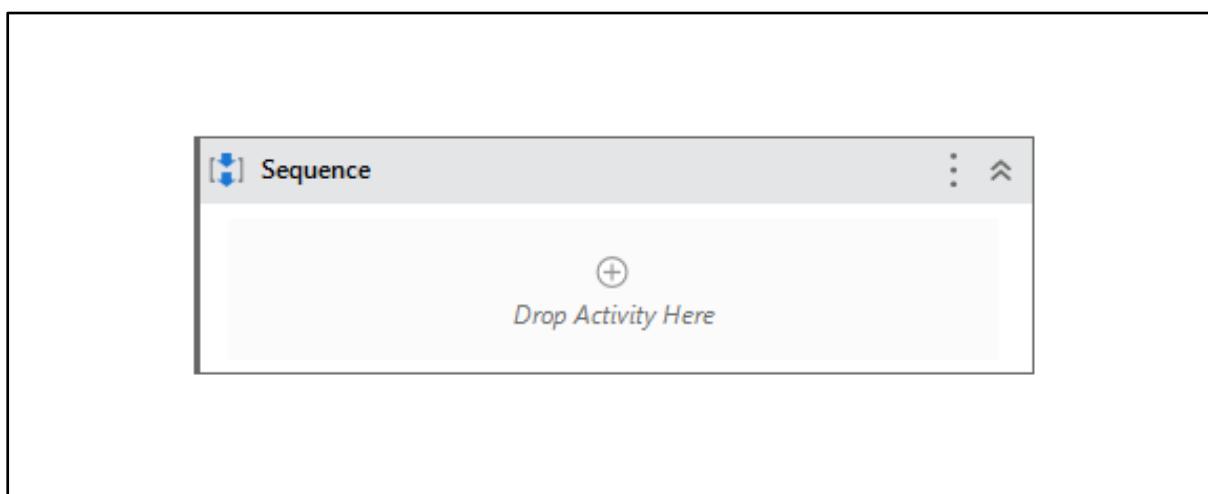
[B] AIM: Create an automation UiPath Project using looping statements.

I] For Each Loop

Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



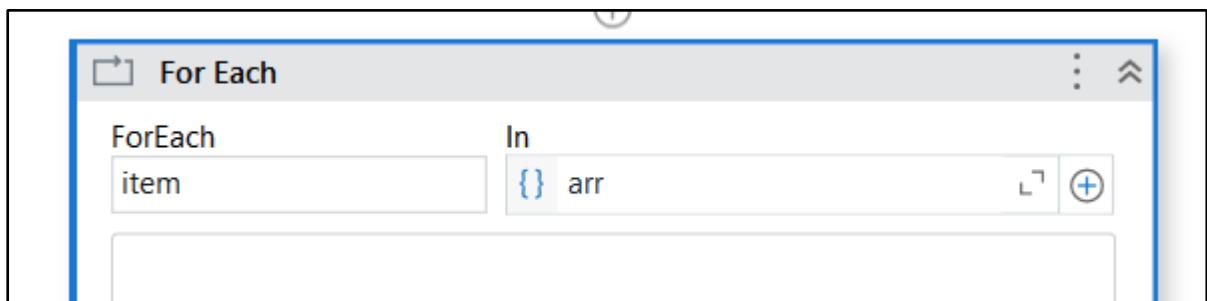
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



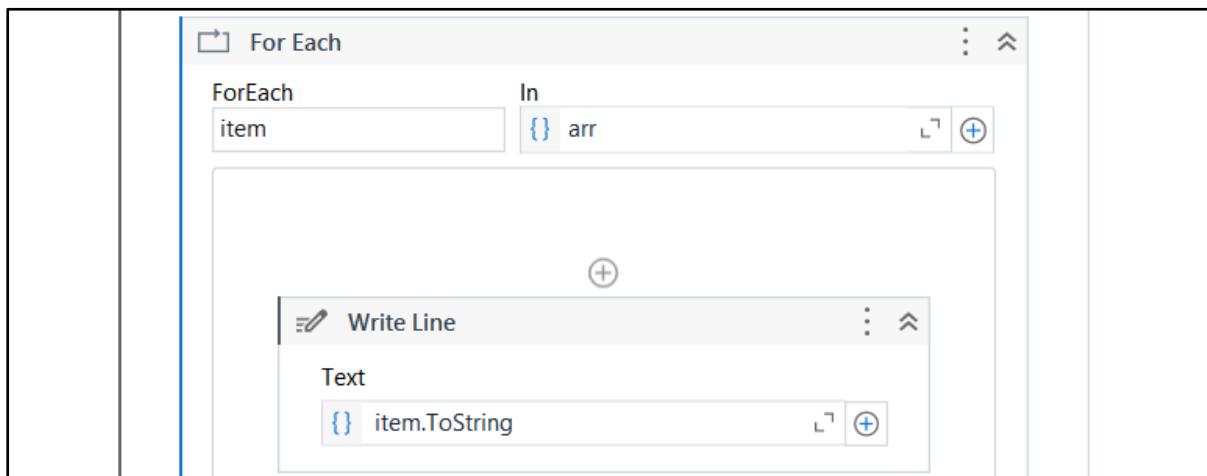
Step 3: Create an array variable. Set the Datatype as array of Int datatype and specify the array elements.

Name	Variable type	Scope	Default
arr	Int32[]	Sequence	{1, 2, 3, 4, 5, 6, 7, 8, 9, 10}
Create Variable			

Step 4: Search for “For Each” in the Search panel of the Activities panel. Drag and drop the For Each activity inside the Sequence. Set the iterator item and the list item as our array variable.



Step 5: Search for “Write Line” in the Search panel of the Activities panel. Drag and drop the Write Line activity inside the For Each Activity Body. Enter the output for the For Each Loop using Write Line Activity as “item.ToString”.

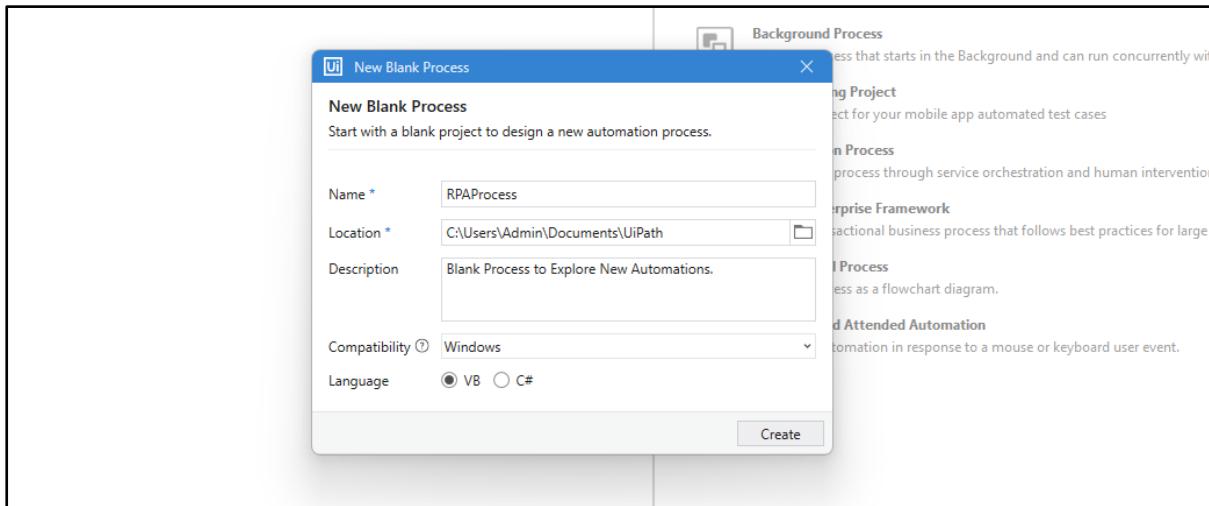


Step 6: Click the Run button and see the result.

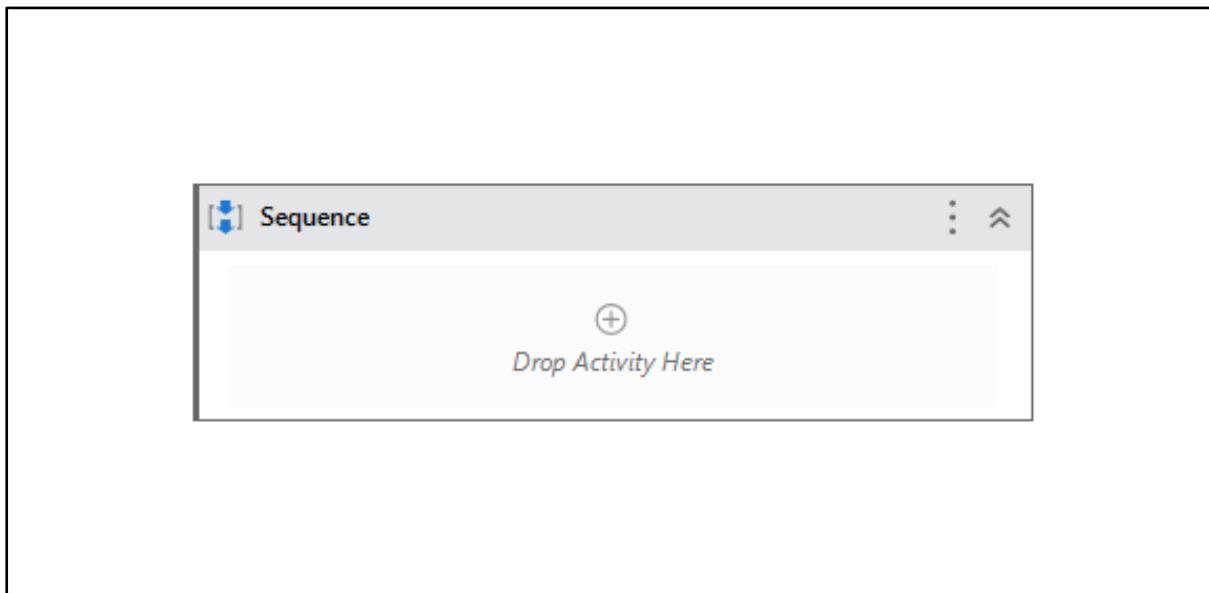
- ① RPAProcess execution started
- ② 1
- ③ 2
- ④ 3
- ⑤ 4
- ⑥ 5
- ⑦ 6
- ⑧ 7
- ⑨ 8
- ⑩ 9
- ⑪ RPAProcess execution ended in: 00:00:00

II] While Loop

Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



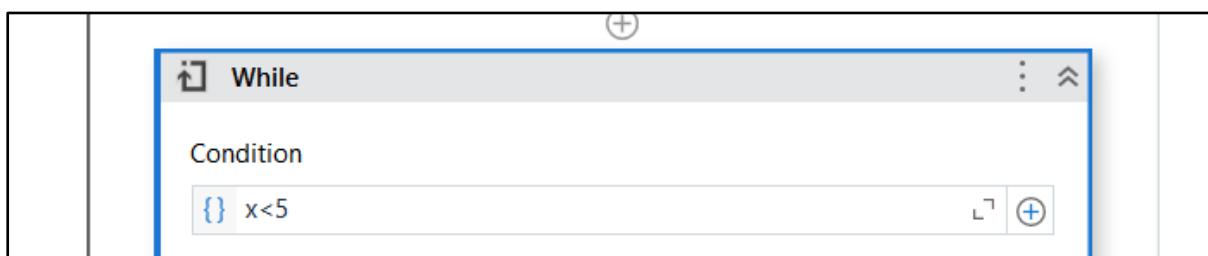
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



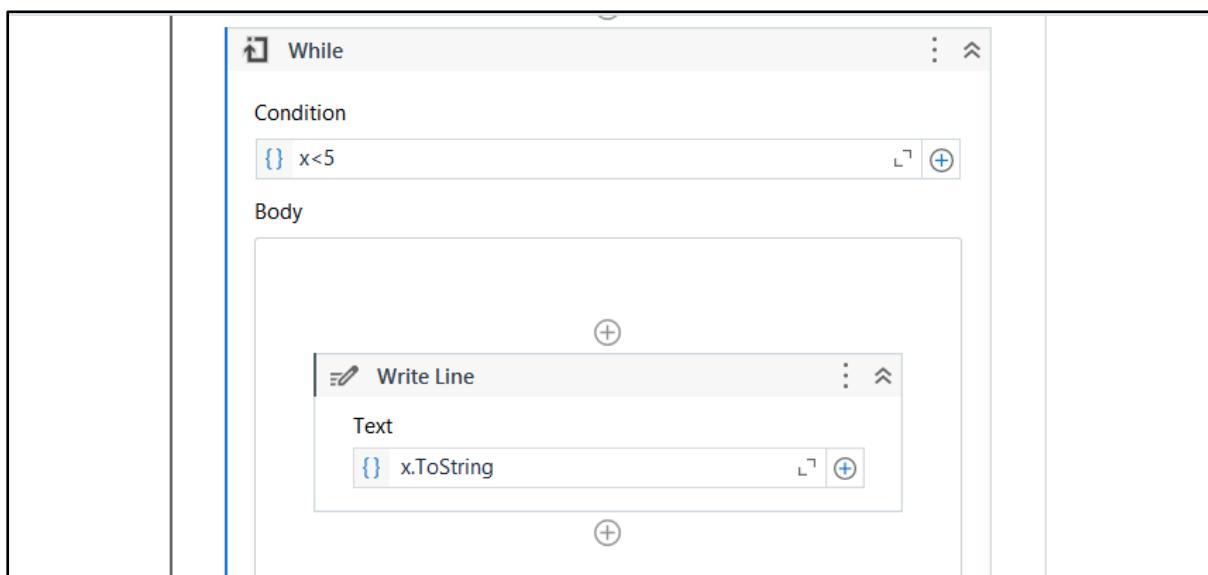
Step 3: Create an integer variable and specify its value.

Name	Variable type	Scope	Default
x	Int32	Sequence	1
Create Variable			

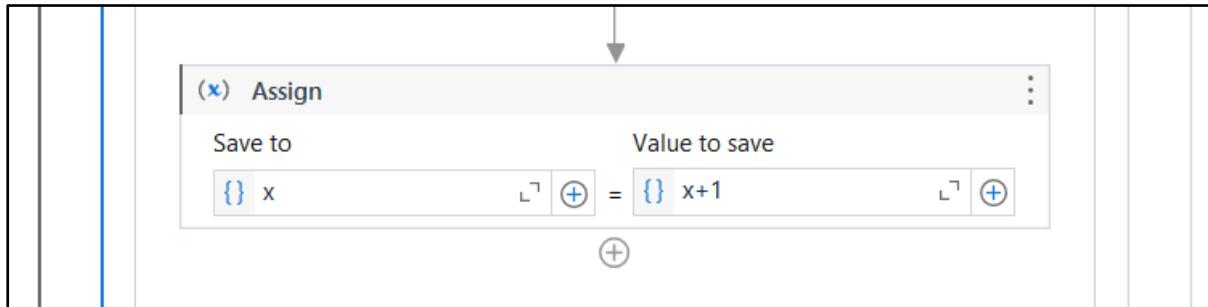
Step 4: Search for “While” in the Search panel of the Activities panel. Drag and drop the While activity inside the Sequence. Set the condition as “x<5”.



Step 5: Search for “Write Line” in the Search panel of the Activities panel. Drag and drop the Write Line activity inside the Activity Body. Enter the output for the Loop using Write Line Activity as “x.ToString”.



Step 6: Search for “Assign” in the Search panel of the Activities panel. Drag and drop the Assign activity inside the Activity Body. Assign the value for x as “ $x = x + 1$ ”.

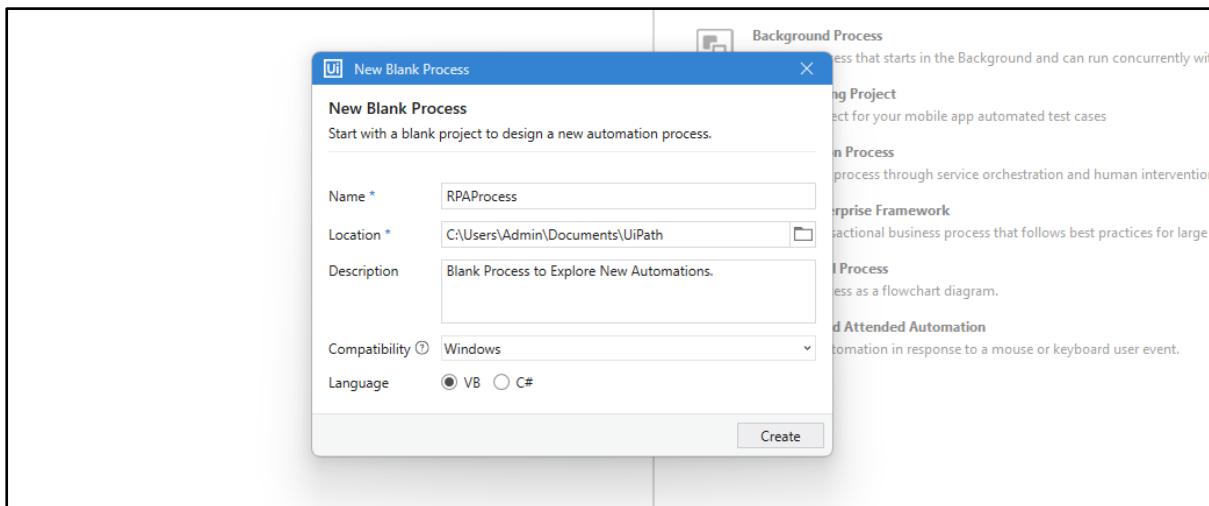


Step 7: Click the Run button and see the result.

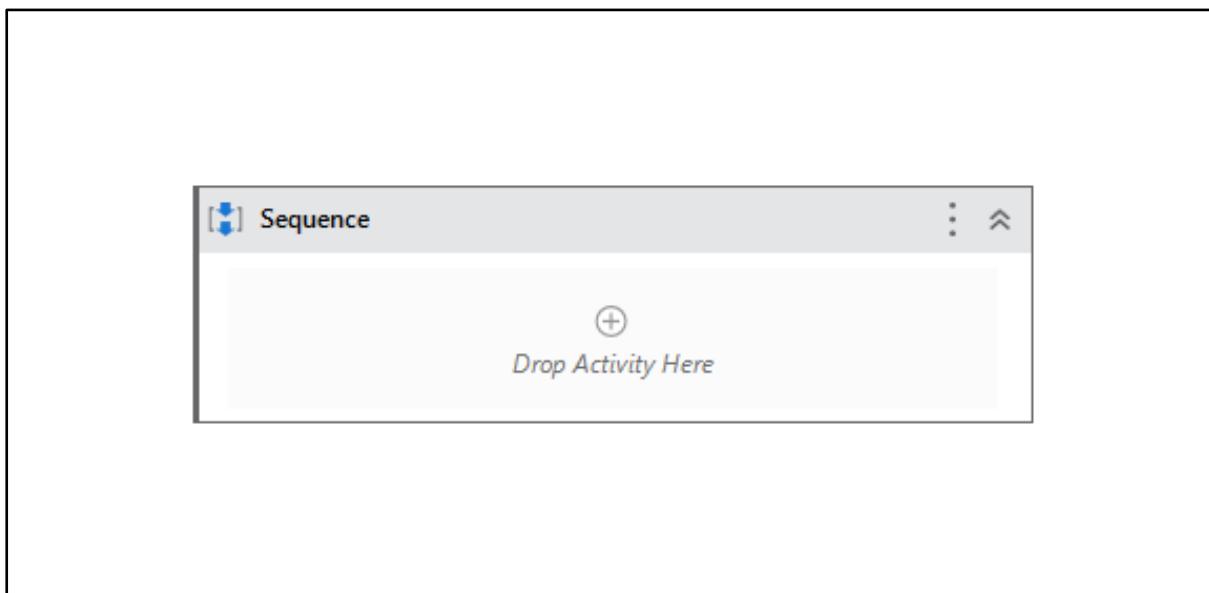
- ① RPAProcess execution started
- ② 1
- ③ 2
- ④ 3
- ⑤ 4
- ⑥ RPAProcess execution ended in: 00:00:00

III] Do-While Loop

Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



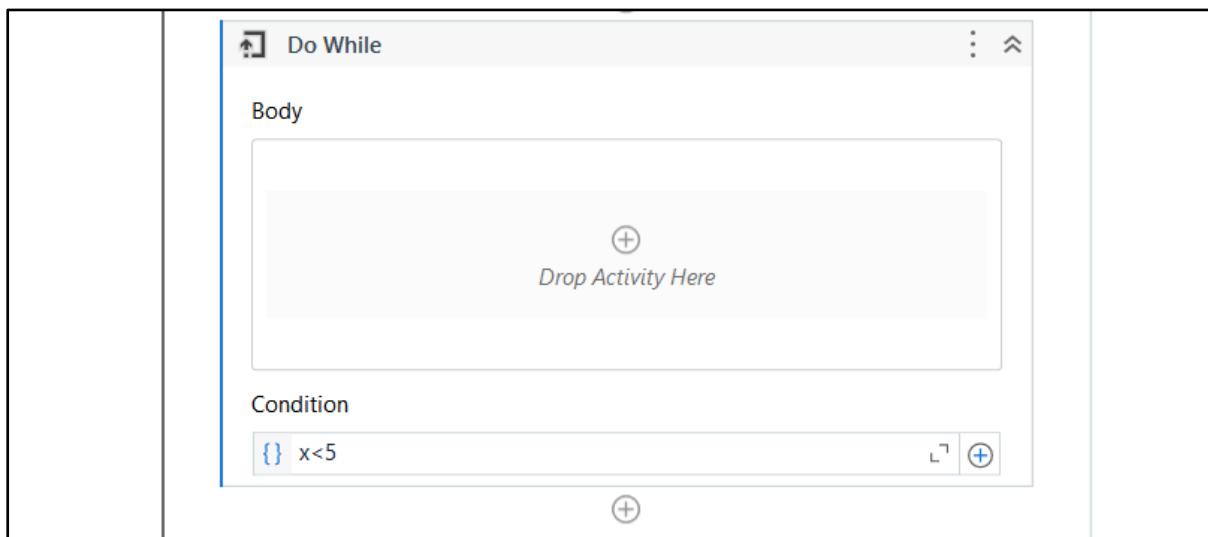
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



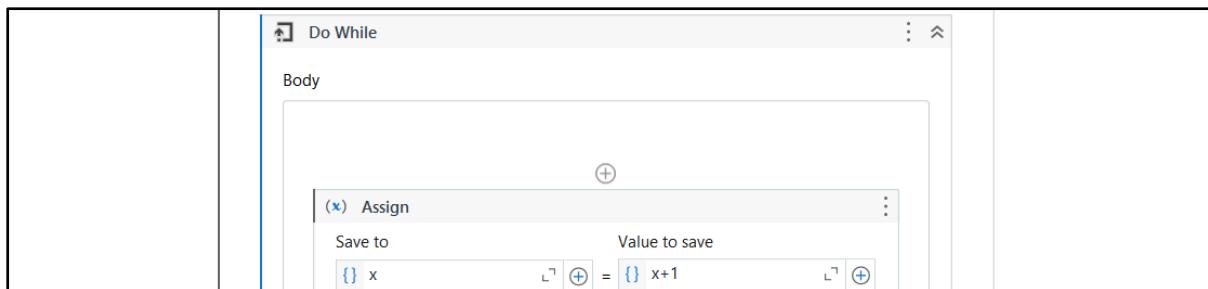
Step 3: Create an integer variable and specify its value.

Name	Variable type	Scope	Default
x	Int32	Sequence	0
<i>Create Variable</i>			

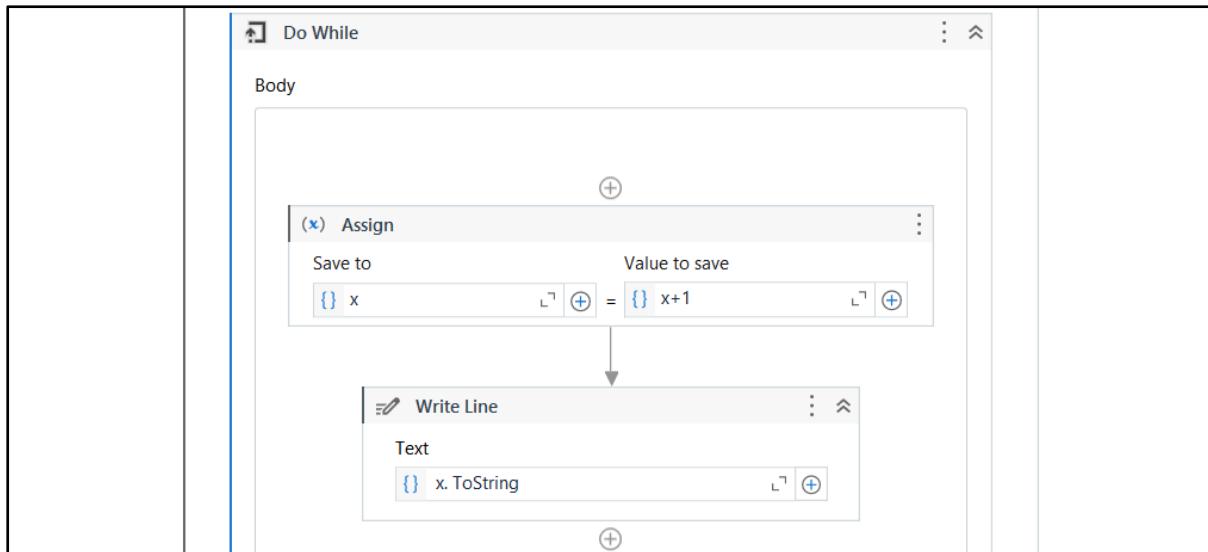
Step 4: Search for “Do-While” in the Search panel of the Activities panel. Drag and drop the While activity inside the Sequence. Set the condition as “x<5”.



Step 5: Search for “Assign” in the Search panel of the Activities panel. Drag and drop the Assign activity inside the Activity Body. Assign the value for x as “x = x + 1”.



Step 6: Search for “Write Line” in the Search panel of the Activities panel. Drag and drop the Write Line activity inside the Activity Body. Enter the output for the Loop using Write Line Activity as “x.ToString”.



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

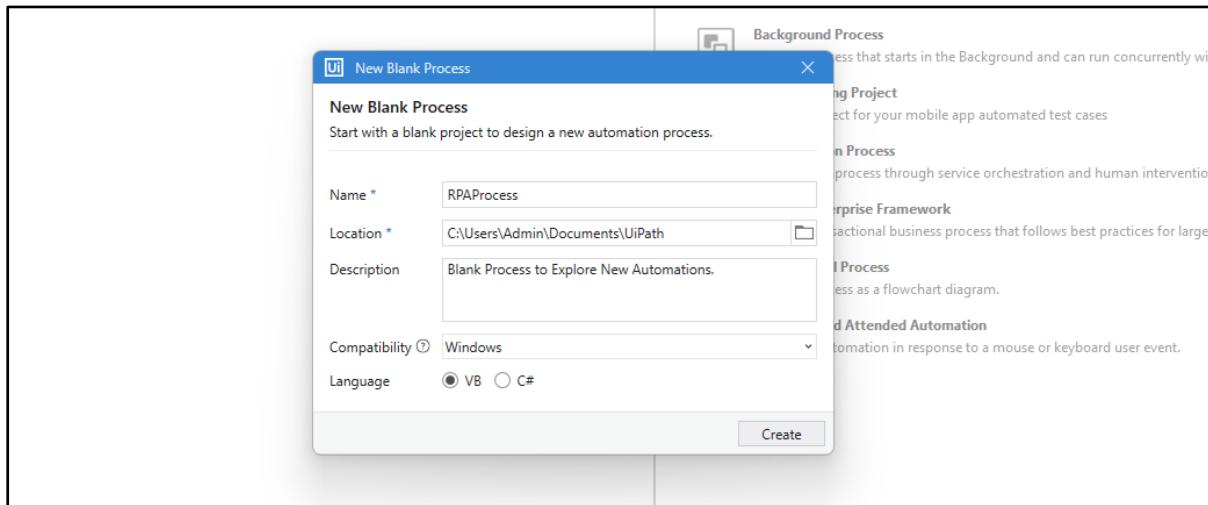
```
① RPAProcess execution started
② 1
③ 2
④ 3
⑤ 4
⑥ 5
⑦ RPAProcess execution ended in: 00:00:00
```

Conclusion: The practical to create an automation UiPath Project using looping statements was performed successfully.

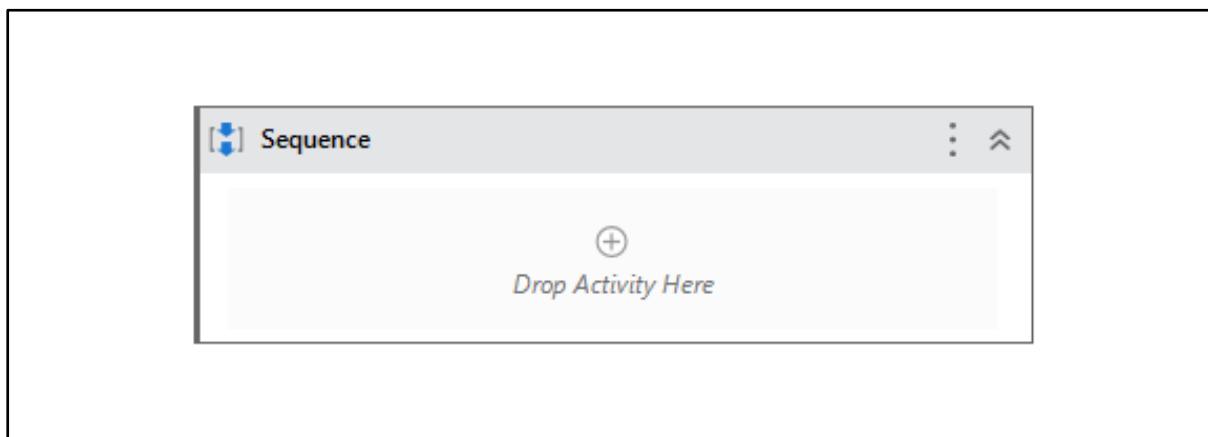
PRACTICAL 4

[A] AIM: Automate any process using basic recording.

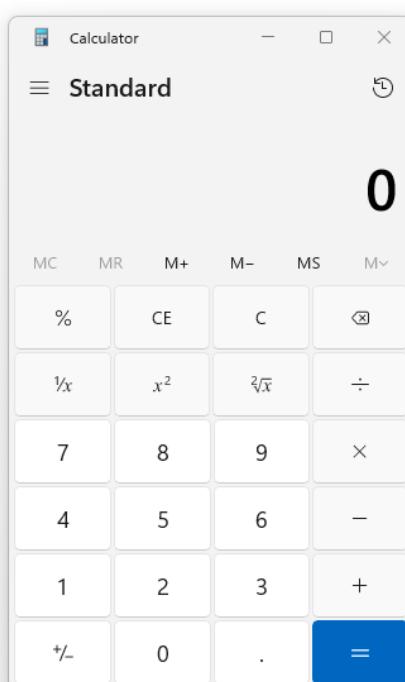
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



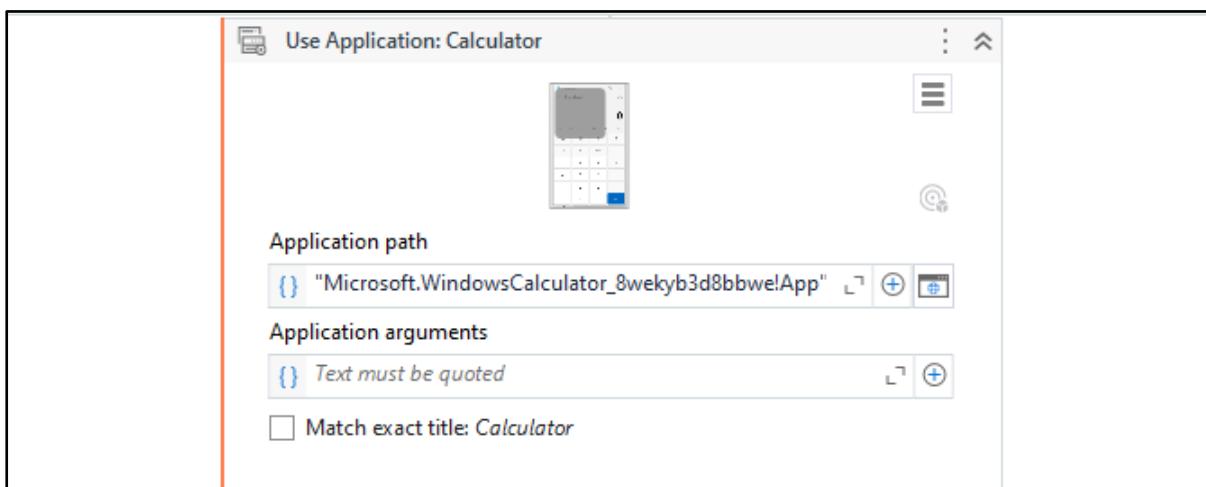
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Open Calculator.



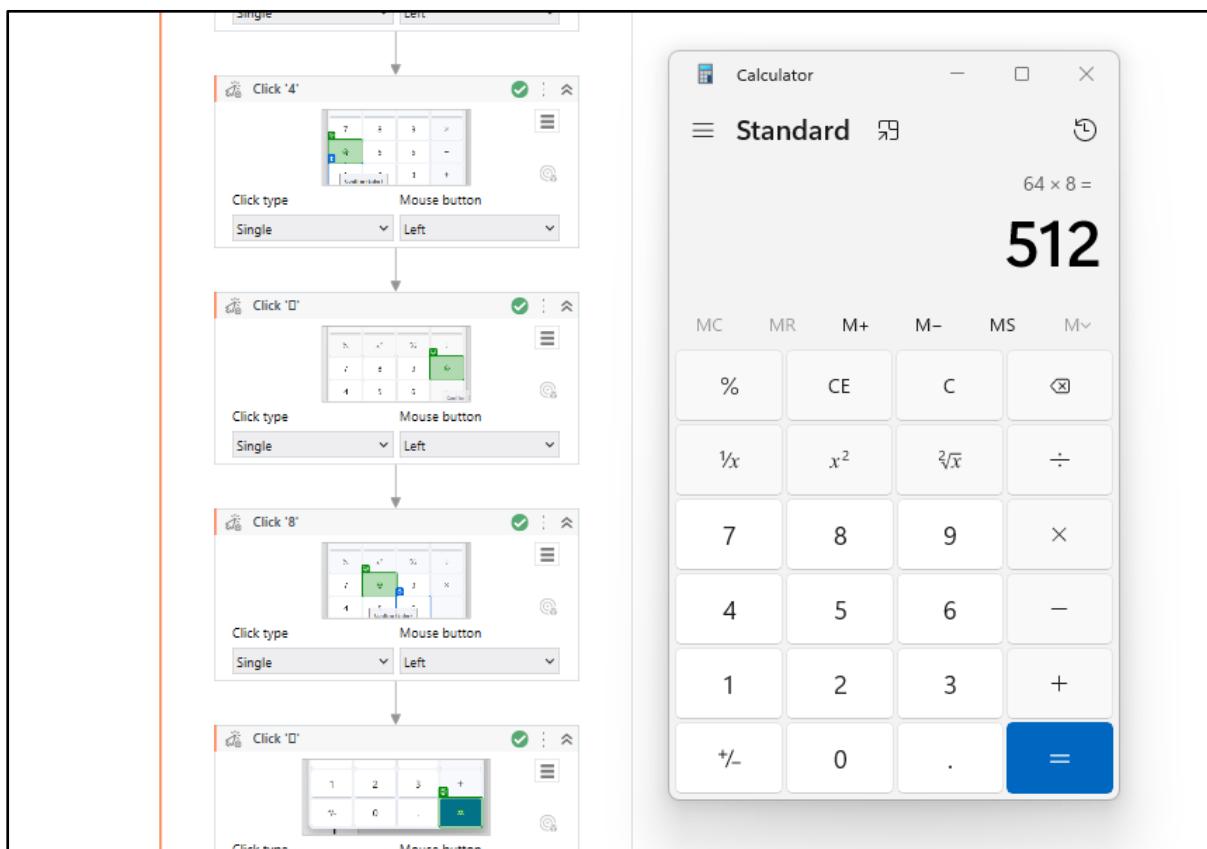
Step 4: Click on “App/ Web Recorder” Icon to record the following steps on the Calculator.



Step 5: Record the Performed Calculation. Save and Confirm to return back to UiPath Studio. This will create a Recorder Sequence in the workspace.



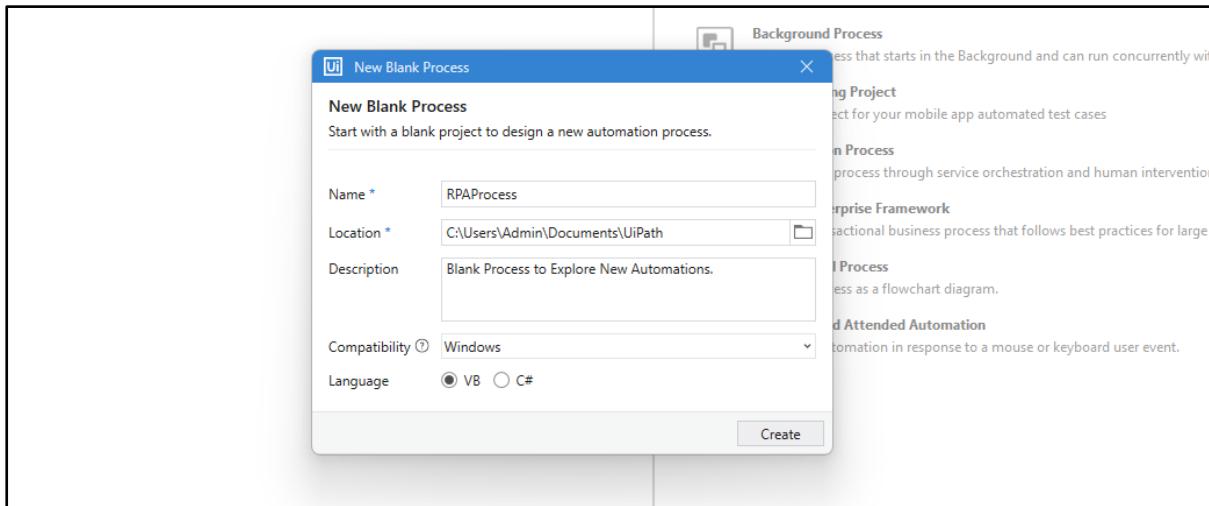
Step 6: Click the Run button and see the result.



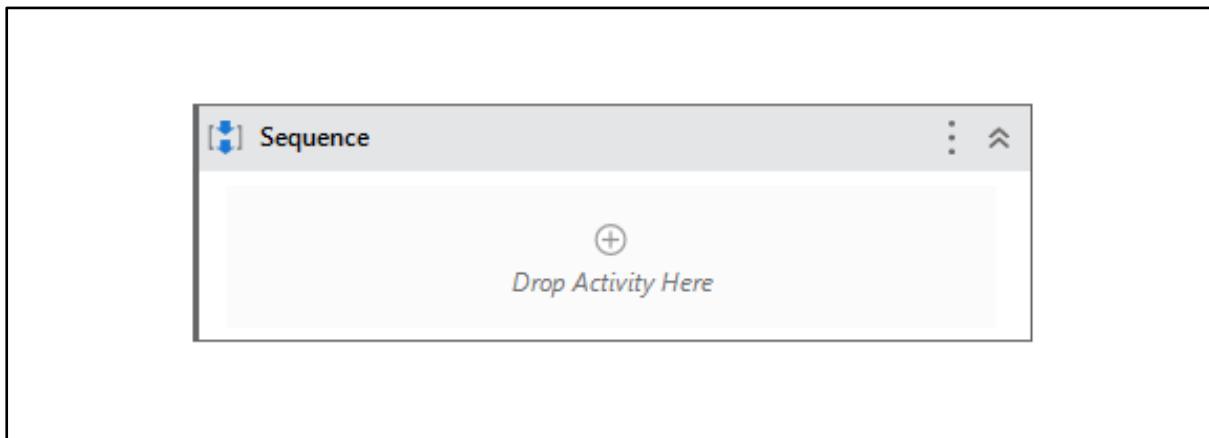
Conclusion: The practical to automate any process using basic recording was performed successfully.

[B] AIM: Automate any process using desktop recording.

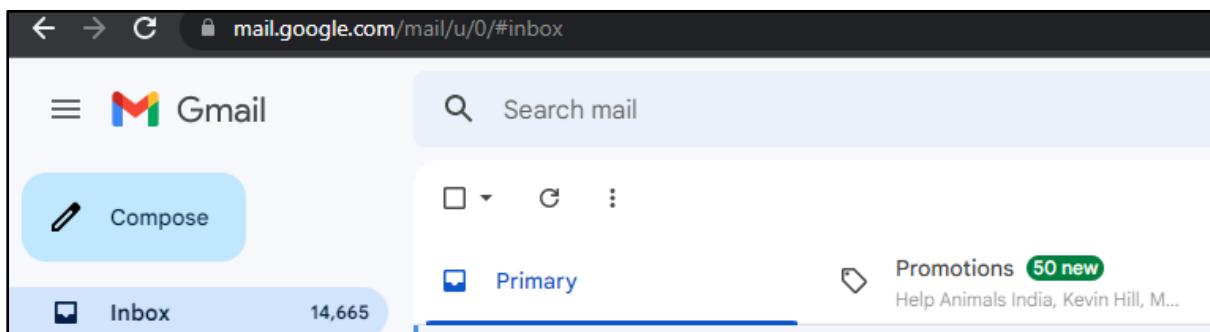
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



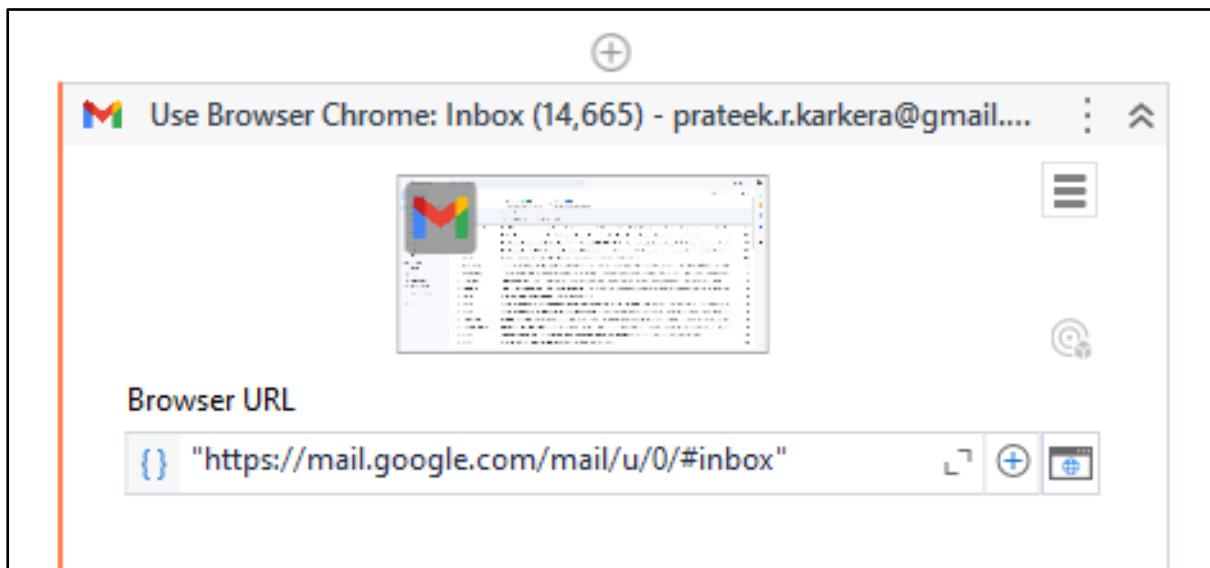
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



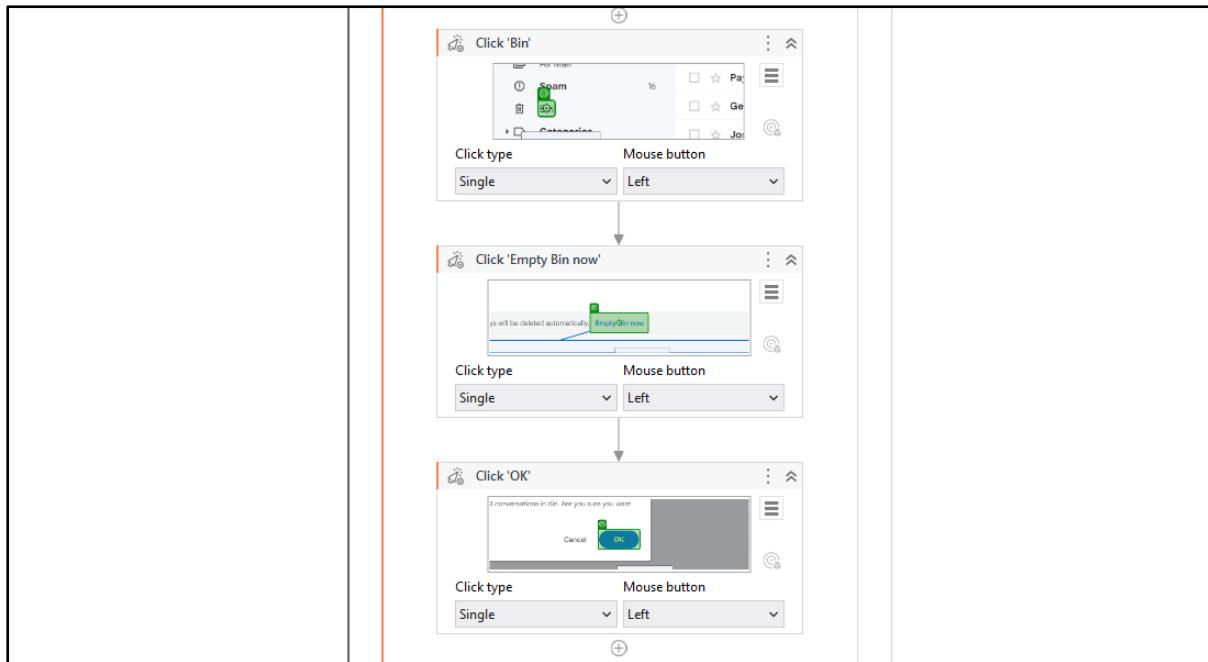
Step 3: Open Gmail.



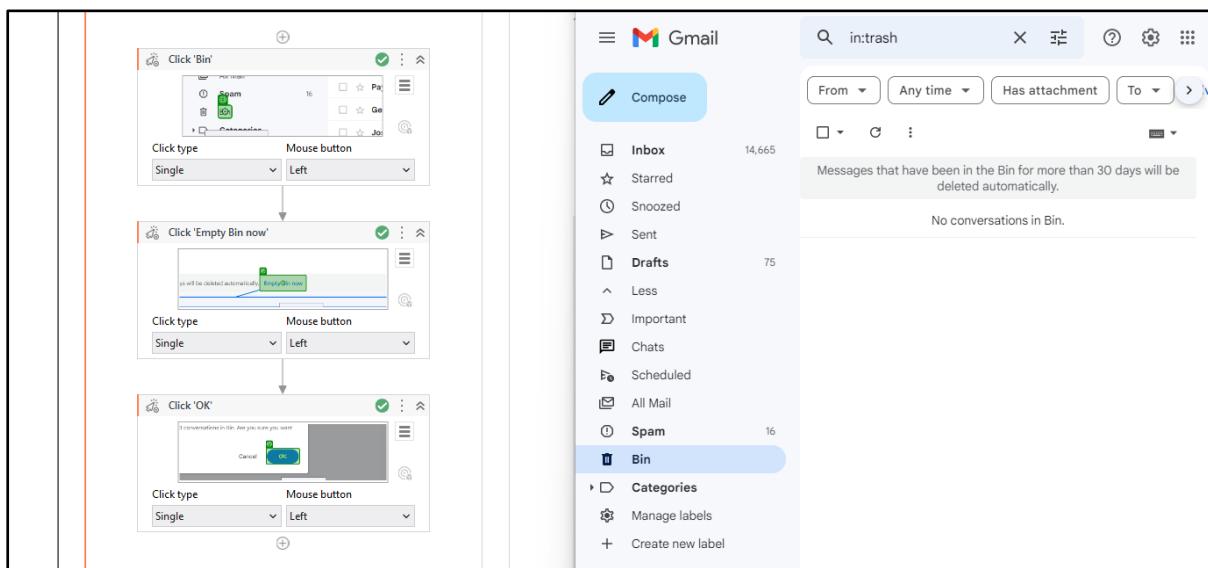
Step 4: Click on “App/ Web Recorder” Icon to record the following steps using the “Use Browser” Activity.



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.



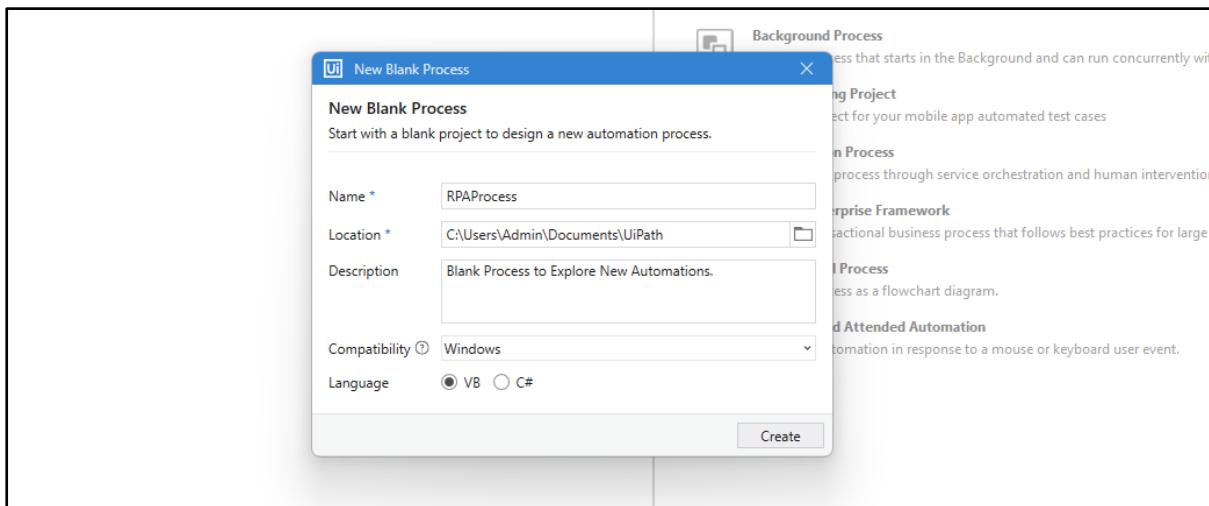
Step 6: Click the Run button and see the result.



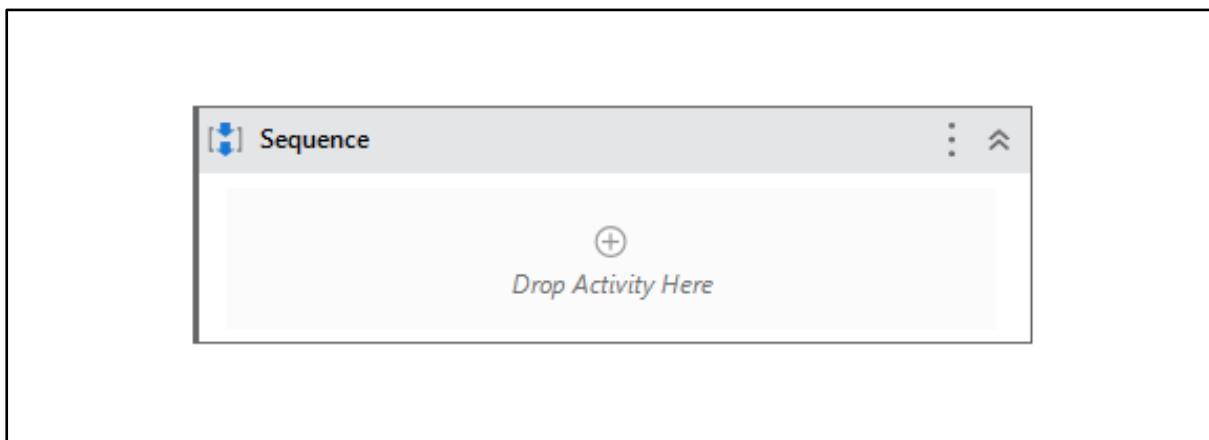
Conclusion: The practical to automate any process using desktop recording was performed successfully.

[C] AIM: Automate any process using web recording.

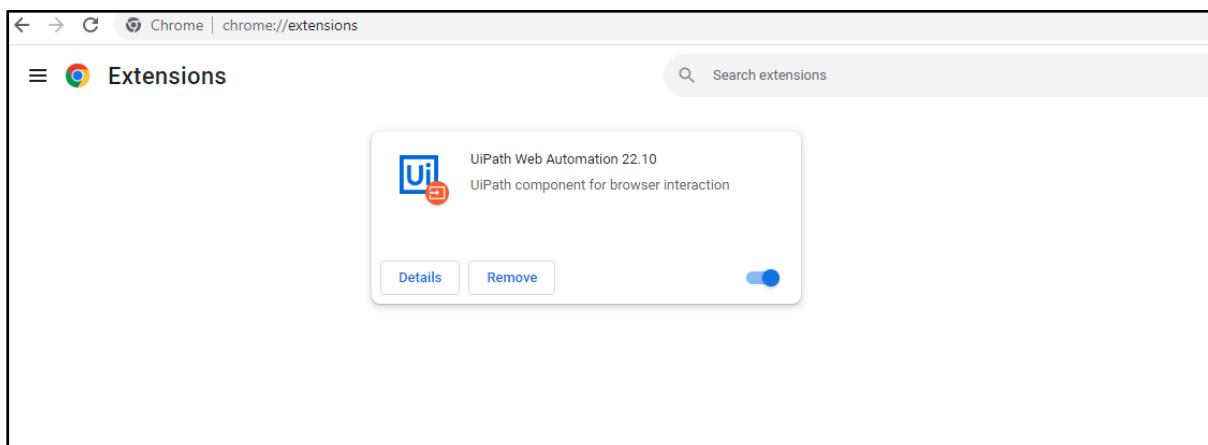
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



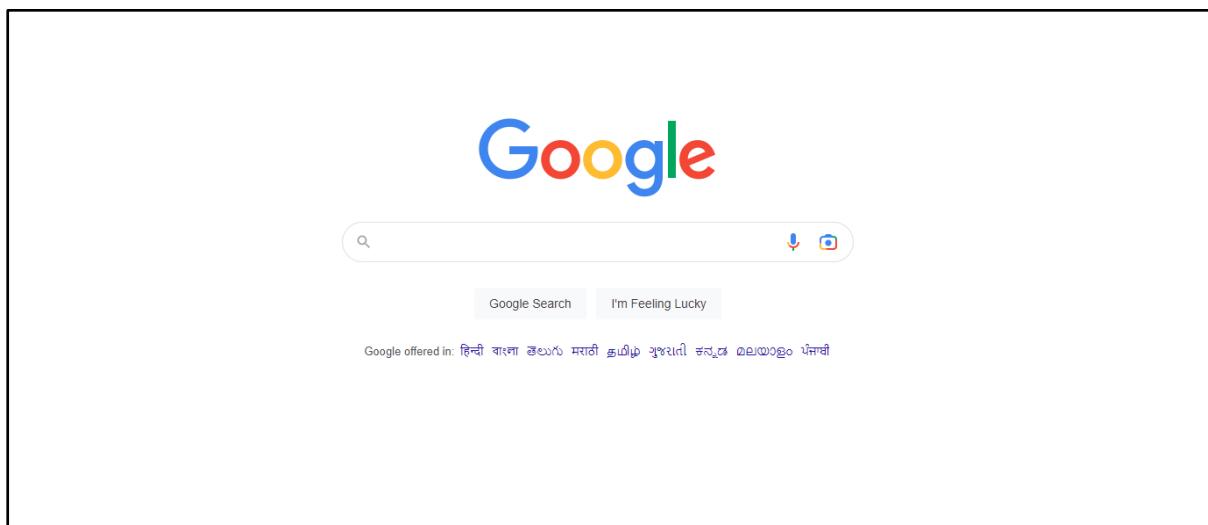
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Install the UiPath Web Automation Extension on your browser.



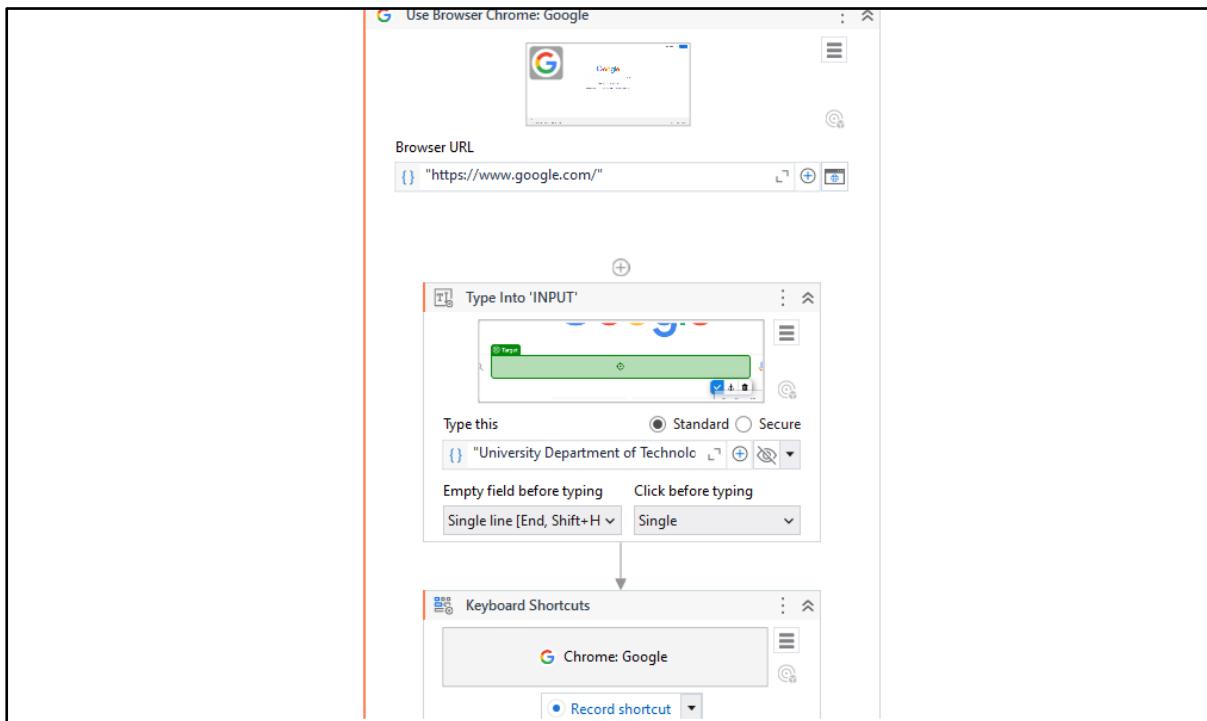
Step 3: Open www.google.com.



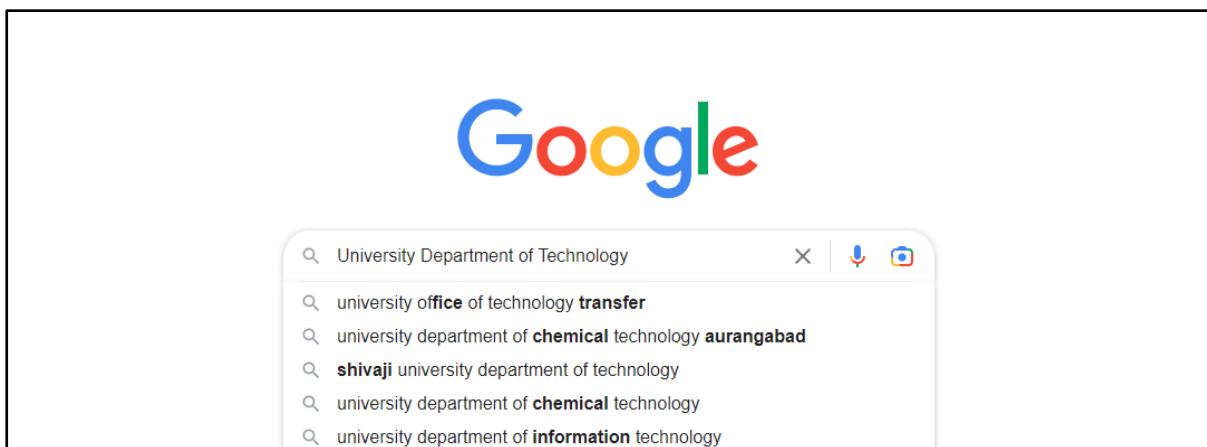
Step 3: Click on “App/ Web Recorder” Icon. This will record the following step.

Step 4: Choose the “Type into” action to type some text into www.google.com.

Step 5: 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.



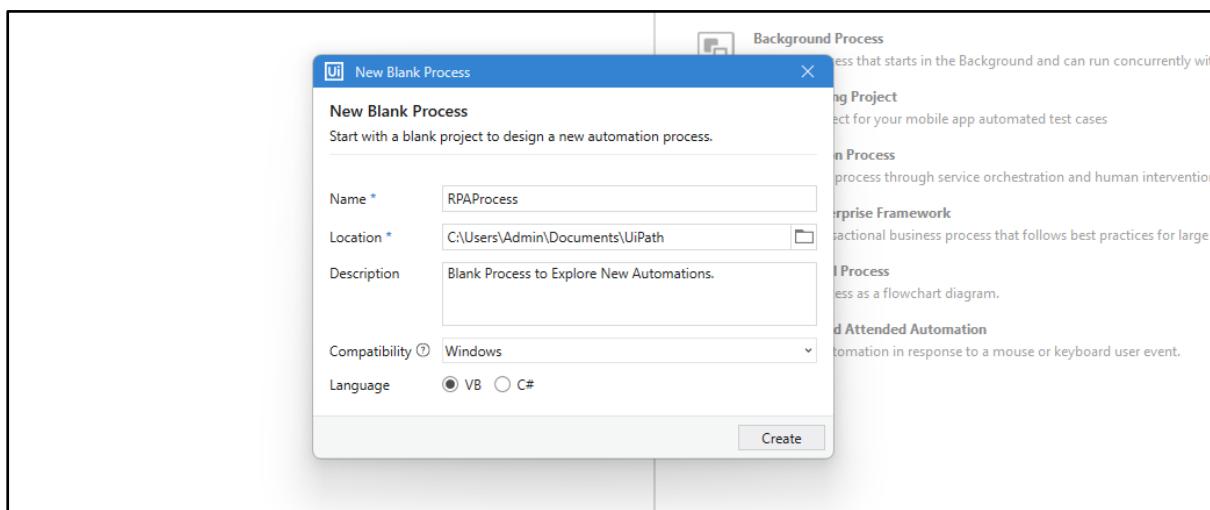
The screenshot shows a Google search results page. The search query is "University Department of Technology". The results are filtered for "Koliverry Village, Santacruz East, Mumbai". The top result is for "University Department Of Information Technology", which has a rating of 4.7 stars from 14 reviews. It is located at 3VF5+68X, Santacruz – Chembur Link Rd. The listing includes a quote: "Exilent place of genarete new information Technology and Reform". There are buttons for "Rating" and "Hours". A "Directions" button and a blue circular icon are also present.

Conclusion: The practical to automate any process using web recording was performed successfully.

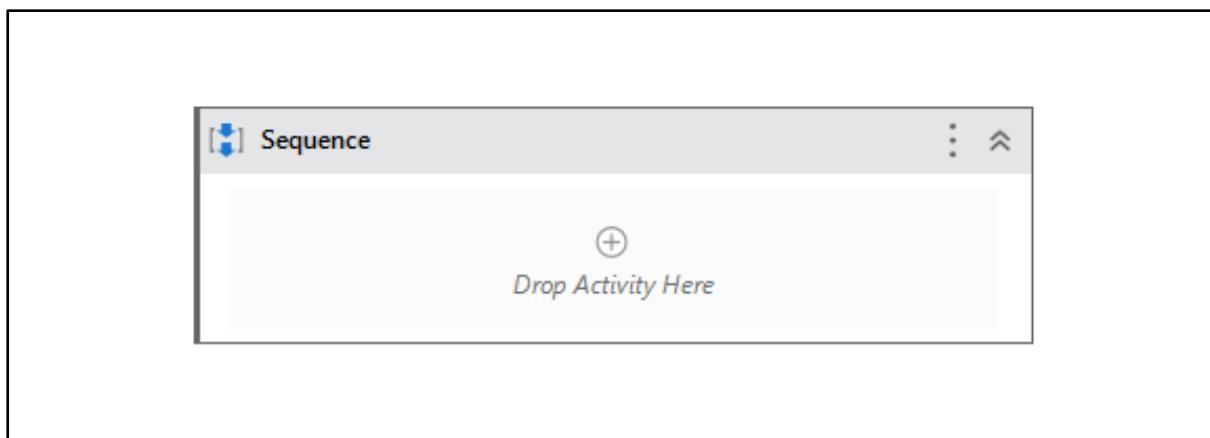
PRACTICAL 5

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" are counted and the result is displayed.

Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Create a count variable and set count variable as count = 0. Create an array variable. Set the Datatype as array of String datatype and specify the array elements.

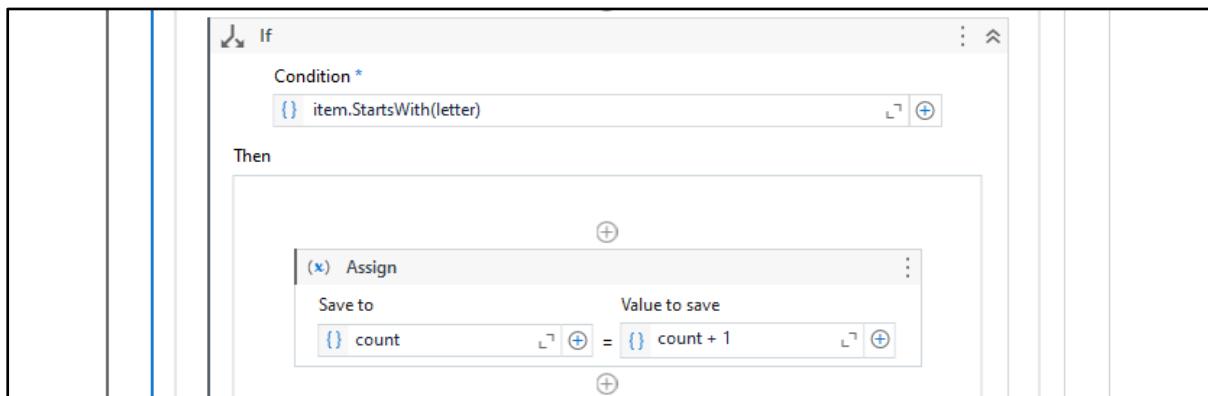
Name	Variable type	Scope	Default
count	Int32	Sequence	0
arr	String[]	Sequence	{"apples", "bananas", "amaranths", "citrus", "almonds", "berries"}

Step 4: 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 for asking user input of the letter to search for. Create a variable and specify the variable in the Result property of the Input dialog box.

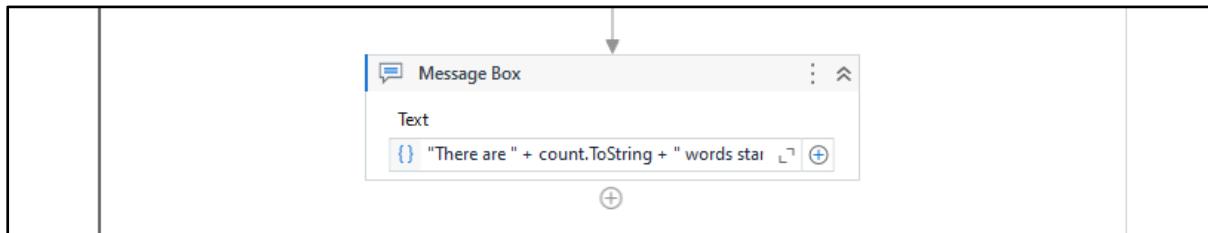
Name	Variable type	Scope	Default
count	Int32	Sequence	0
arr	String[]	Sequence	{"apples", "bananas", "amaranths", "citrus", "almonds", "berries"}
letter	String	Sequence	Enter a VB expression

Step 5: Search for “For Each” in the Search panel of the Activities panel. Drag and drop the For Each activity inside the Sequence. Set the iterator item and the list item as our array variable.

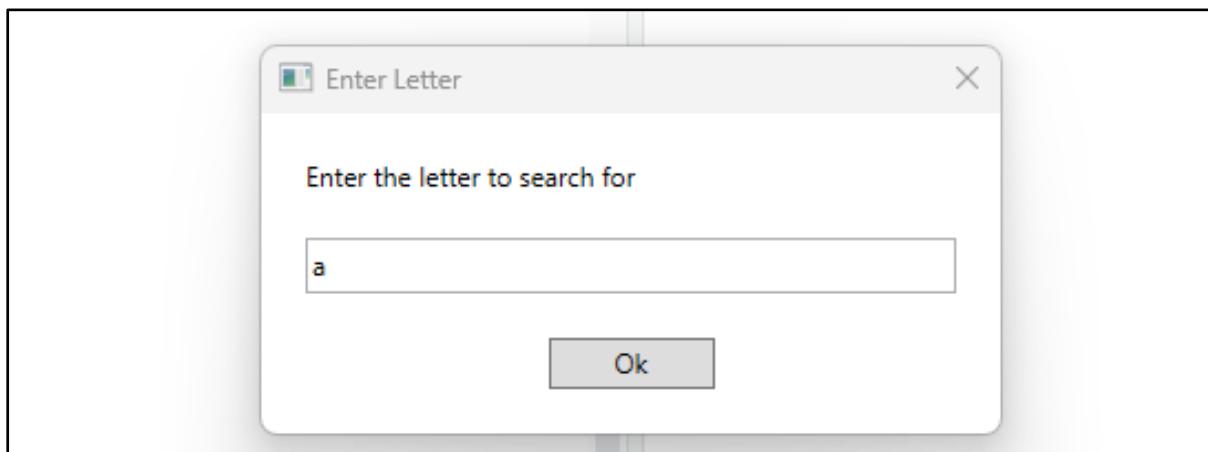
Step 6: Search for “If” in the Search panel of the Activities panel. Drag and drop the If activity inside the Sequence. In the condition part, enter the condition as “item.StartsWith(letter), i.e. “a”. Search for “Assign” Activity and drag it into the Then section of If Activity. Assign count as “count = count + 1”.

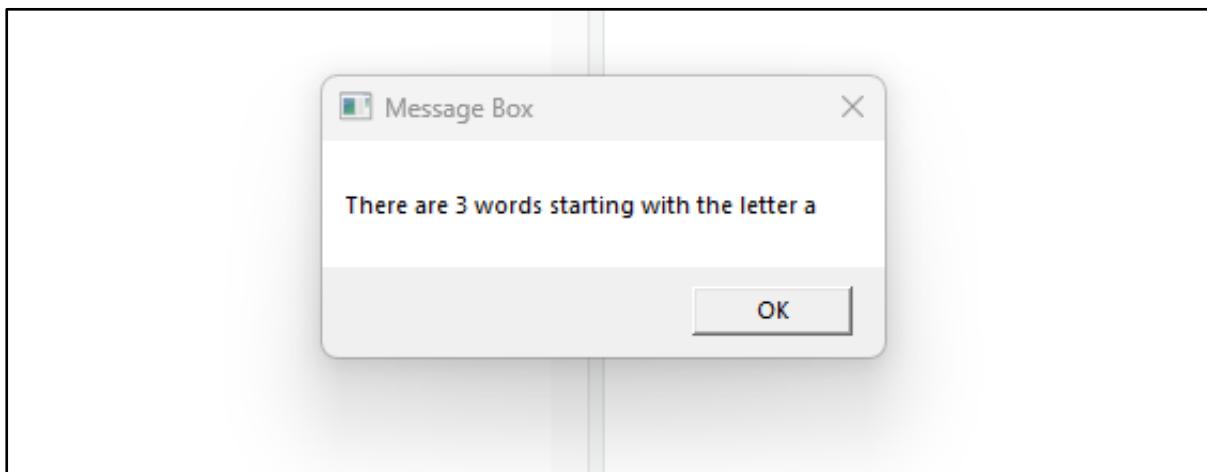


Step 7: Search for “Message Box” in the Search panel of the Activities panel. Drag the Message Box activity inside the sequence body and enter the output statement displaying the count of words starting with the letter “a”.



Step 8: Hit the Run button and see the result.





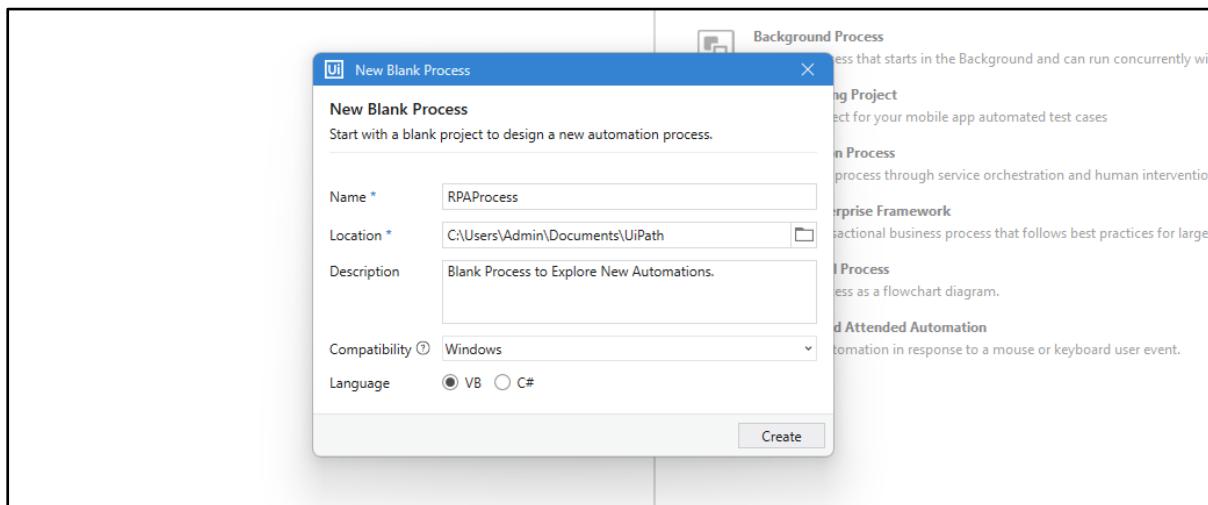
Conclusion: The practical to create an automation where the number of names starting with "a" is counted and the result is displayed was performed successfully.

PRACTICAL 6

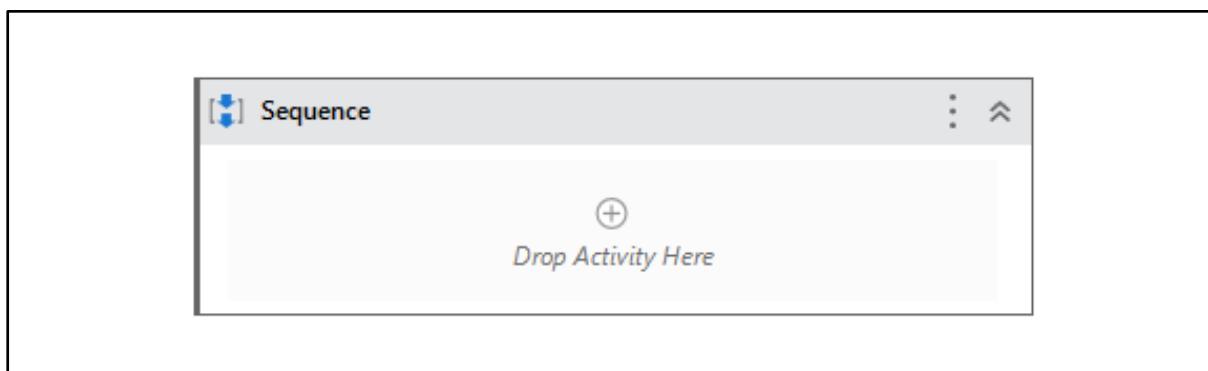
[A] AIM: Create an application automating the read, write and append operation on excel file.

I] Read Cell

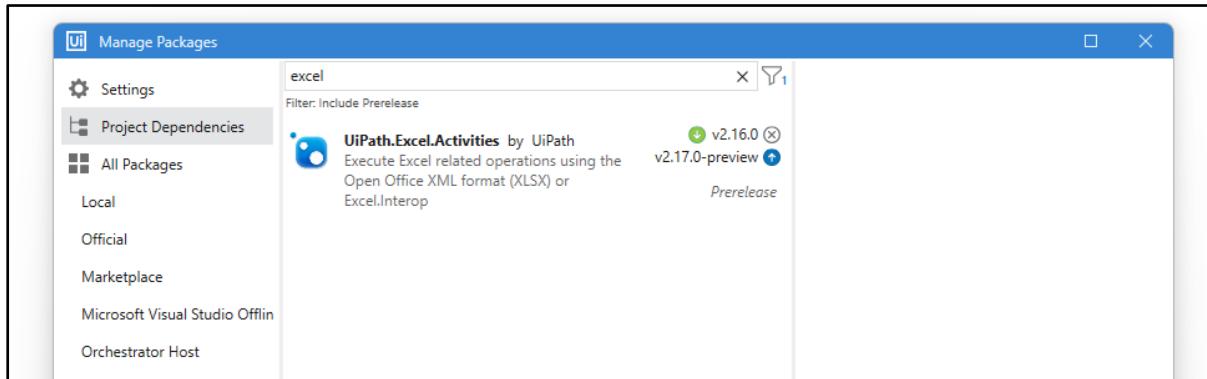
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



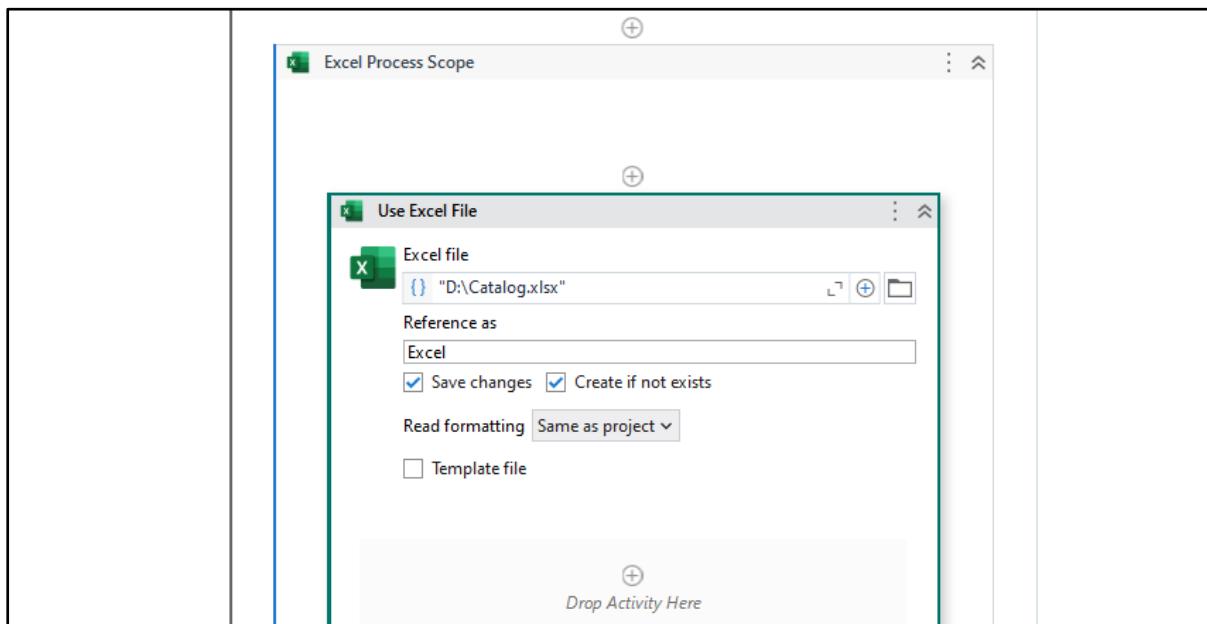
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



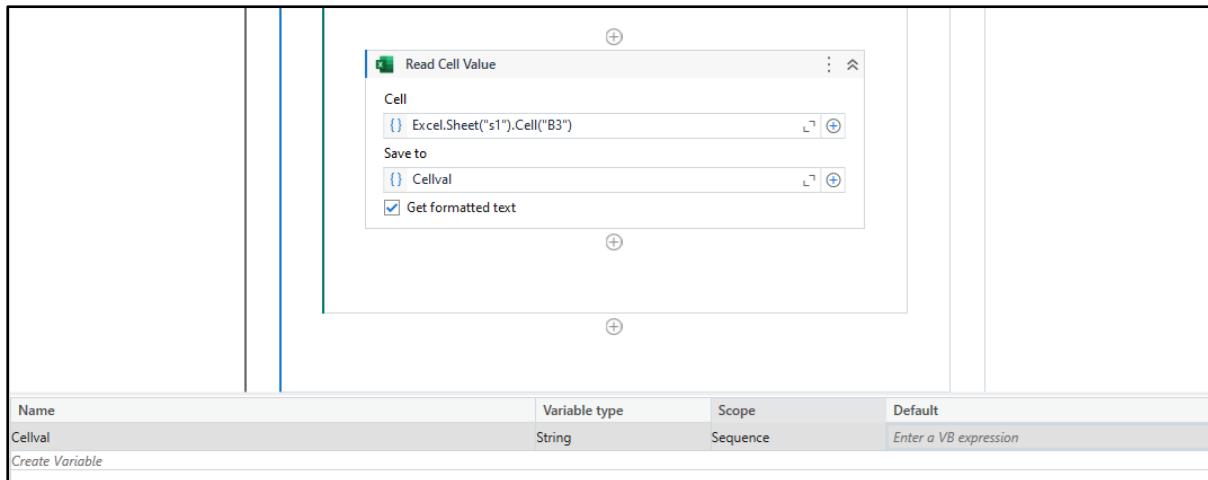
Step 3: Search for “Excel” in the Search panel of the Manage Packages Tab and install “UiPath.Excel.Activities”.



Step 4: Search for “Excel Process Scope” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Search for “Use Excel File” in the Search panel of the Activities panel. Drag and drop the activity inside the Excel Process Scope. Enter the Target File location and provide a Reference name.



Step 5: Search for “Read Cell Value” in the Search panel of the Activities panel. Drag and drop the activity inside the Body. Enter the Sheet name and Cell Location to Read from. Create an output variable to store the value of the cell.



Step 6: Search for “Message Box” in the Search panel of the Activities panel. Drag and drop Message Box activity inside the Body. Enter the output variable to display the cell value.



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

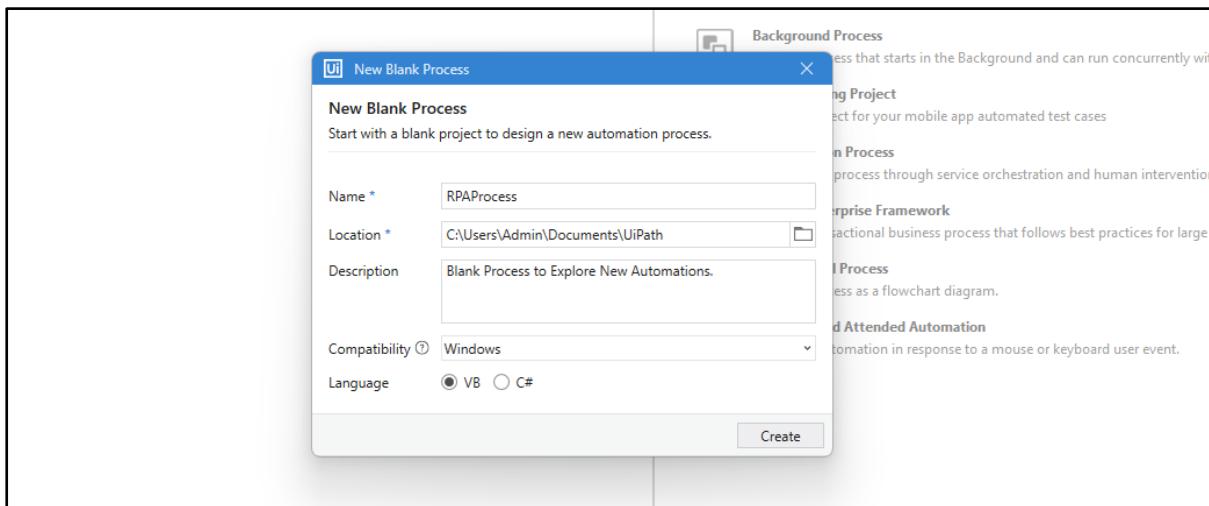
The image shows a Microsoft Excel spreadsheet and a message dialog box. The spreadsheet has a table with columns A through J. Row 1 contains "Sr. No." and "Fruits". Row 2 contains "1 apples". Row 3 contains "2 bananas". Rows 4 and 5 are empty. The formula bar at the top shows "B3". The message dialog box, titled "Message", displays the word "bananas" and has an "OK" button.

Sr. No.	Fruits
1	apples
2	bananas
3	
4	
5	

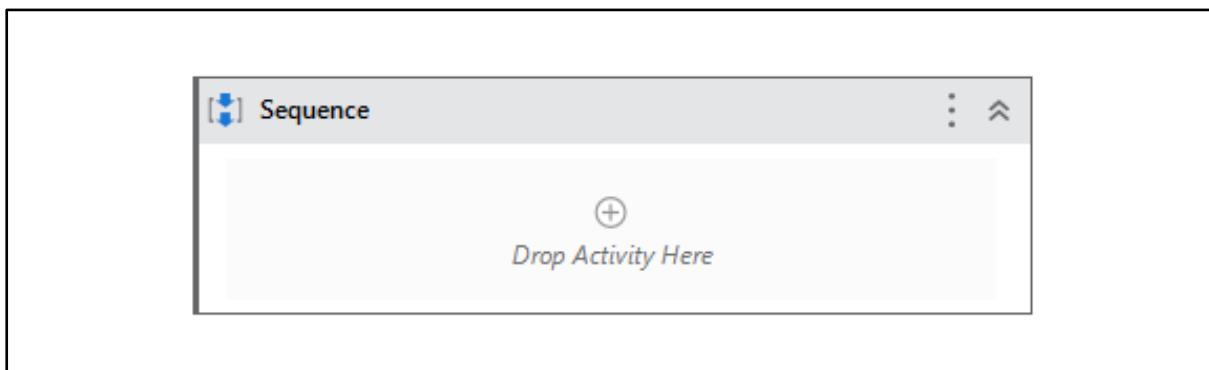
Message
bananas
OK

II] Write Cell

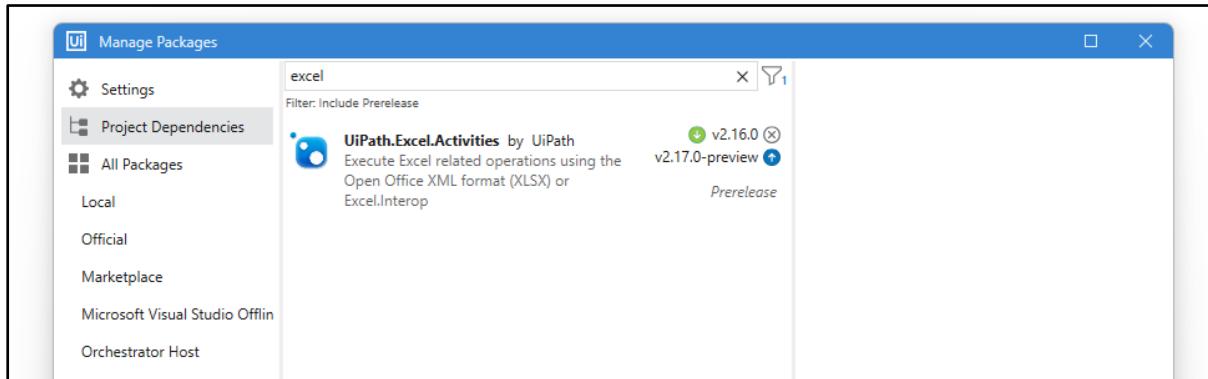
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



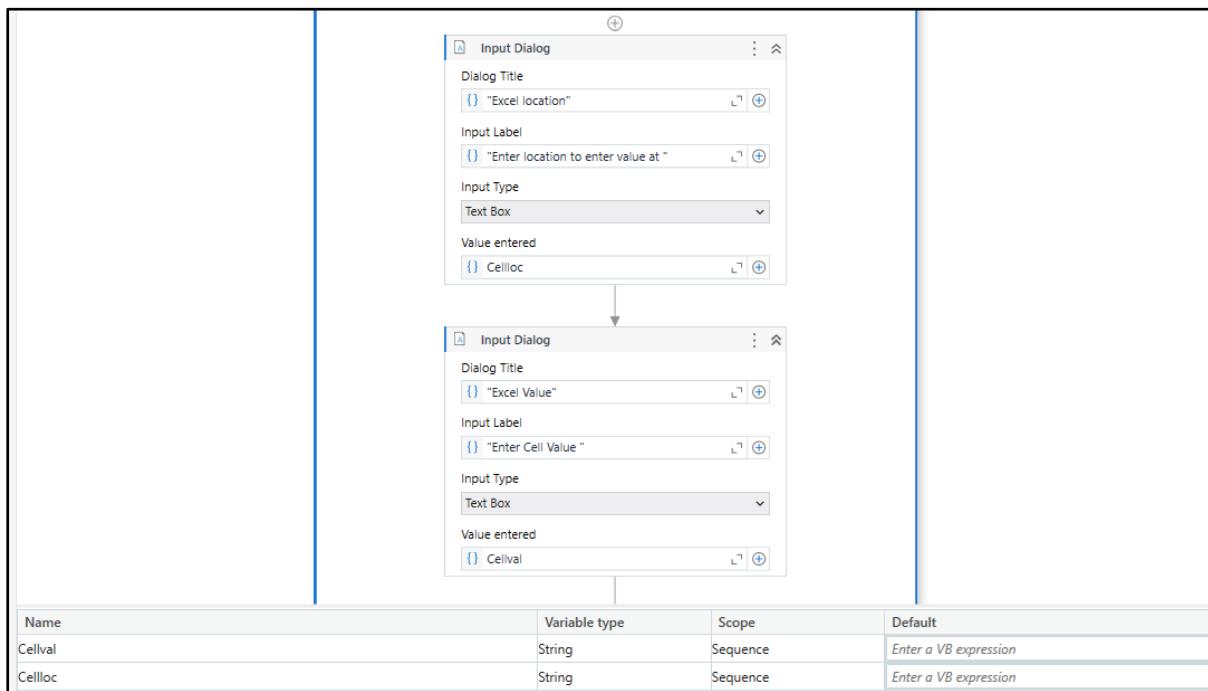
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



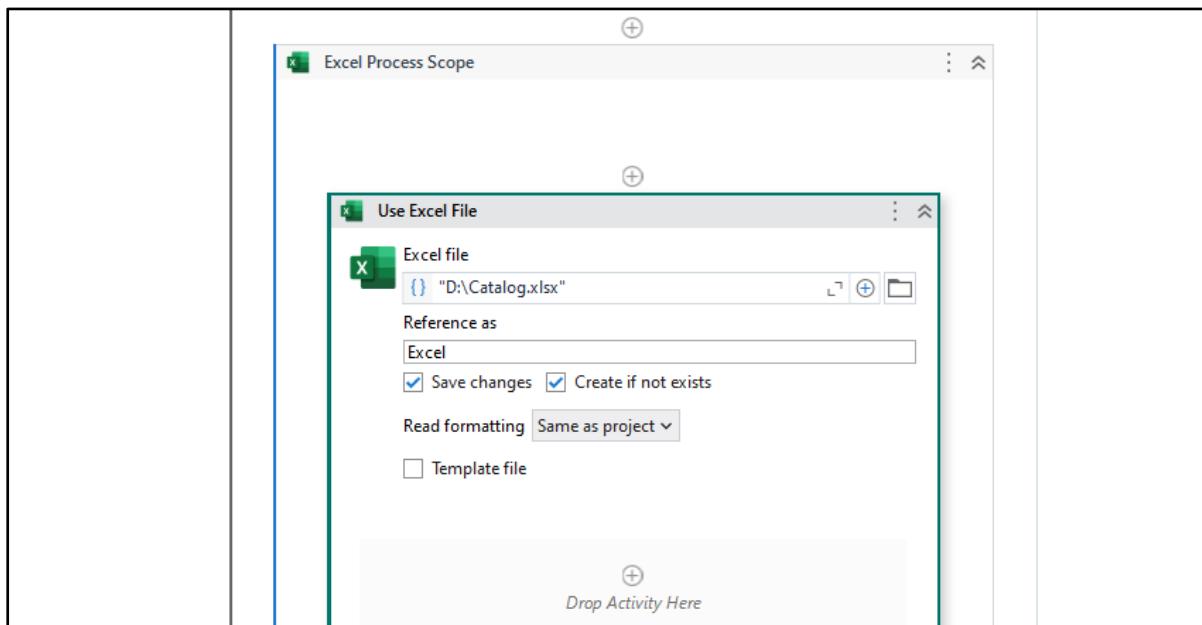
Step 3: Search for “Excel” in the Search panel of the Manage Packages Tab and install “UiPath.Excel.Activities”.



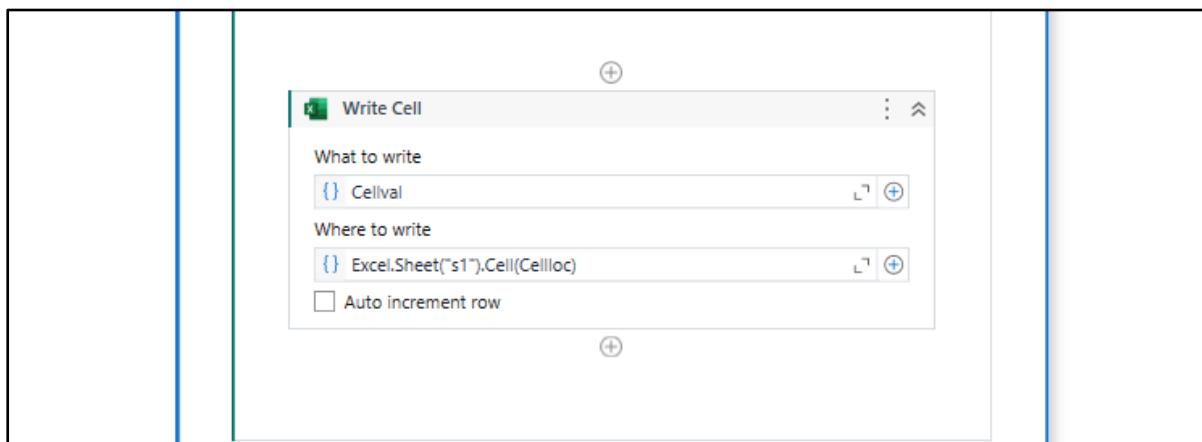
Step 4: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop two Input dialog activities inside the Sequence. Write the appropriate message on the Label of the Input dialogs. Create variables and specify the variables in the Result property of the Input dialog boxes.



Step 5: Search for “Excel Process Scope” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Search for “Use Excel File” in the Search panel of the Activities panel. Drag and drop the activity inside the Excel Process Scope. Enter the Target File location and provide a Reference name.

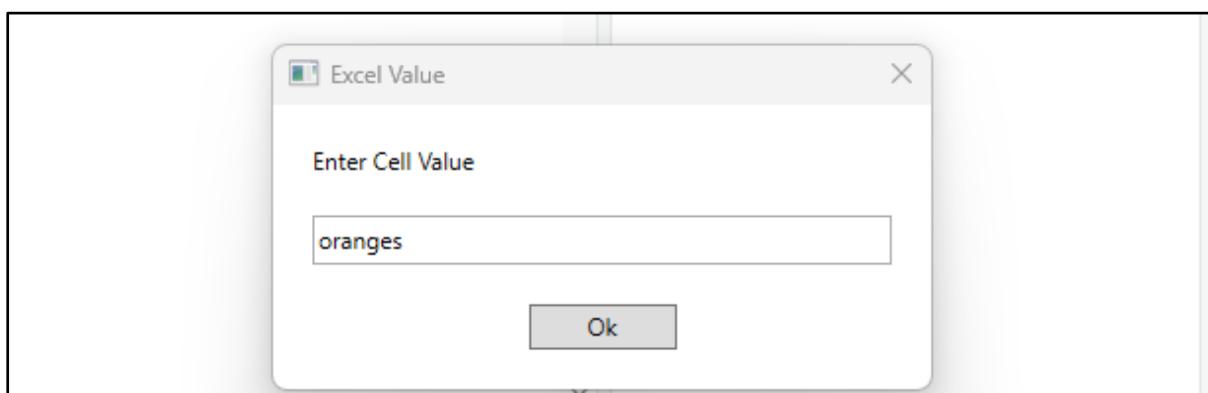
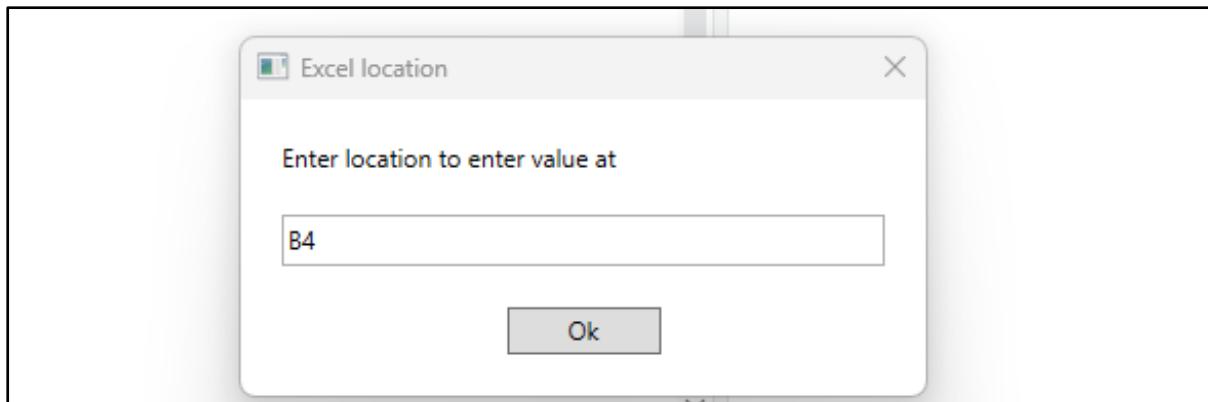


Step 6: Search for “Write Cell” in the Search panel of the Activities panel. Drag and drop the activity inside the Body. Enter the Sheet name and Cell Location to Write to. Enter the cell value variable.



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

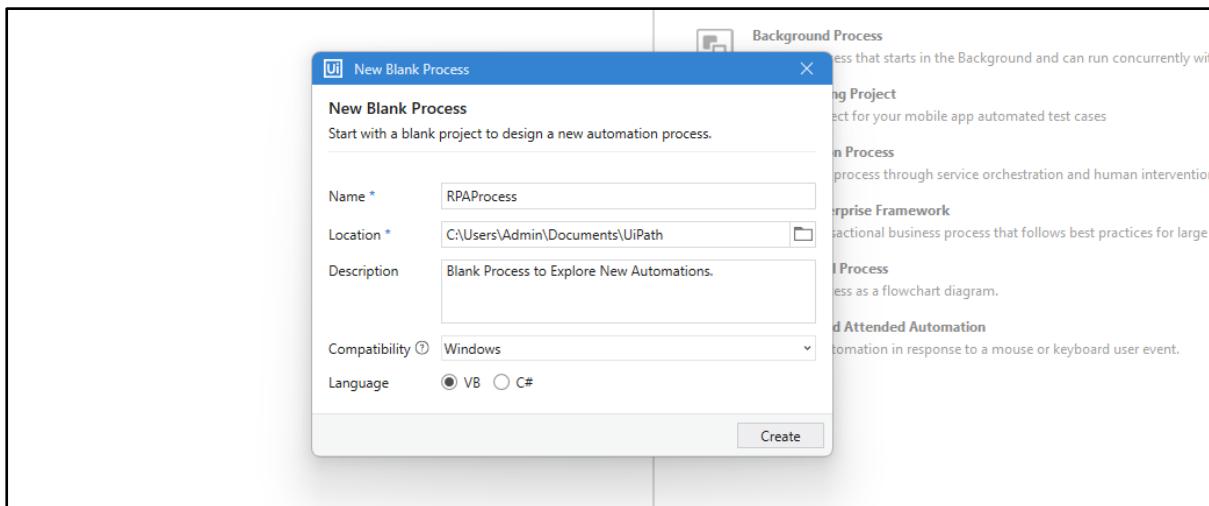
B3	A	B	C	D	E	F	G	H	I	J
1	Sr. No.	Fruits								
2		1 apples								
3		2 bananas								
4										
5										



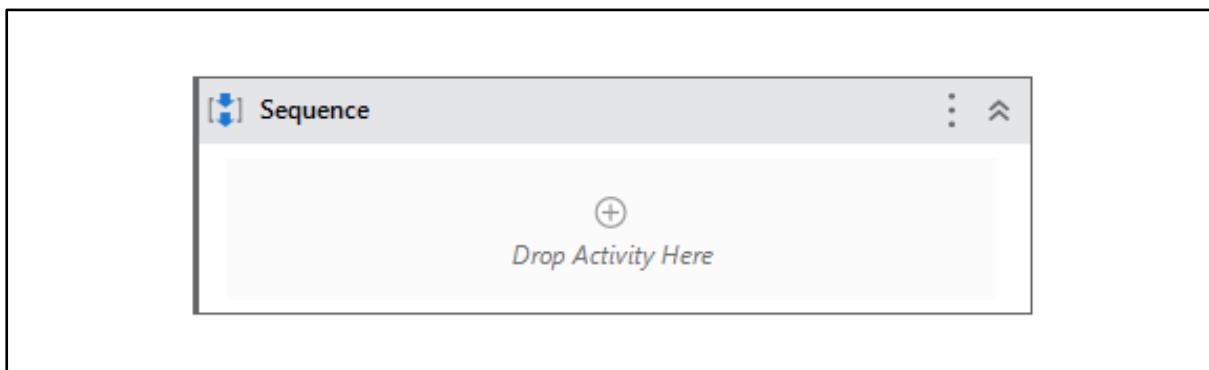
B4	A	B	C	D	E	F	G	H
1	Sr. No.	Fruits						
2		1 apples						
3		2 bananas						
4		oranges						
5								

III] Append Range

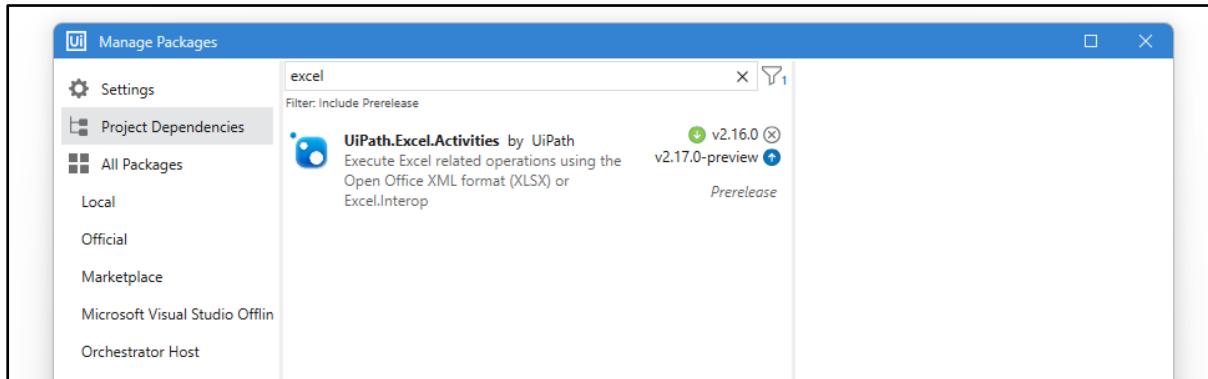
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



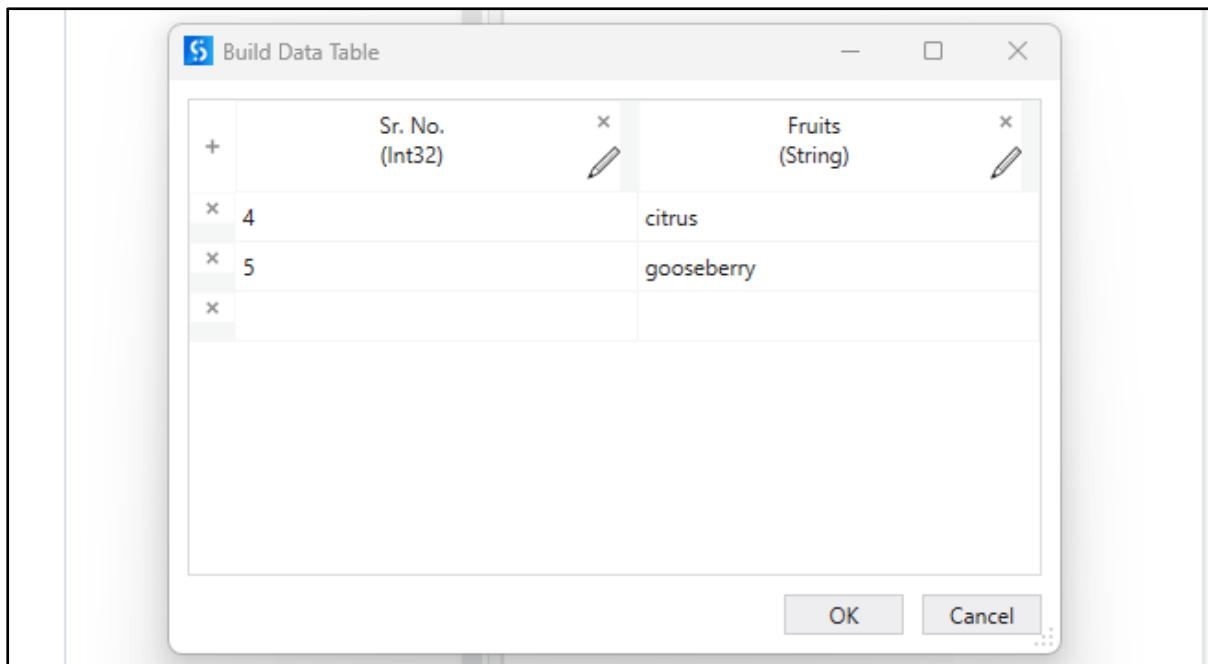
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



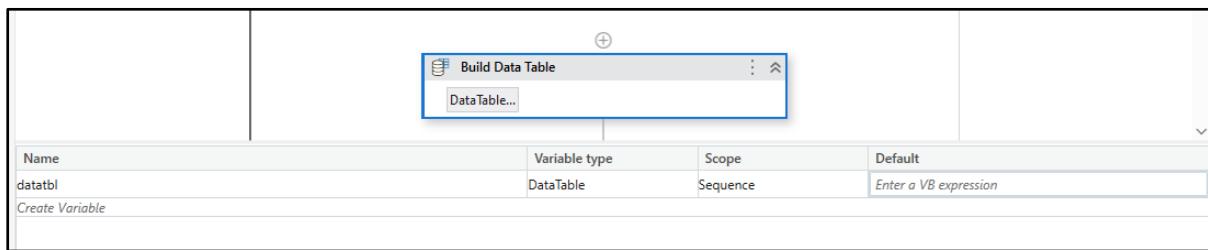
Step 3: Search for “Excel” in the Search panel of the Manage Packages Tab and install “UiPath.Excel.Acitivites”.



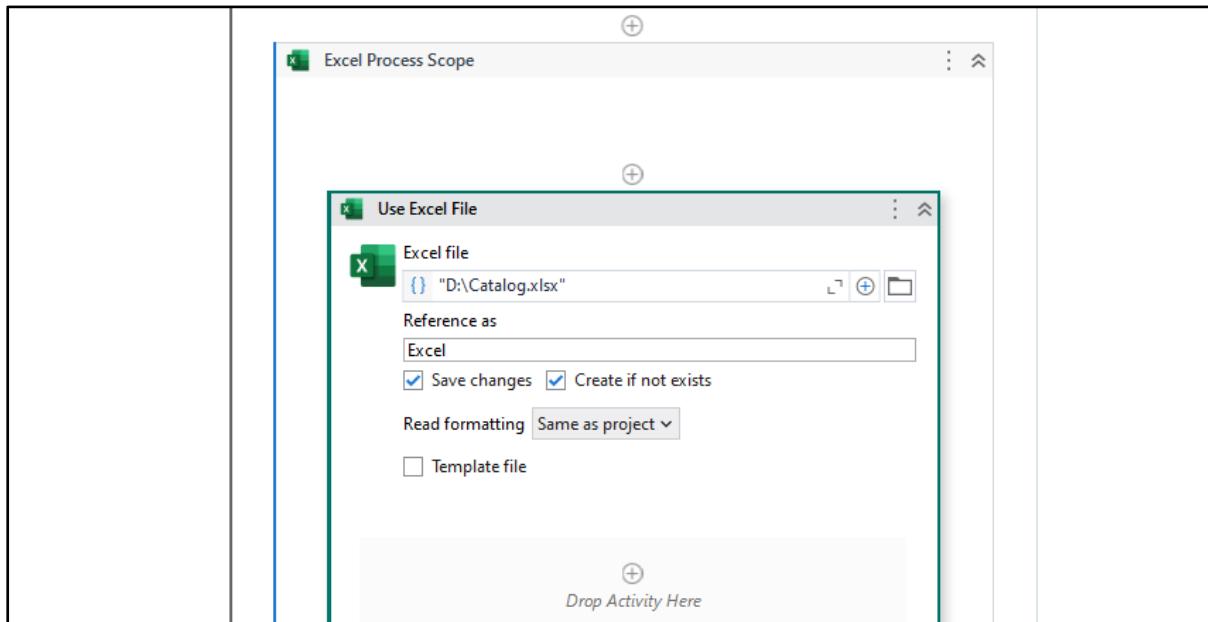
Step 4: Search for “Build Data Table” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Enter the values for the DataTable and click “OK”.



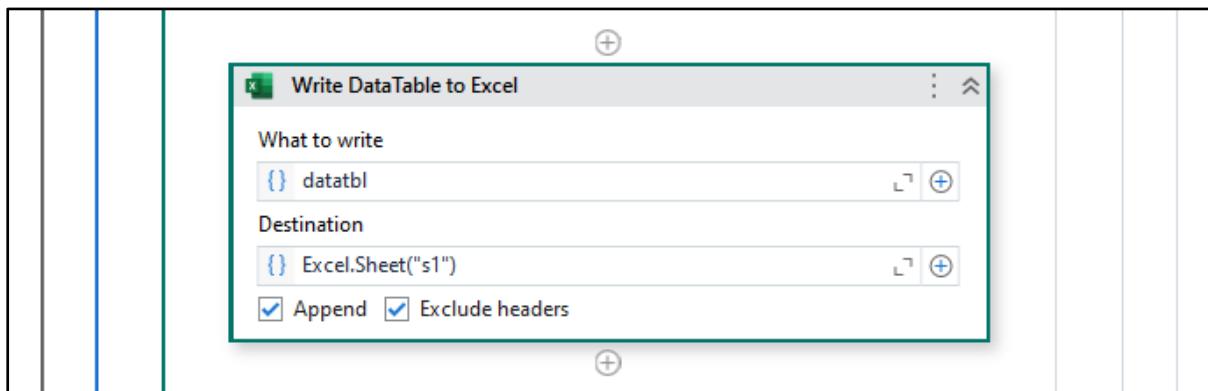
Step 5: Create a DataTable variable for Output.



Step 6: Search for “Excel Process Scope” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Search for “Use Excel File” in the Search panel of the Activities panel. Drag and drop the activity inside the Excel Process Scope. Enter the Target File location and provide a Reference name.



Step 7: Search for “Write DataTable to Excel” in the Search panel of the Activities panel. Drag and drop the activity inside the Body. Enter the Sheet name and Range to Write To. Enter the output variable of “DataTable” type to write the range. Check “Append” and “Exclude Headers”.



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

	A1	▼	:	X	✓	fsc	Sr. No.	
	A	B	C	D	E	F	G	
1	Sr. No.	Fruits						
2		1 apples						
3		2 bananas						
4		3 oranges						
5								

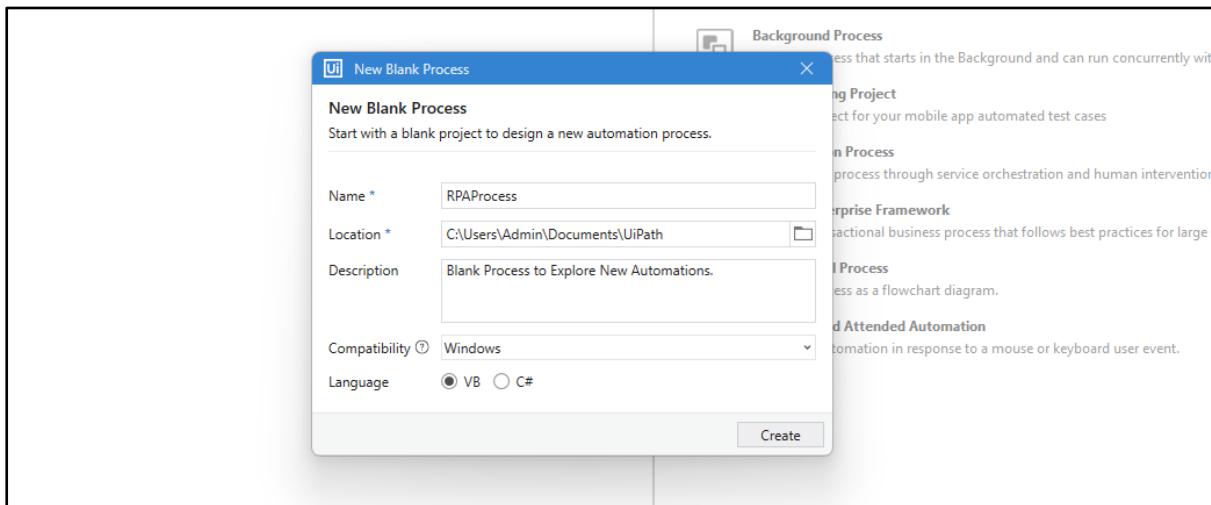
	A	B	C	D	E	F	G	H	I
1	Sr. No.	Fruits							
2		1 apples							
3		2 bananas							
4		3 oranges							
5		4 citrus							
6		5 gooseberry							

Conclusion: The practical to create an application automating the read, write and append operation on excel file was performed successfully.

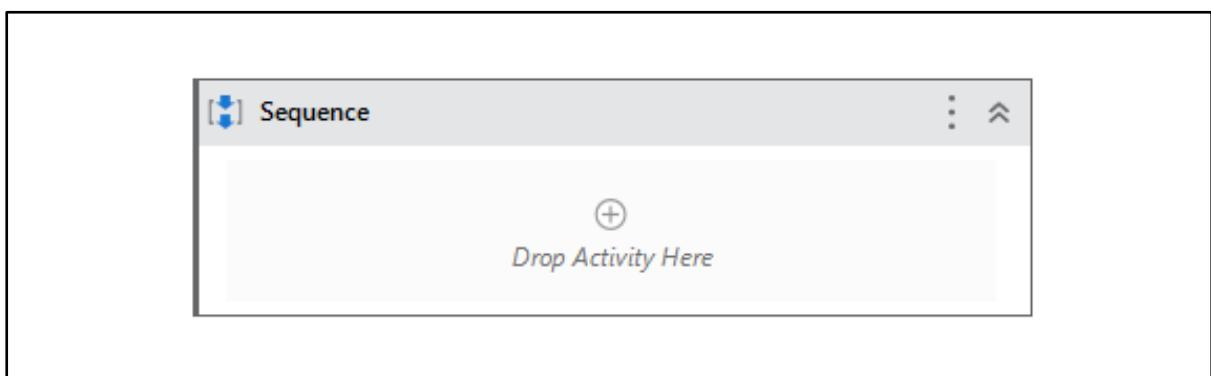
[B] Aim: Automate the process to extract data from an excel file into a data table and vice versa.

I] Read Range

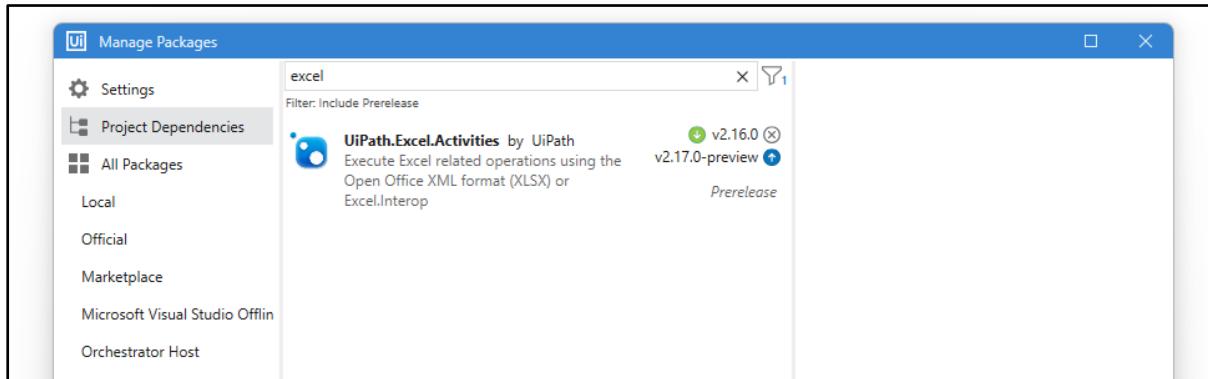
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



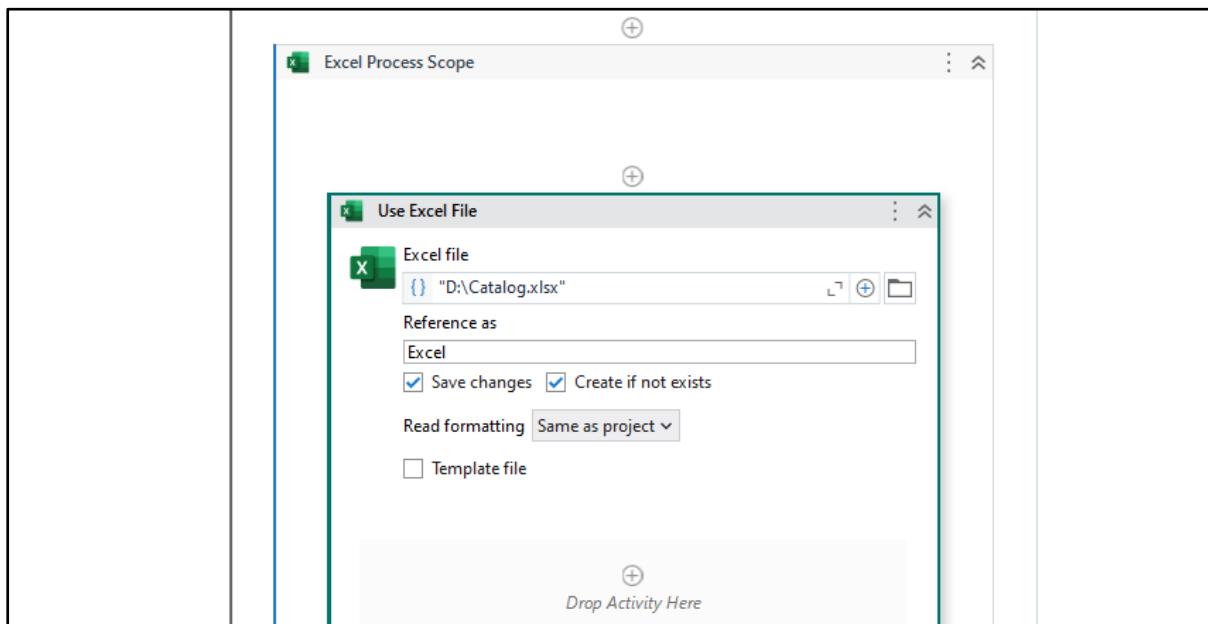
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



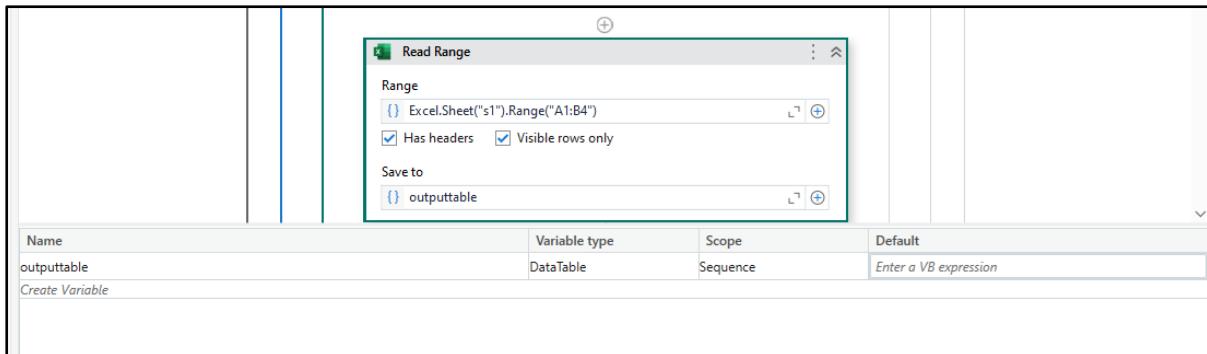
Step 3: Search for “Excel” in the Search panel of the Manage Packages Tab and install “UiPath.Excel.Activities”.



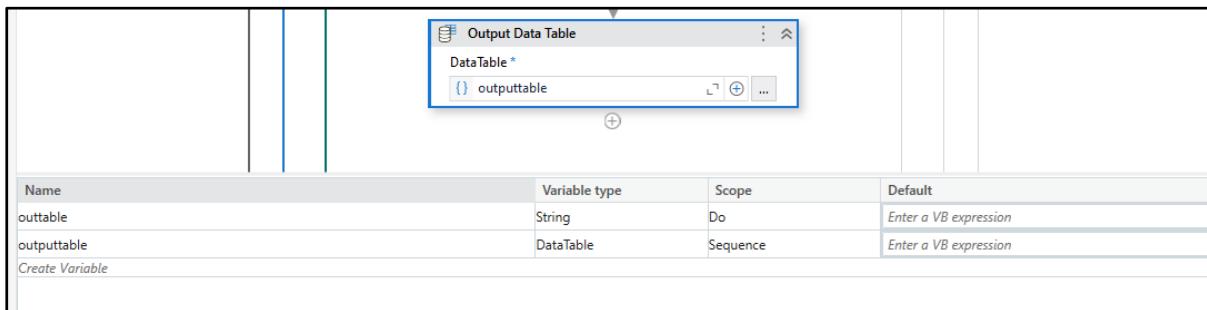
Step 4: Search for “Excel Process Scope” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Search for “Use Excel File” in the Search panel of the Activities panel. Drag and drop the activity inside the Excel Process Scope. Enter the Target File location and provide a Reference name.



Step 5: Search for “Read Range” in the Search panel of the Activities panel. Drag and drop the activity inside the Body. Enter the Sheet name and Range to Read from. Create an output variable of “DataTable” type to store the range.



Step 6: Search for “Output DataTable” in the Search panel of the Activities panel. Drag and drop the activity inside the Body to convert the DataTable Output. Enter the DataTable variable and create a new text variable to store the output.



Step 7: Search for “Message Box” in the Search panel of the Activities panel. Drag and drop Message Box activity inside the Body. Enter the output variable to display the cell values.



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

	4R x 2C	⋮	X	✓	f _x	Sr. No.		
	A	B	C	D	E	F	G	H
1	Sr. No.	Fruits						
2		1 apples						
3		2 bananas						
4		3 oranges						
5								

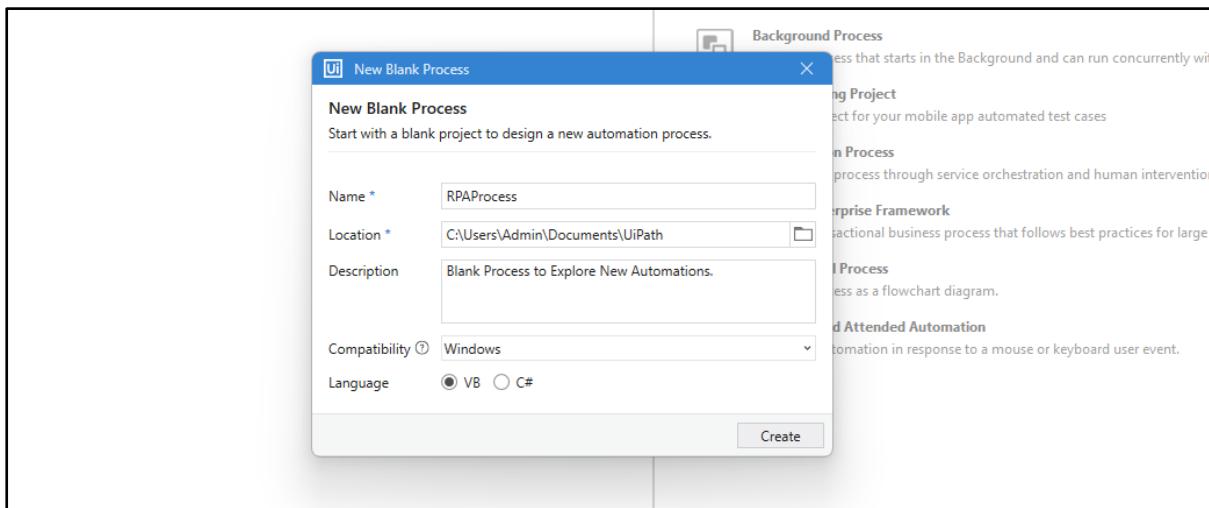
 Messag... X

Sr. No.,Fruits
1,apples
2,bananas
3,oranges

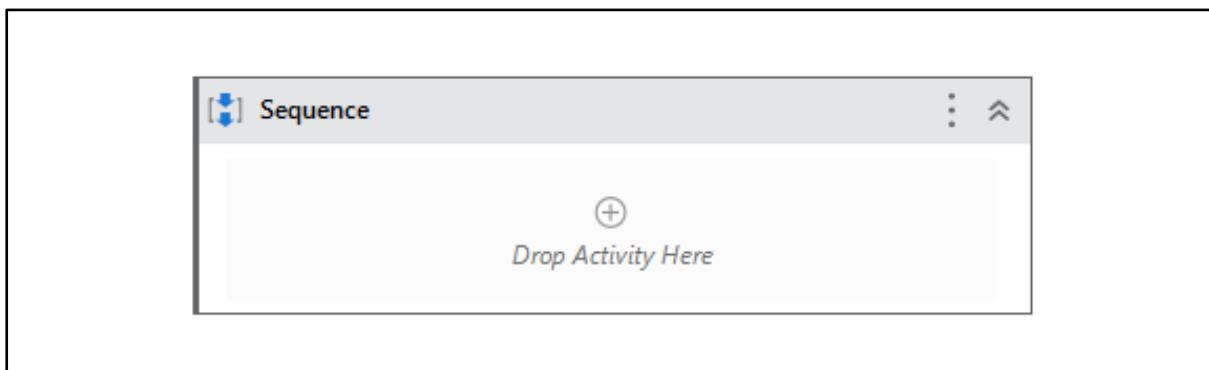
OK

II] Read Range using For Each

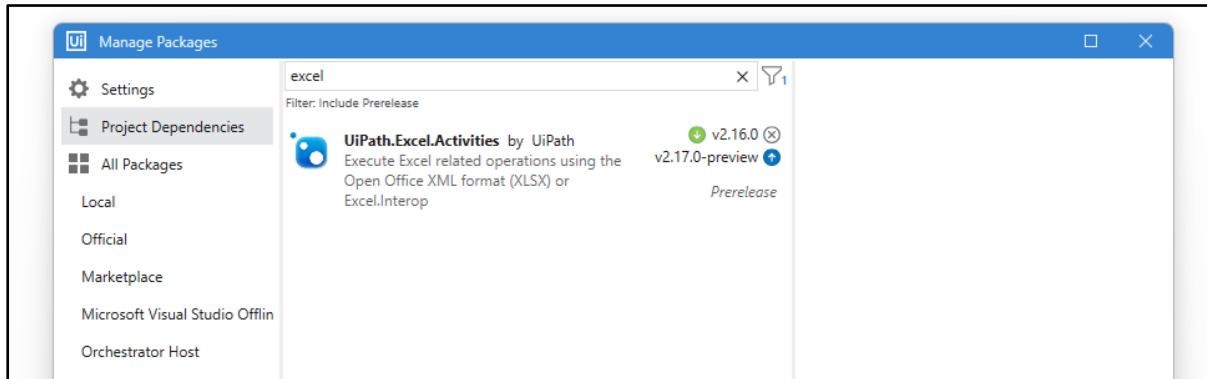
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



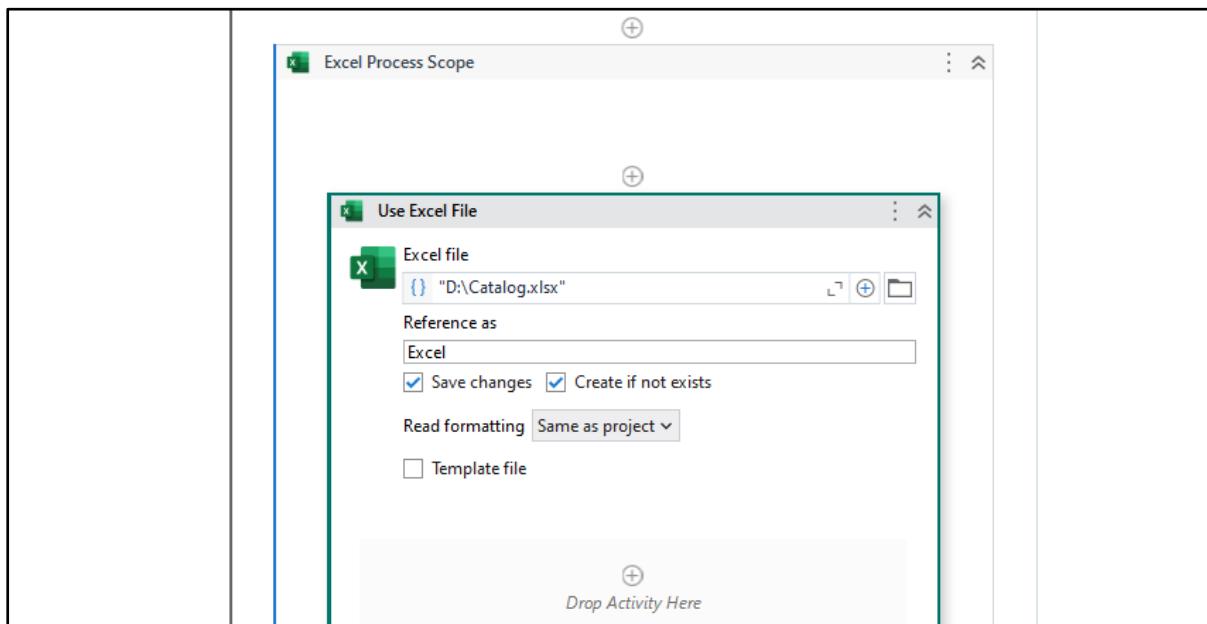
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



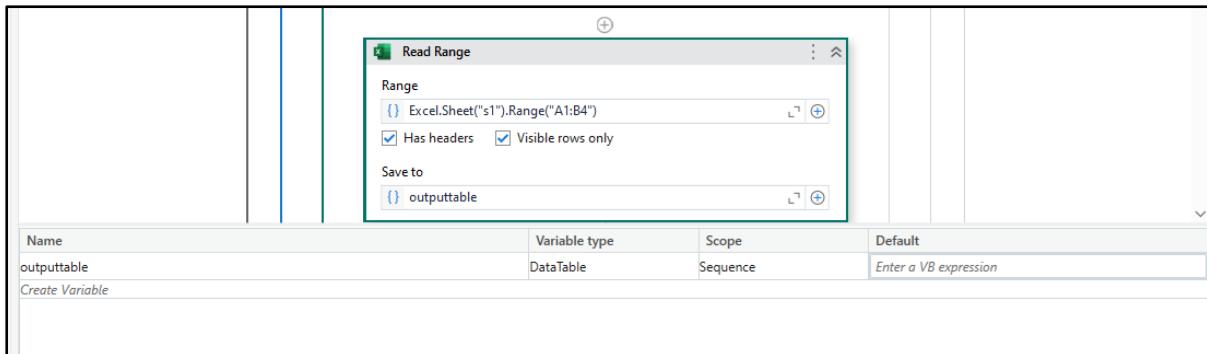
Step 3: Search for “Excel” in the Search panel of the Manage Packages Tab and install “UiPath.Excel.Activities”.



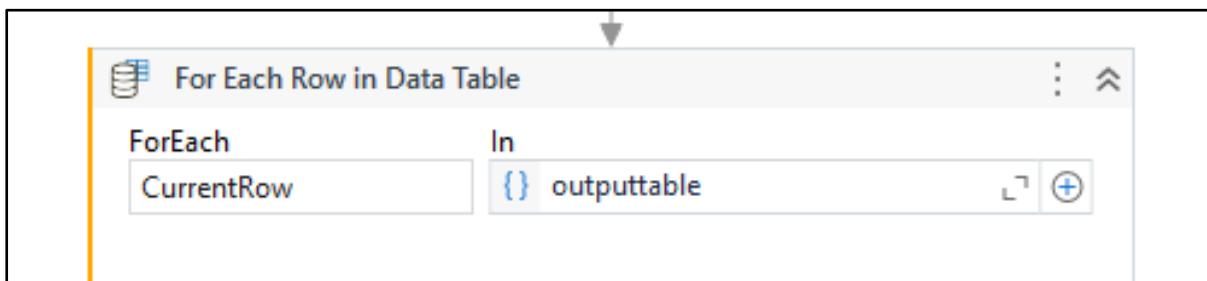
Step 4: Search for “Excel Process Scope” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Search for “Use Excel File” in the Search panel of the Activities panel. Drag and drop the activity inside the Excel Process Scope. Enter the Target File location and provide a Reference name.



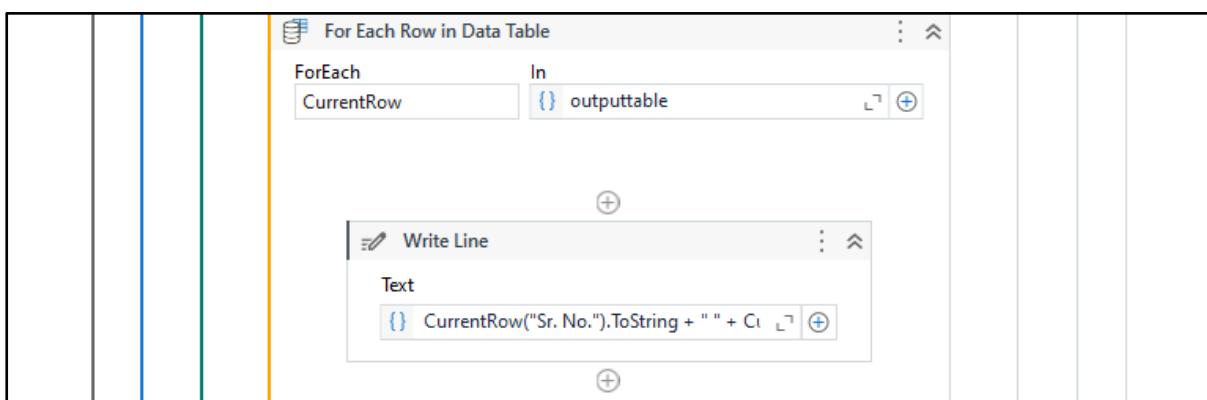
Step 5: Search for “Read Range” in the Search panel of the Activities panel. Drag and drop the activity inside the Body. Enter the Sheet name and Range to Read from. Create an output variable of “DataTable” type to store the range.



Step 6: Search for “For Each Row in Data Table” in the Search panel of the Activities panel. Drag and drop the activity inside the Body. Set “CurrentRow” as iterator and for our DataTable variable.



Step 7: Search for “WriteLine” in the Search panel of the Activities panel. Drag and drop activity inside the For Each Body. Enter the output to display the cell values.



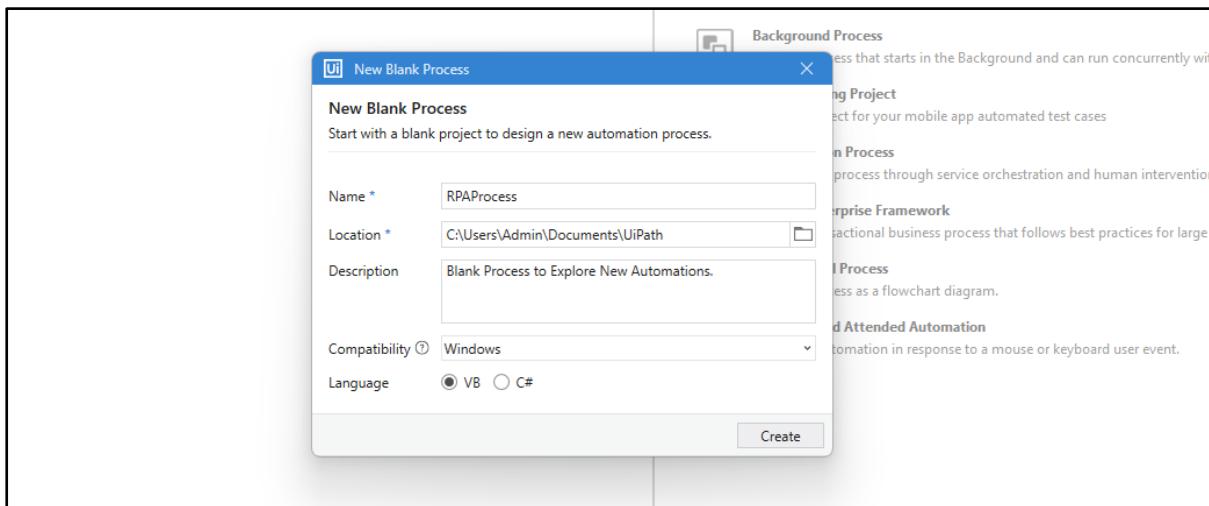
Step 8: Click the Run button and see the result.

4R x 2C						Sr. No.		
	A	B	C	D	E	F	G	H
1	Sr. No.	Fruits						
2		1 apples						
3		2 bananas						
4		3 oranges						
5								

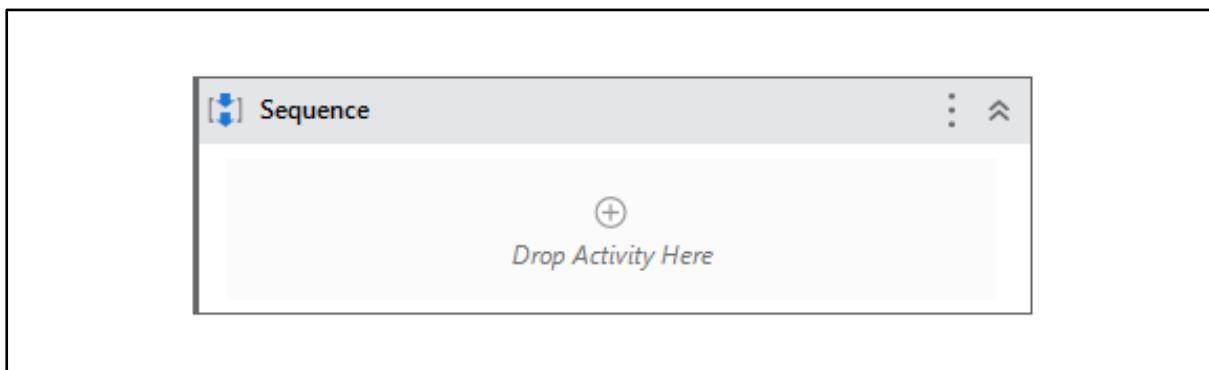
- ① Audit: Using Excel File: D:\Catalog.xlsx
- ② 1 apples
- ③ 2 bananas
- ④ 3 oranges
- ⑤ RPAProcess execution ended in: 00:00:01

III] Write Range

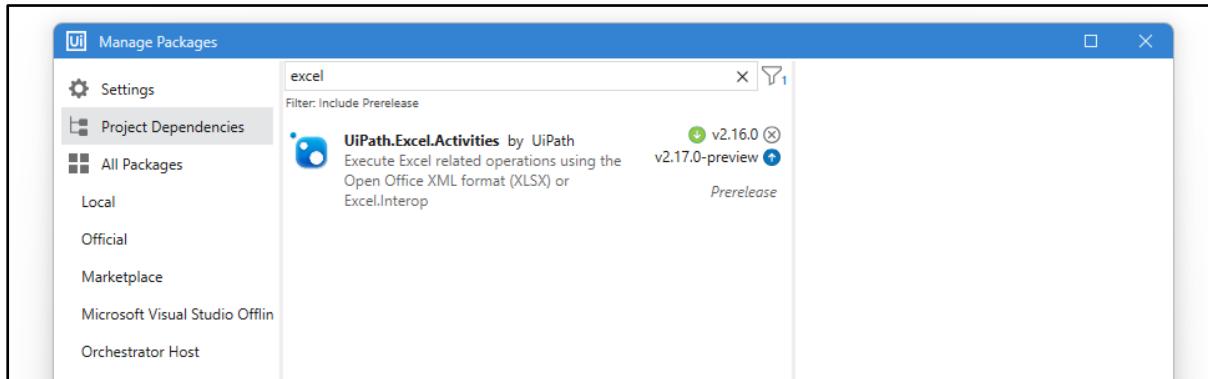
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



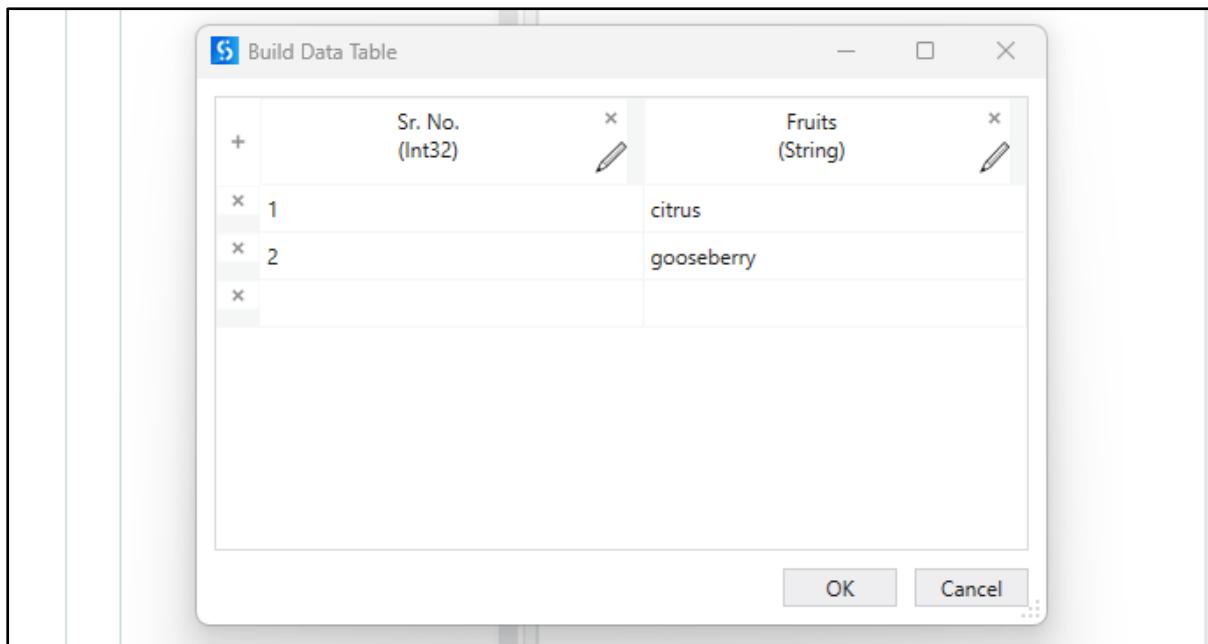
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



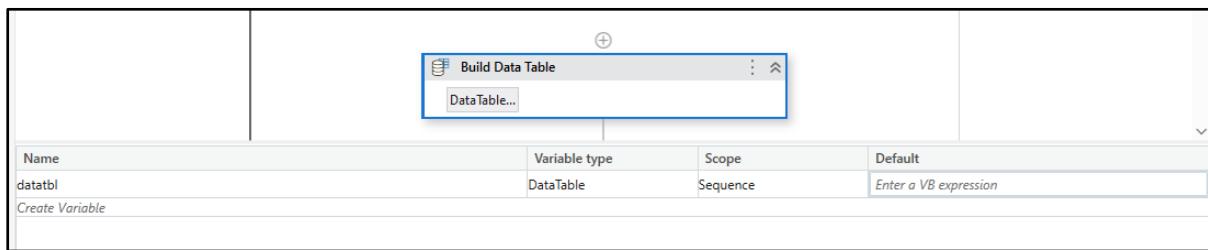
Step 3: Search for “Excel” in the Search panel of the Manage Packages Tab and install “UiPath.Excel.Acitivites”.



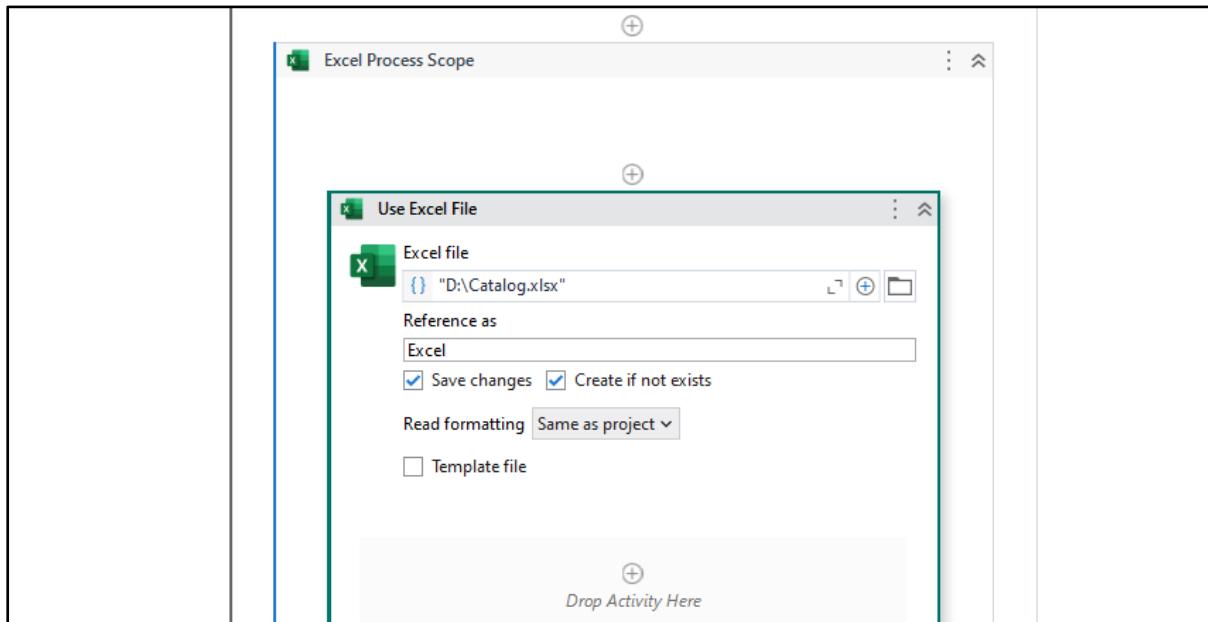
Step 4: Search for “Build Data Table” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Enter the values for the DataTable and click “OK”.



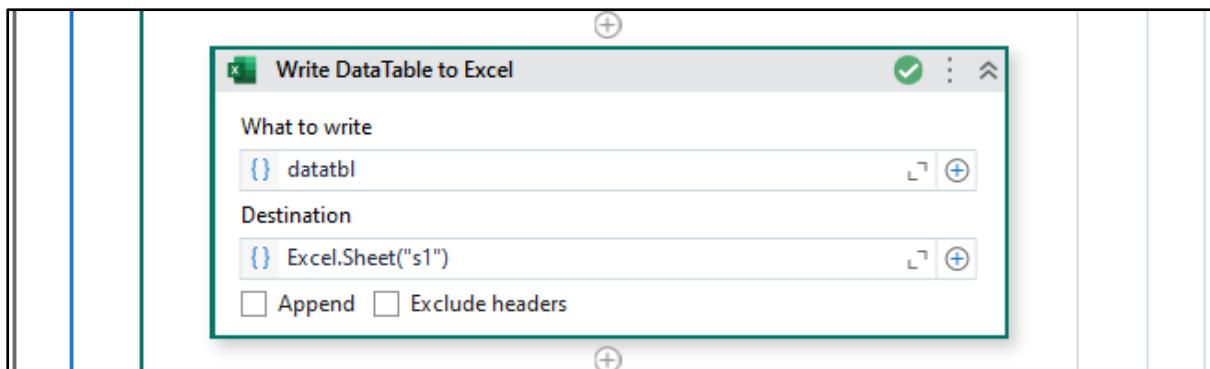
Step 5: Create a DataTable variable for Output.



Step 6: Search for “Excel Process Scope” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Search for “Use Excel File” in the Search panel of the Activities panel. Drag and drop the activity inside the Excel Process Scope. Enter the Target File location and provide a Reference name.



Step 7: Search for “Write DataTable to Excel” in the Search panel of the Activities panel. Drag and drop the activity inside the Body. Enter the Sheet name and Range to Write To. Enter the output variable of “DataTable” type to write the range.



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

A1	B	C	D	E	F	G
1						
2						
3						

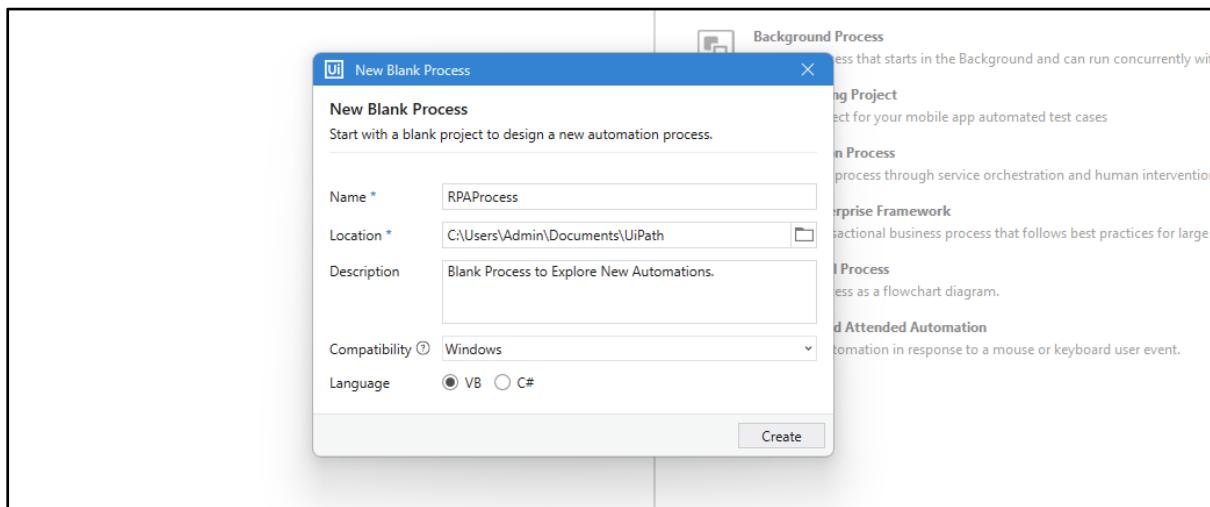
A1	B	C	D	E	F	G
1	Sr. No.	Fruits				
2	1	citrus				
3	2	gooseberry				
4						

Conclusion: The practical to automate the process to extract data from an excel file into a data table and vice versa was performed successfully.

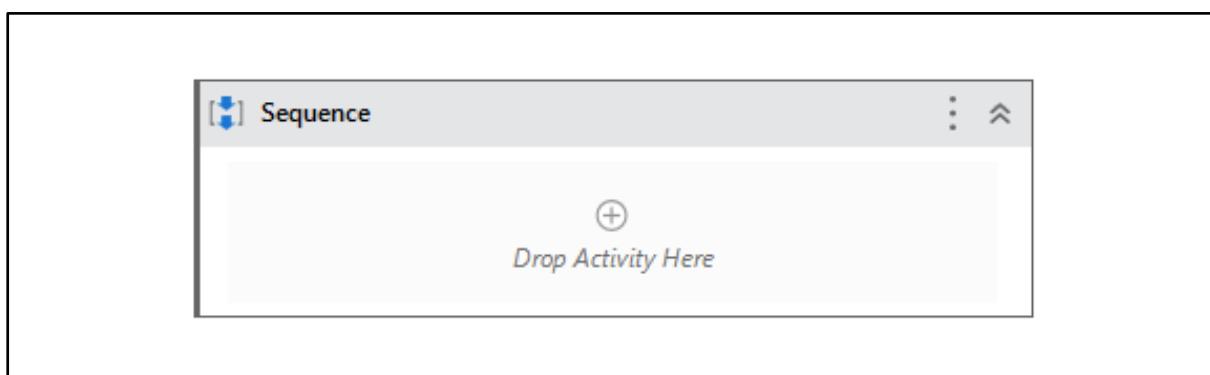
PRACTICAL 7

[A] AIM: Implement the attach window activity.

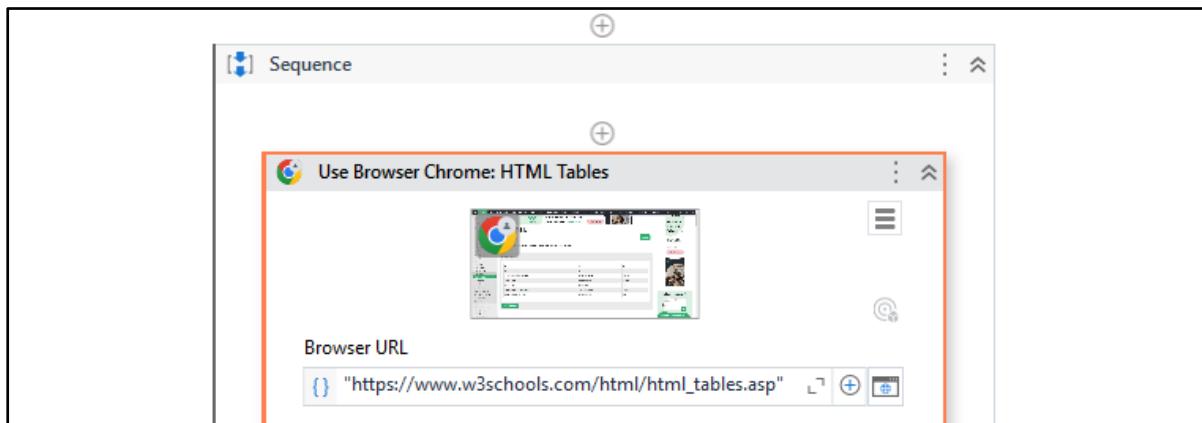
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



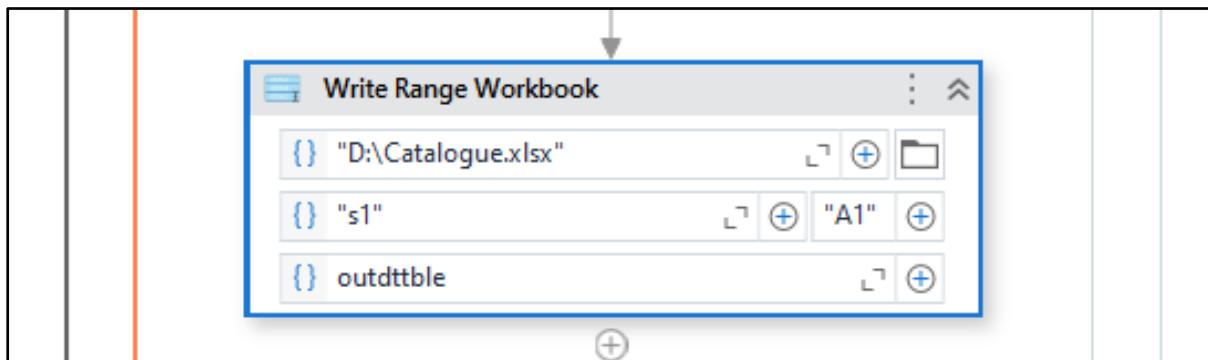
Step 3: Search for “Use Application/ Browser” and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



Step 4: Search for “Extract Table Data” and drag it inside the sequence workflow. Indicate the table to extract the Data from and Click on Save & Close.

Step 5: Extract the data to the variable of datatype DataTable.

Step 6: Search for “Write Range Workbook” and drag it inside the sequence workflow. Enter the Sheet location, Sheet name and the Cell location to write data.



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

Example

Company	Contact	Country
Alfreds Futterkiste	Maria Anders	Germany
Centro comercial Moctezuma	Francisco Chang	Mexico
Ernst Handel	Roland Mendel	Austria
Island Trading	Helen Bennett	UK
Lauhing Bacchus Winecellars	Yoshi Tannamuri	Canada
Magazzini Alimentari Riuniti	Giovanni Rovelli	Italy

A1

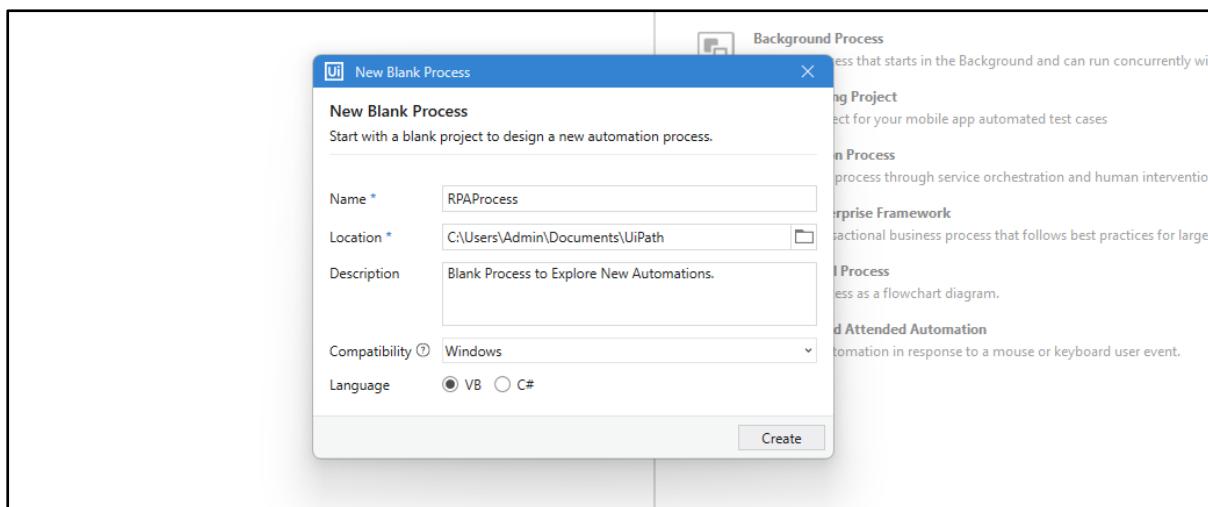
	A	B	C	D	E	F
1	Company	Contact	Country			
2	Alfreds Futterkiste	Maria Anders	Germany			
3	Centro comercial Moctezuma	Francisco Chang	Mexico			
4	Ernst Handel	Roland Mendel	Austria			
5	Island Trading	Helen Bennett	UK			
6	Lauhing Bacchus Winecellars	Yoshi Tannamuri	Canada			
7	Magazzini Alimentari Riuniti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

Conclusion: The practical to implement the attach window activity was performed successfully.

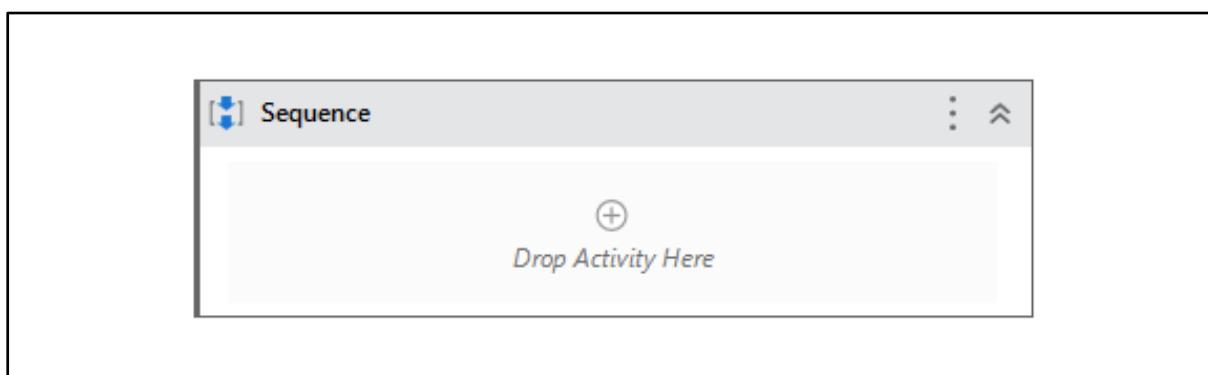
[B] AIM: Find different controls using UiPath.

[I] Element Exists

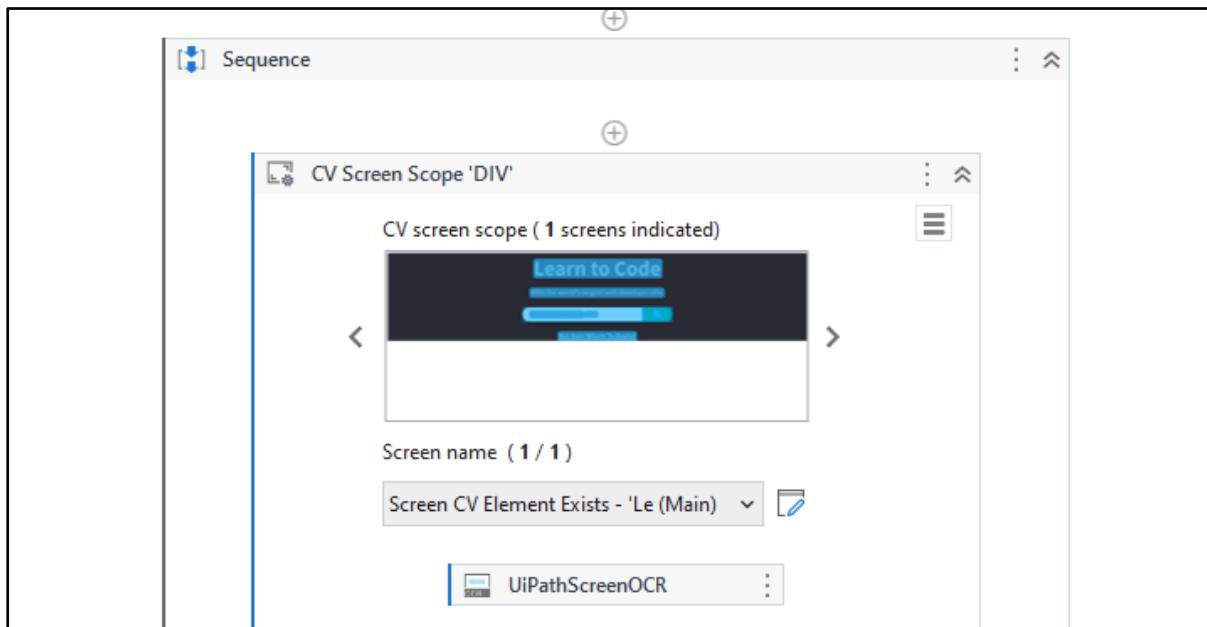
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



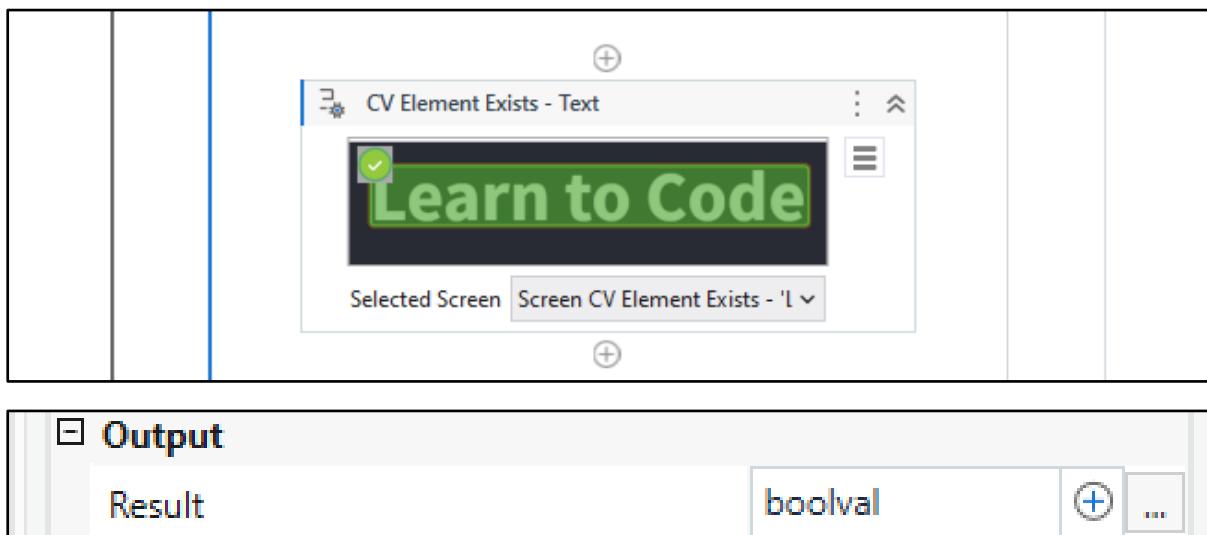
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Search for “CV Screen Scope” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



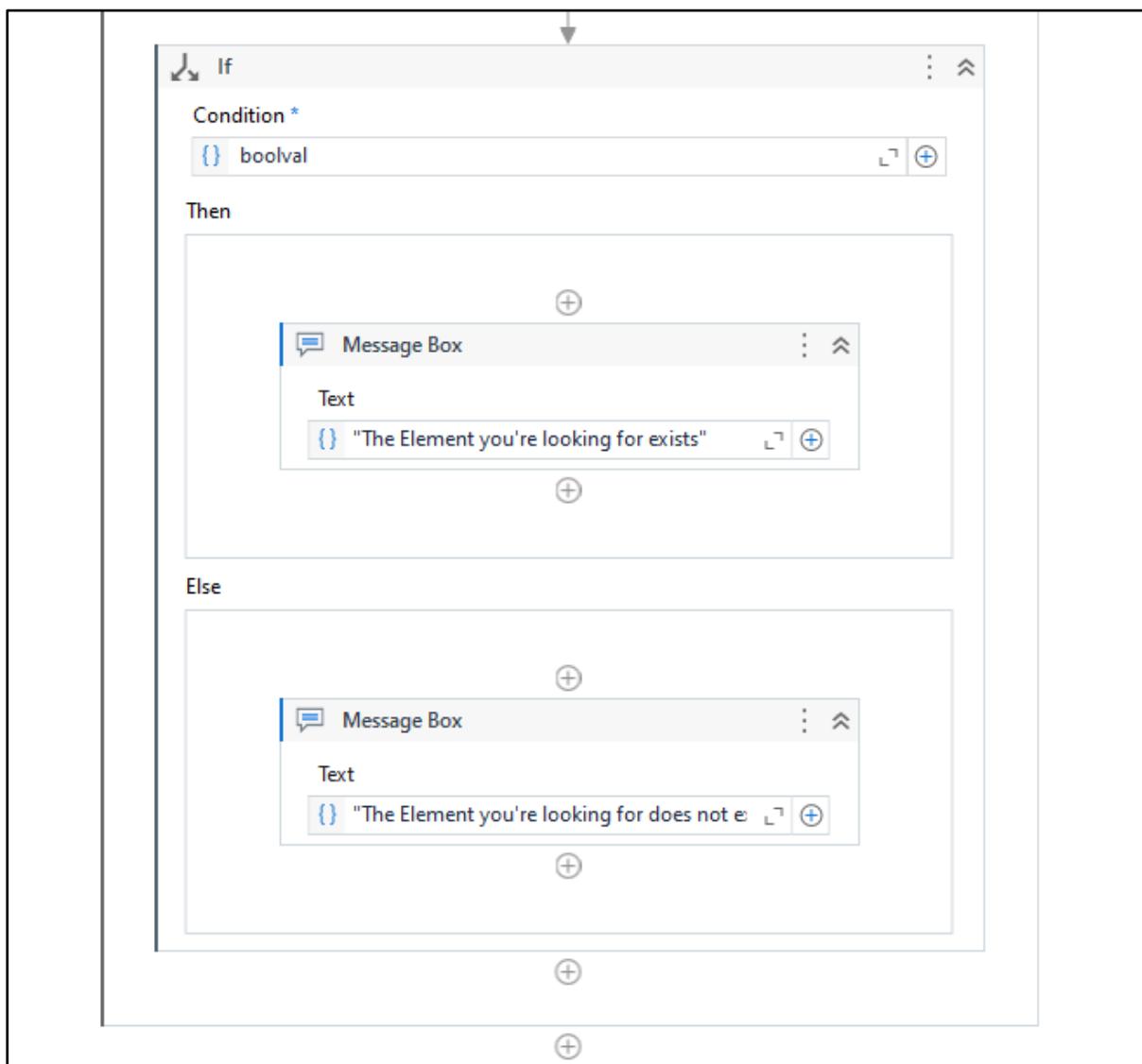
Step 4: Search for “CV Element Exists” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to look for and Click on Save & Close. Create and set an output variable to store the Boolean Value Output.



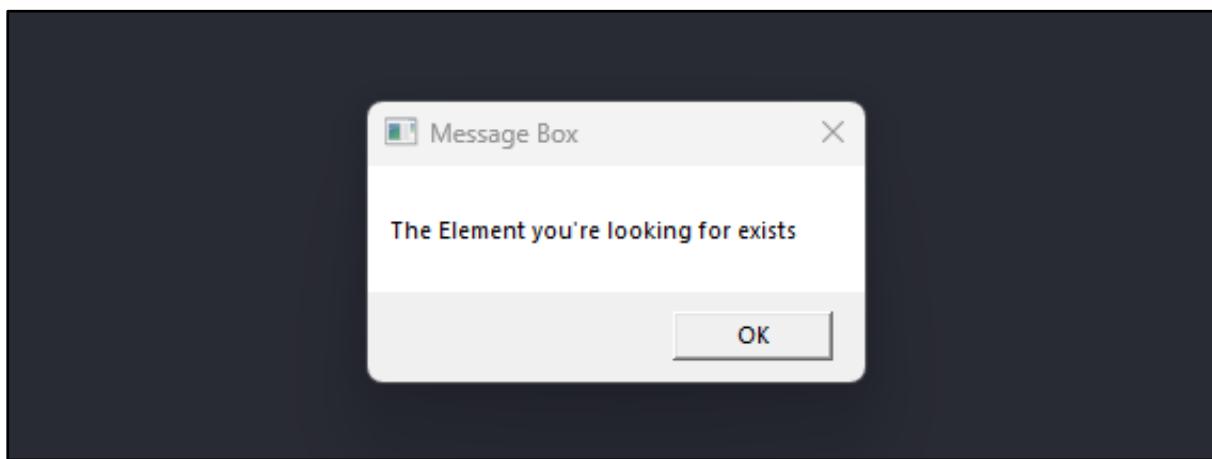
Step 5: Search for “If” Activity in the Activities Panel and drag it inside the sequence workflow. Set the condition as our Output Boolean Value.



Step 6: Search for “Message Box” Activity in the Activities Panel and drag two message box activities, one inside the Then section and the other inside the Else section. Enter the Output for the Then Section and the Else Section.

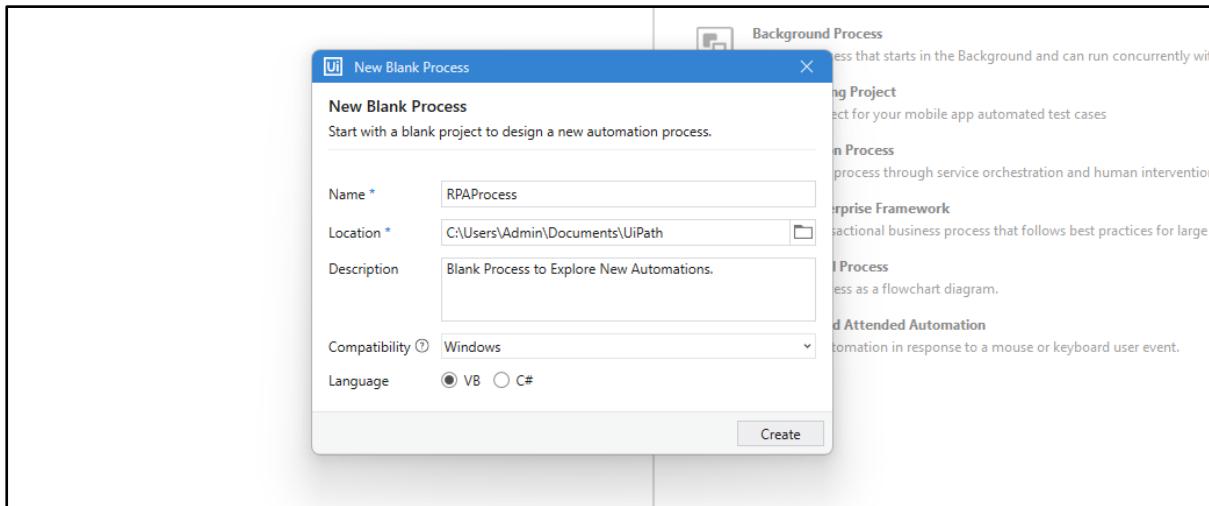


Step 7: Click the Run button and see the result.

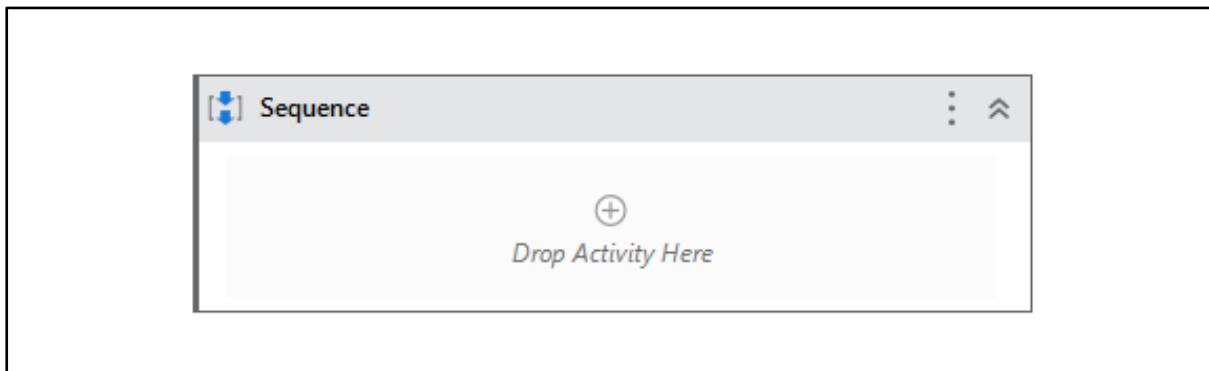


[II] Find element

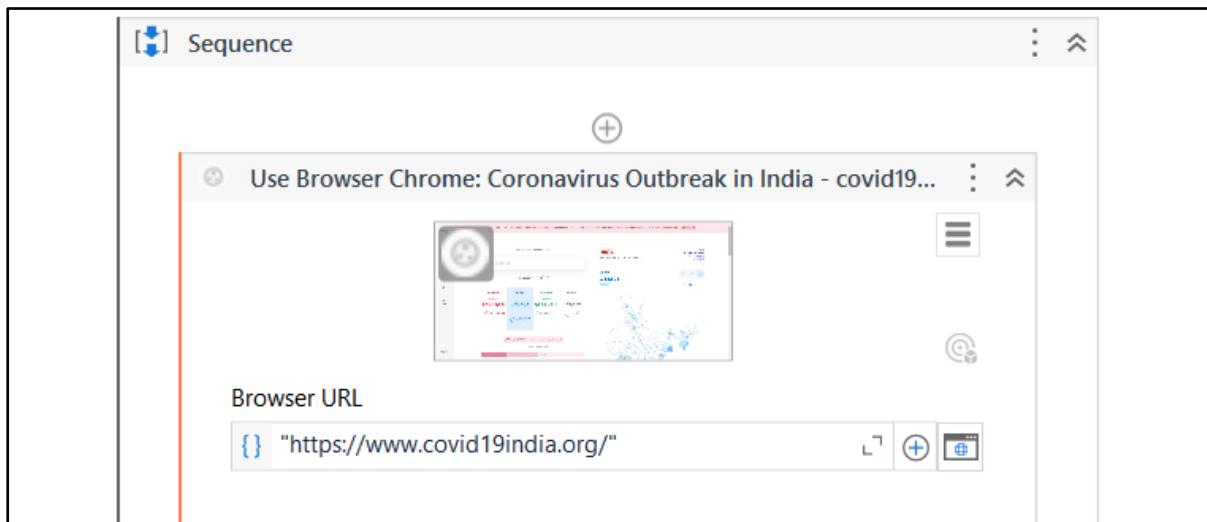
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



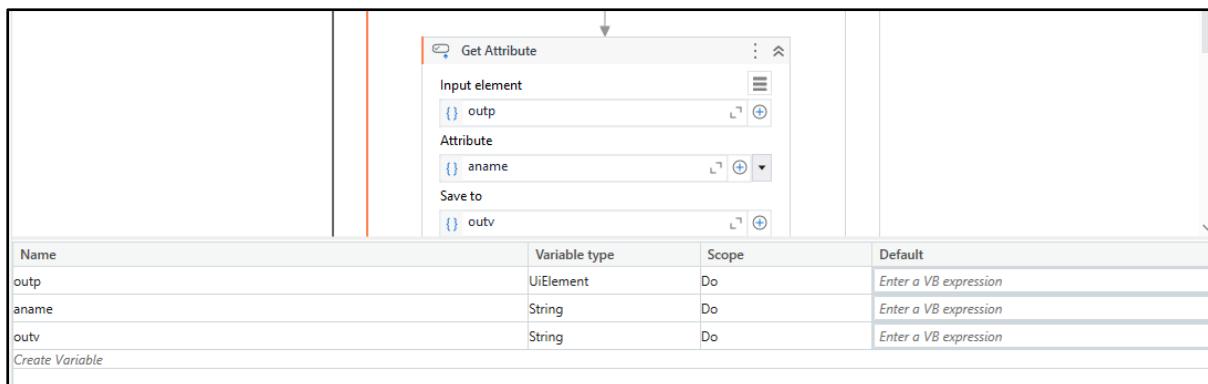
Step 3: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



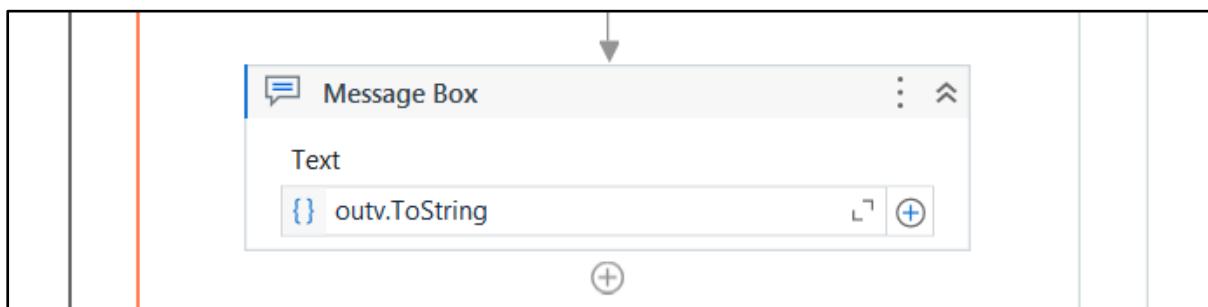
Step 4: Search for “Find Element” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to look for and Click on Save & Close. Create and set an output variable to store the Attribute Value Output.



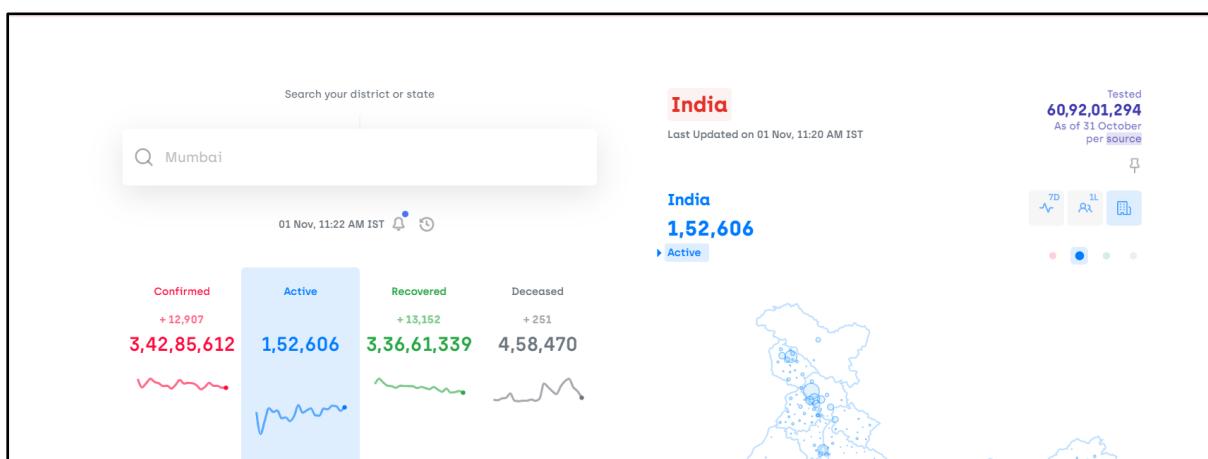
Step 5: Search for “Get Attribute” Activity in the Activities Panel and drag it inside the sequence workflow. Input element as the Find Element output, create and set an attribute value and and String output variable.

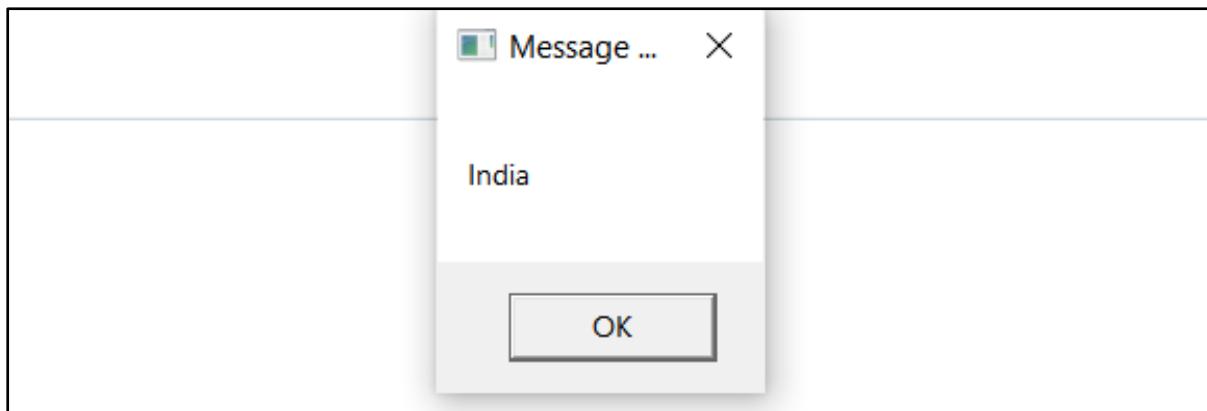


Step 6: Search for “Message Box” Activity in the Activities Panel and drag it inside the sequence. Enter the Output value.



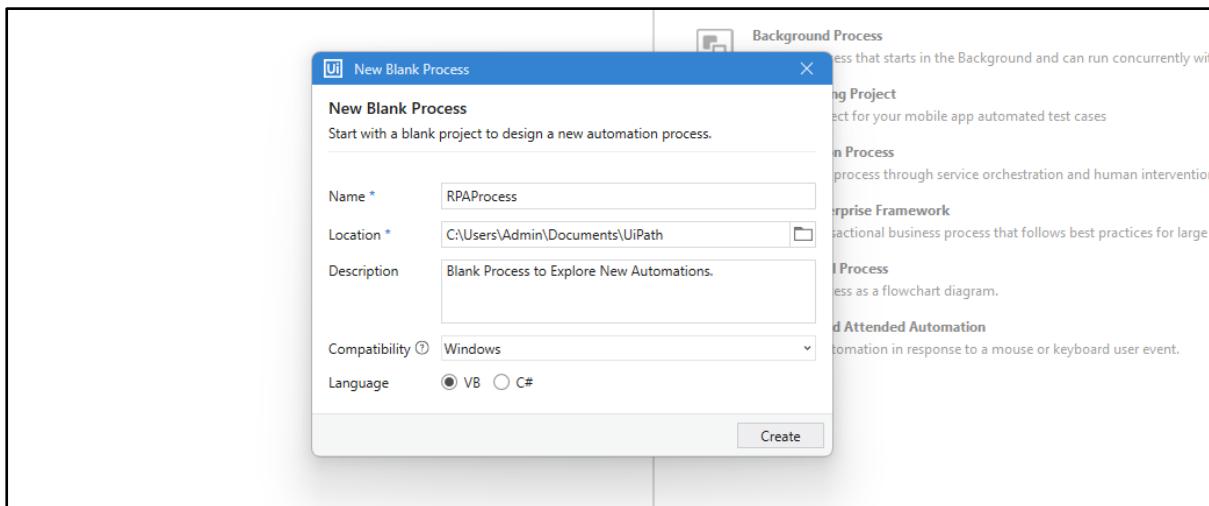
Step 7: Click the Run button and see the result.



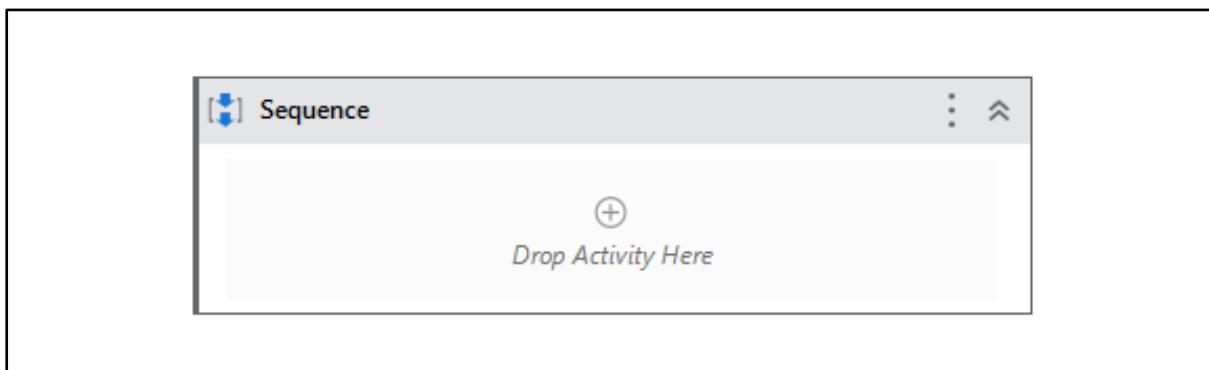


[III] Find children

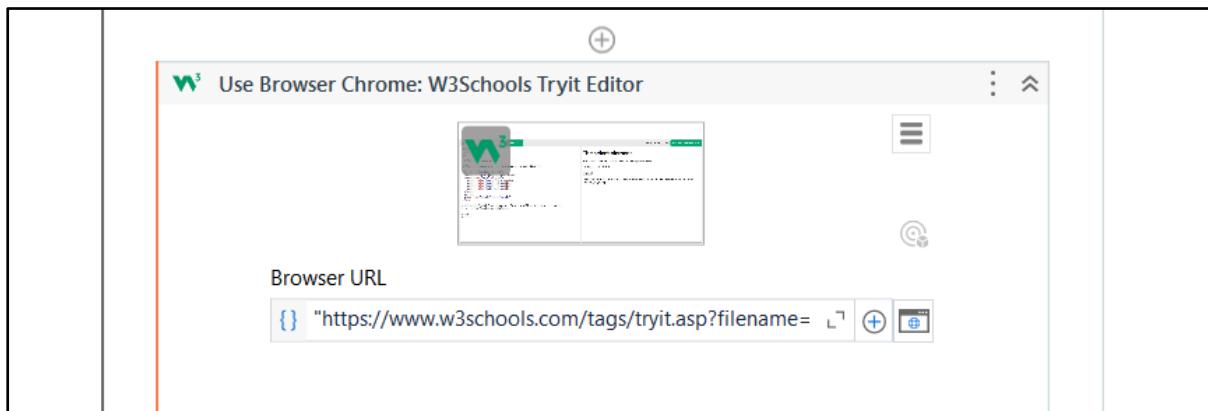
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



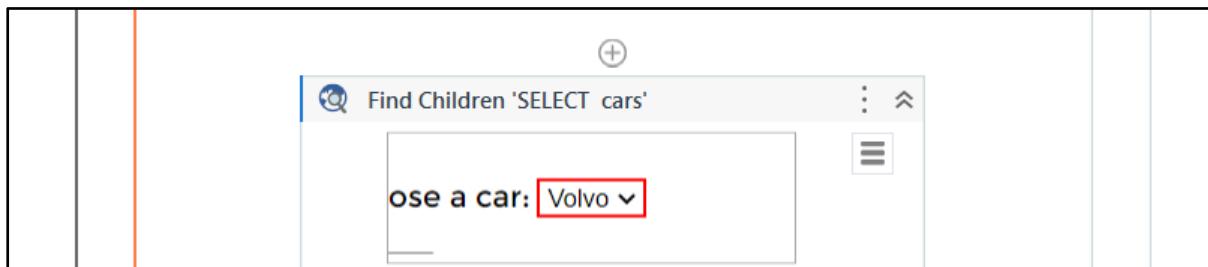
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



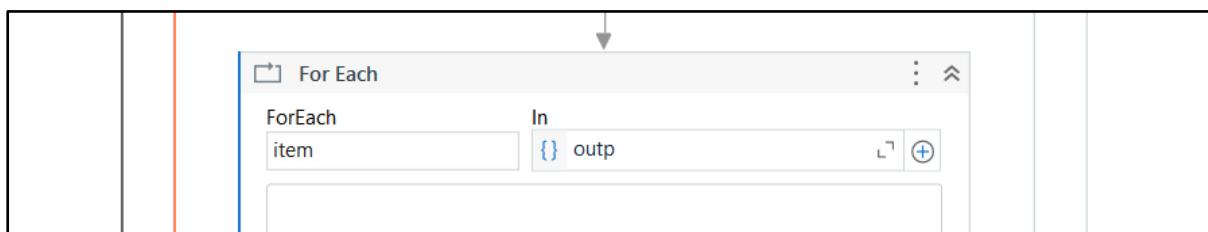
Step 3: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



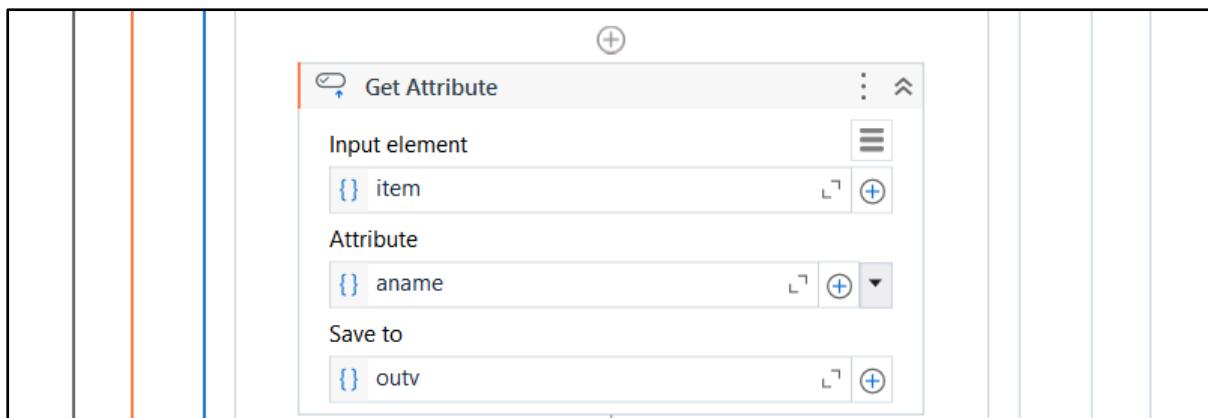
Step 4: Search for “Find Children” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to look for and Click on Save & Close. Create and set an output variable to store the Attribute Value Output.



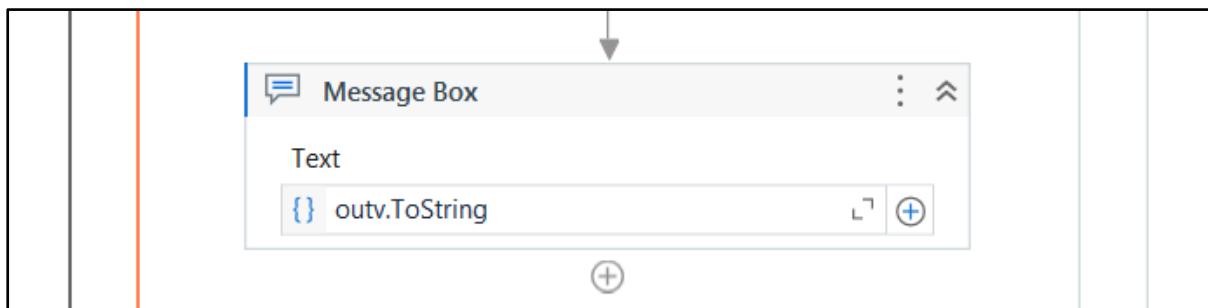
Step 5: Search for “Find Children” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to look for and Click on Save & Close. Create and set an output variable to store the Attribute Value Output.



Step 6: Search for “Get Attribute” Activity in the Activities Panel and drag it inside the sequence workflow. Input element as the Find Element output, 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: Volvo

- [Volvo](#)
- [Saab](#)
- [Opel](#)
- [Audi](#)

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
- ② RPAProcess execution started
- ③ Audit: Using Web App. Browser: Chrome URL: https://www.w3schools.com/tags/tryit.asp?filename=tryhtml_select
- ④ Volvo
- ⑤ Saab
- ⑥ Opel
- ⑦ Audi

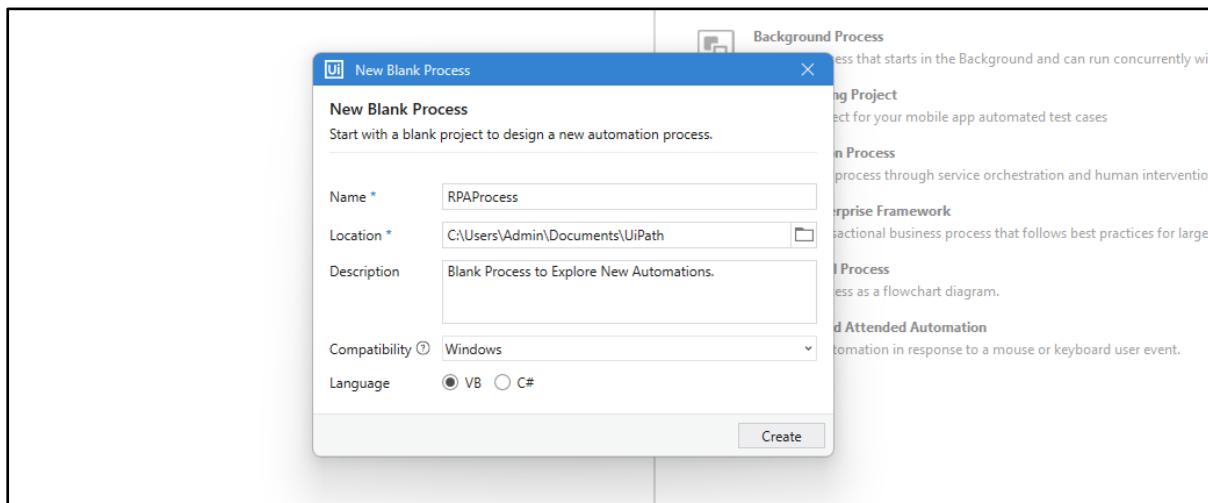
Conclusion: The practical to find different controls using UiPath is successfully completed.

[C] AIM: Demonstrate the following activities in UiPath.

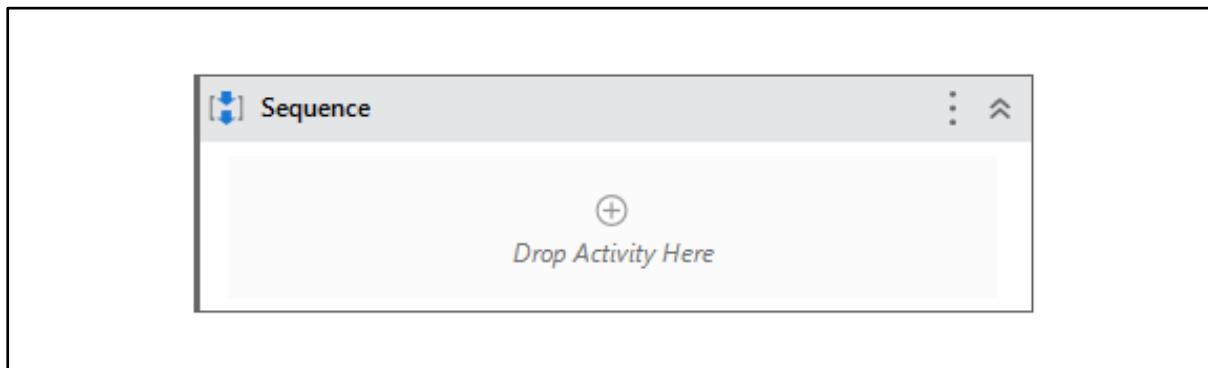
[I] Mouse

[a] Click

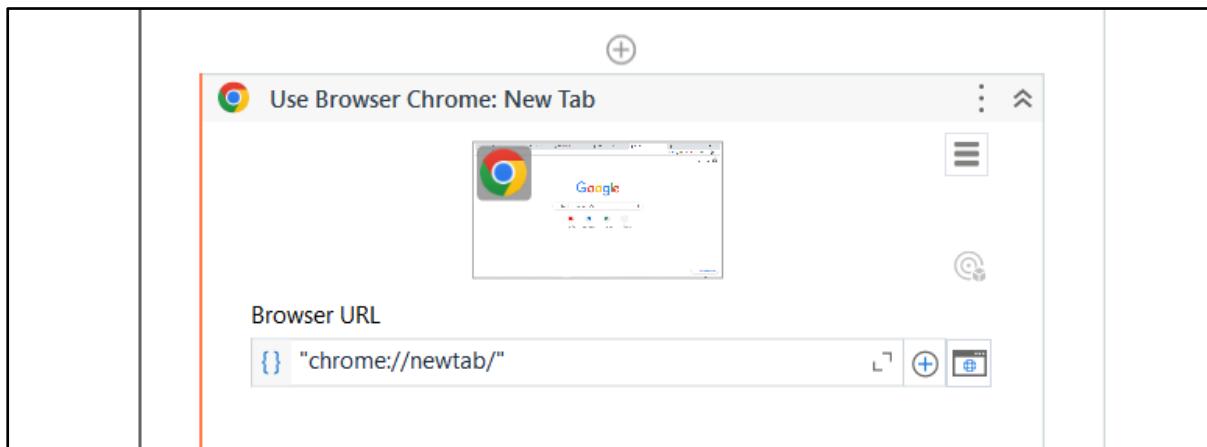
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



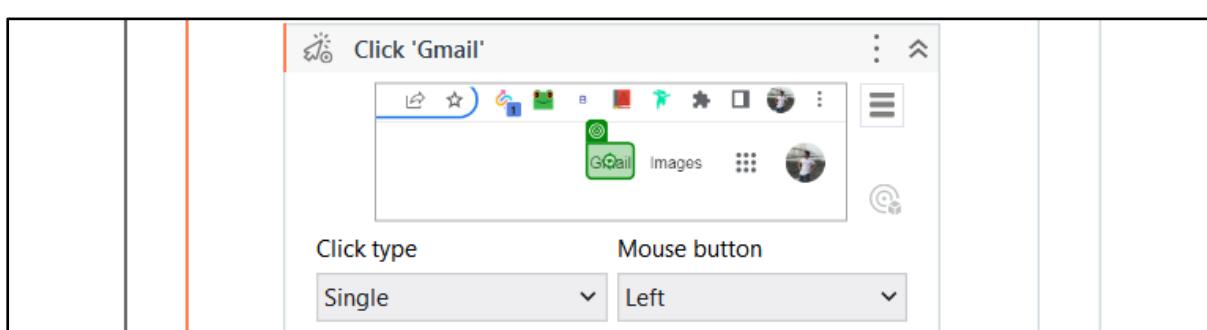
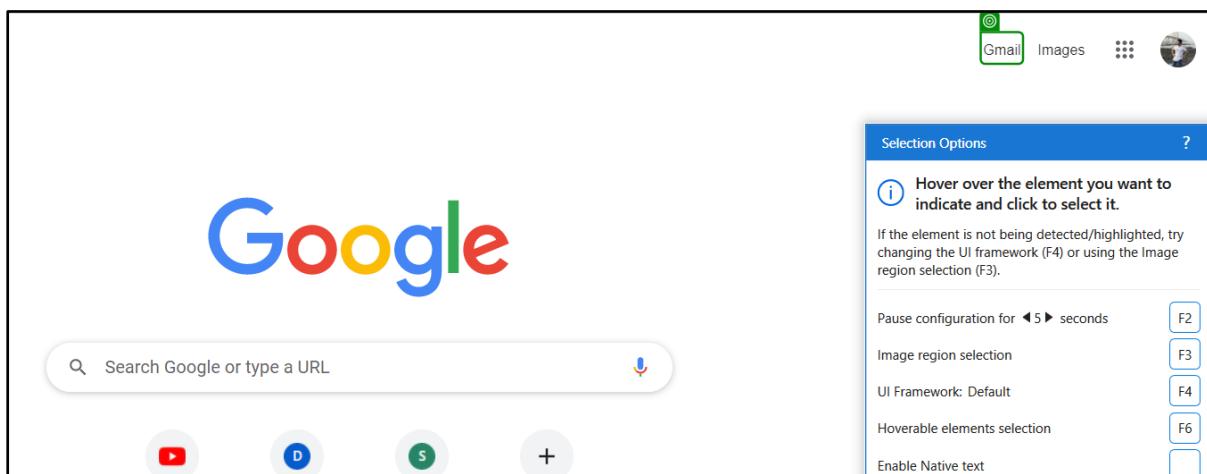
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



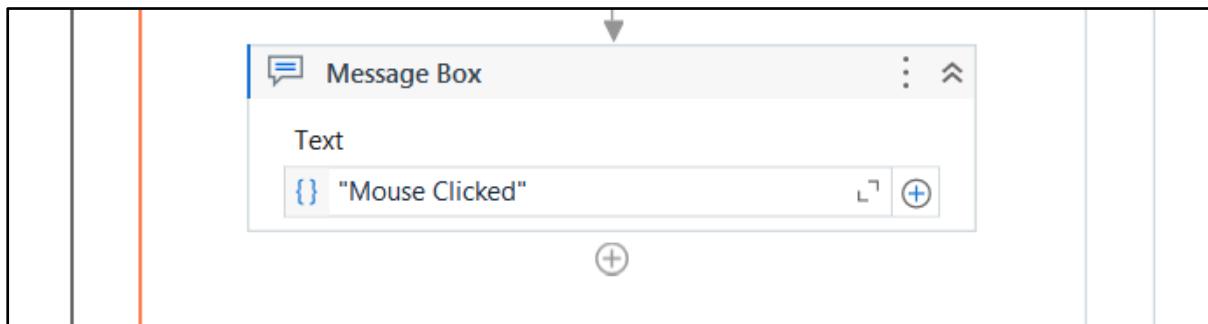
Step 3: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



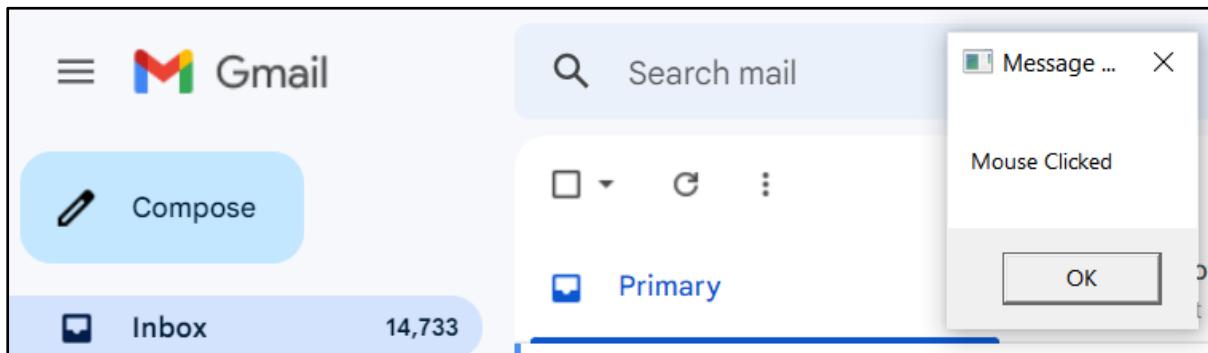
Step 4: Search for “Mouse Click” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to click on and Click on Save & Close. Select Click Type as “Single”.



Step 5: Search for “Message Box” Activity in the Activities Panel and drag it inside the sequence. Enter the Output value.

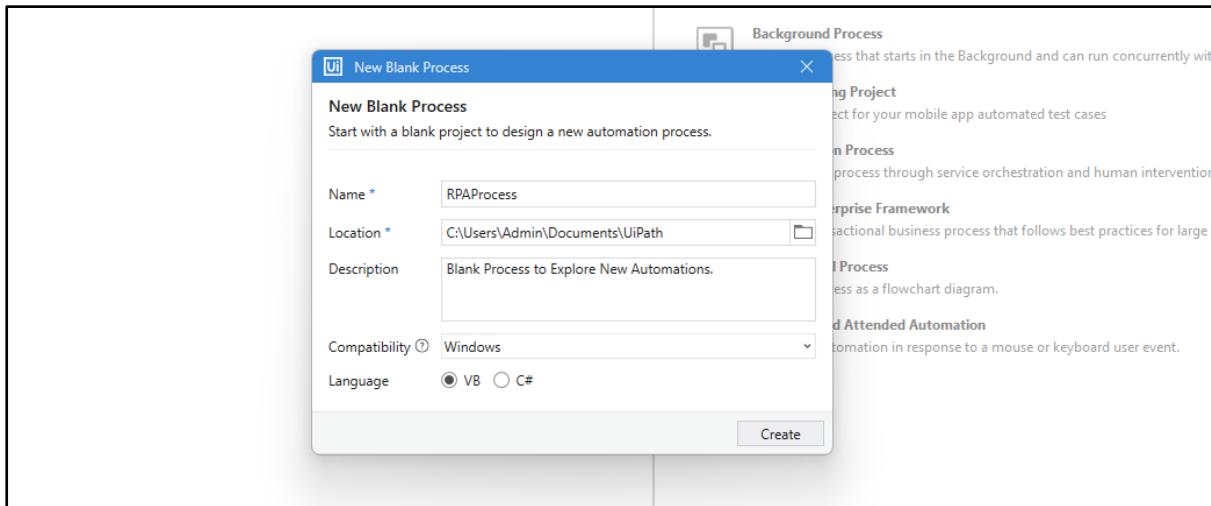


Step 6: Click the Run button and see the result.

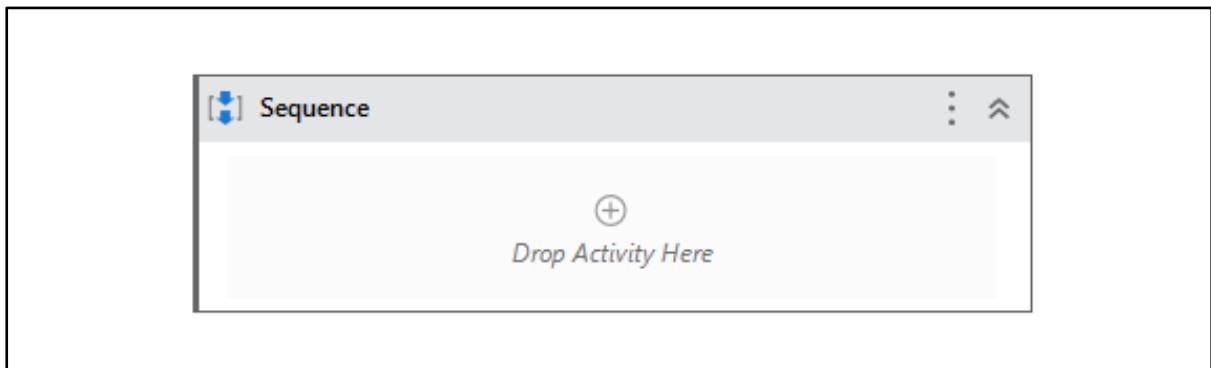


[b] Double-Click

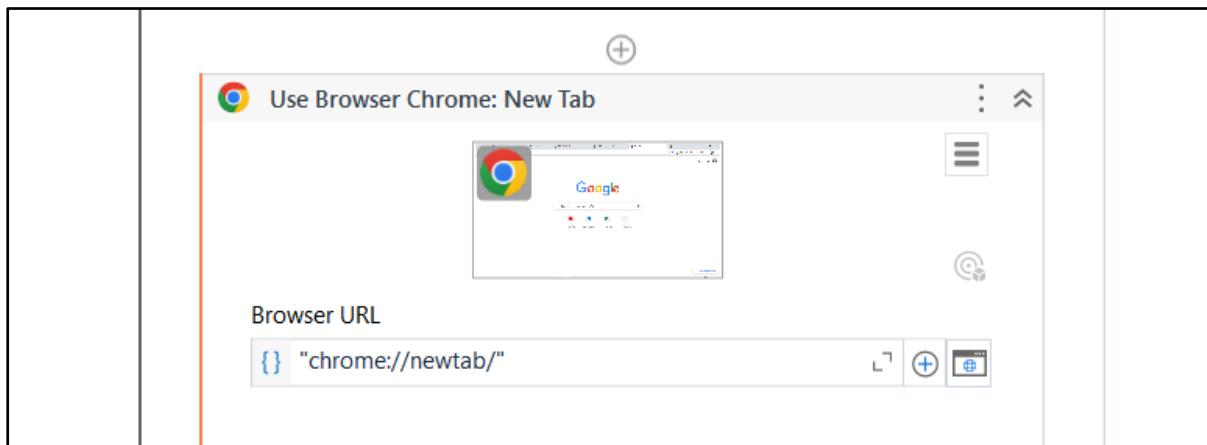
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



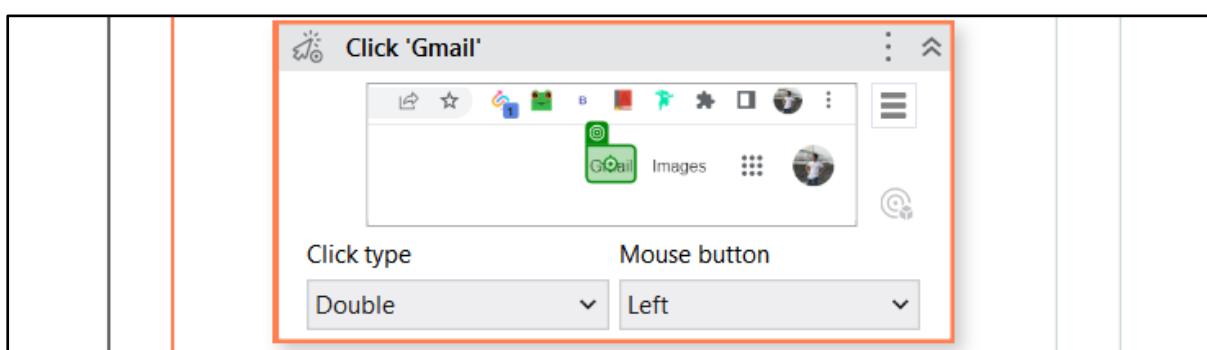
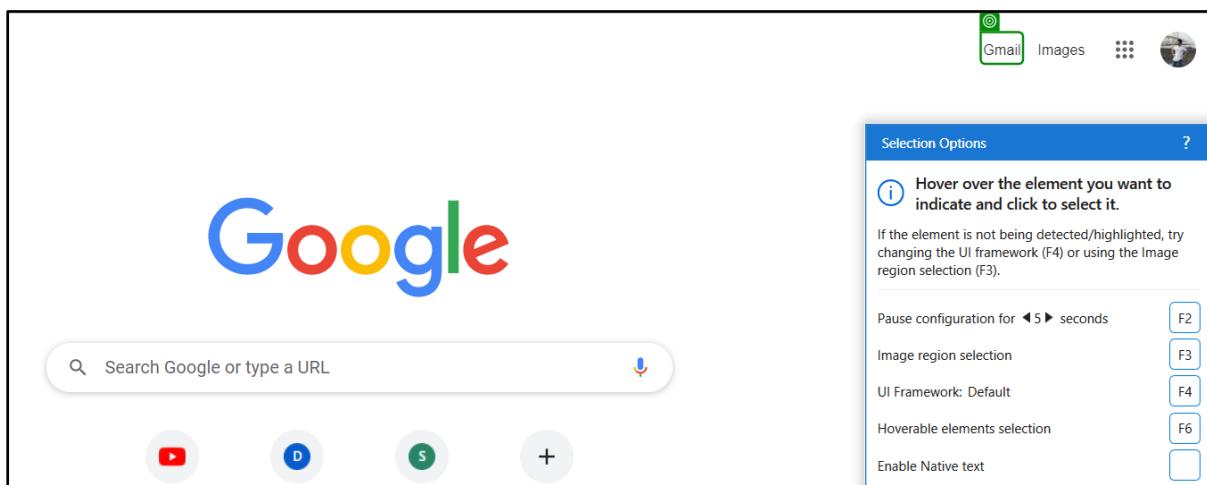
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



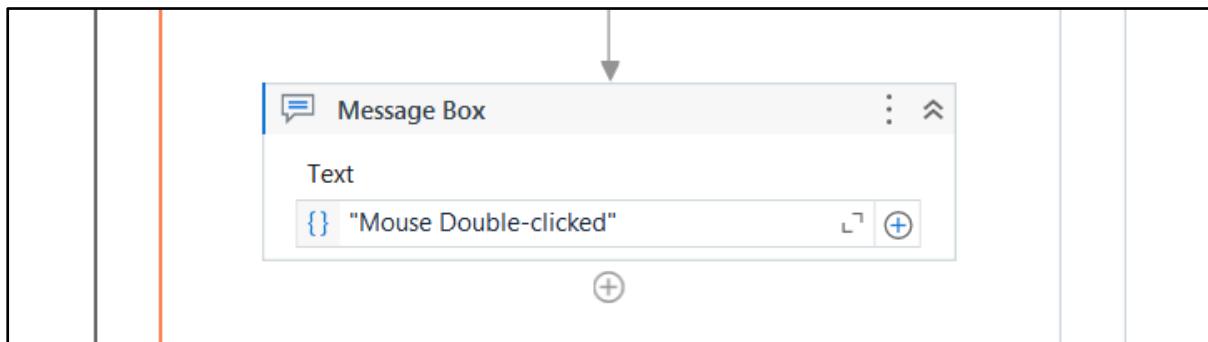
Step 3: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



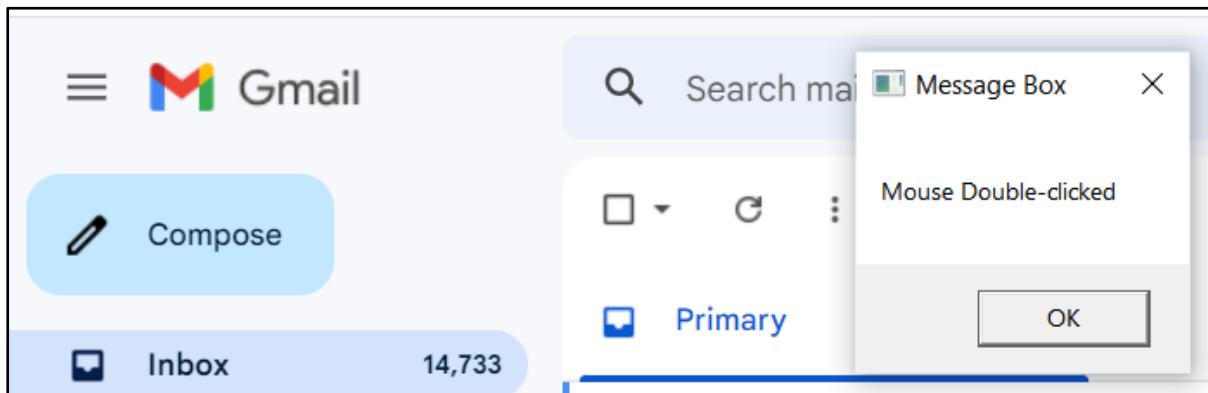
Step 4: Search for “Mouse Click” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to double-click on and Click on Save & Close. Select Click Type as “Double”.



Step 5: Search for “Message Box” Activity in the Activities Panel and drag it inside the sequence. Enter the Output value.

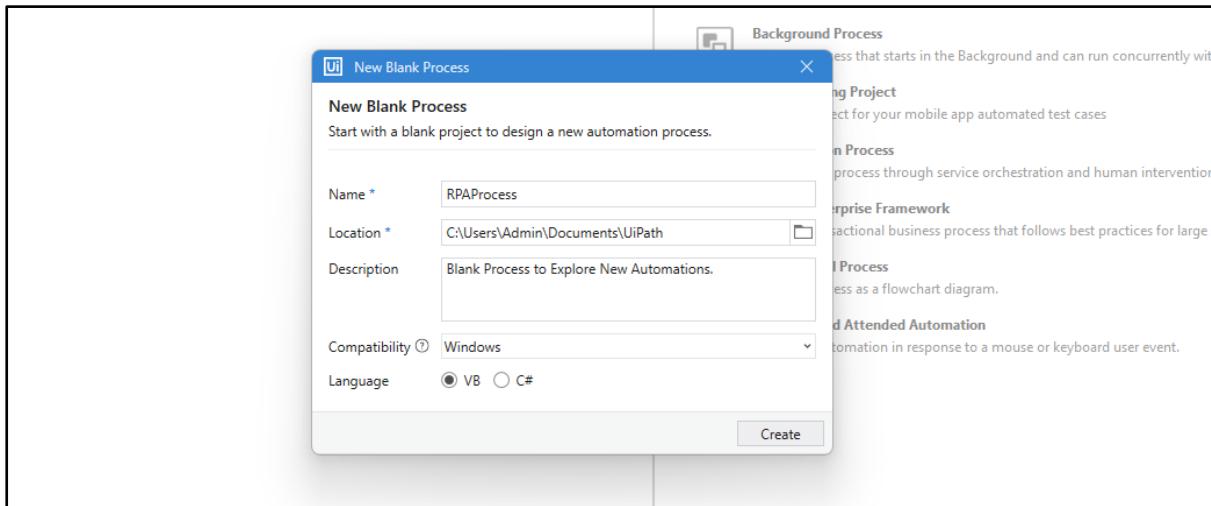


Step 6: Click the Run button and see the result.

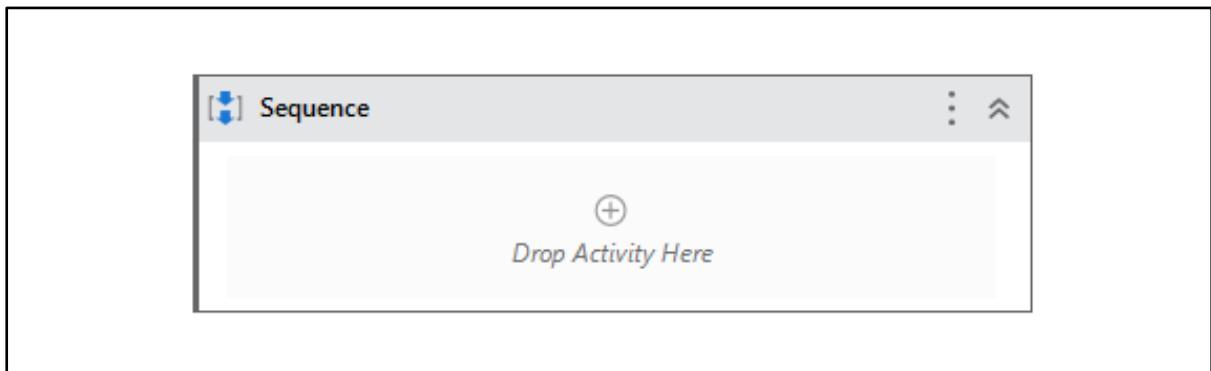


[c] Hover

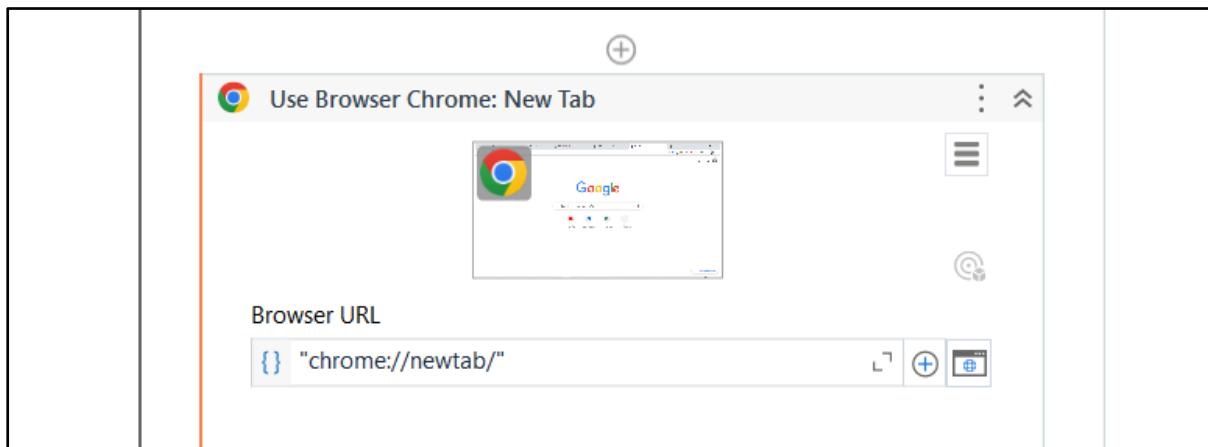
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



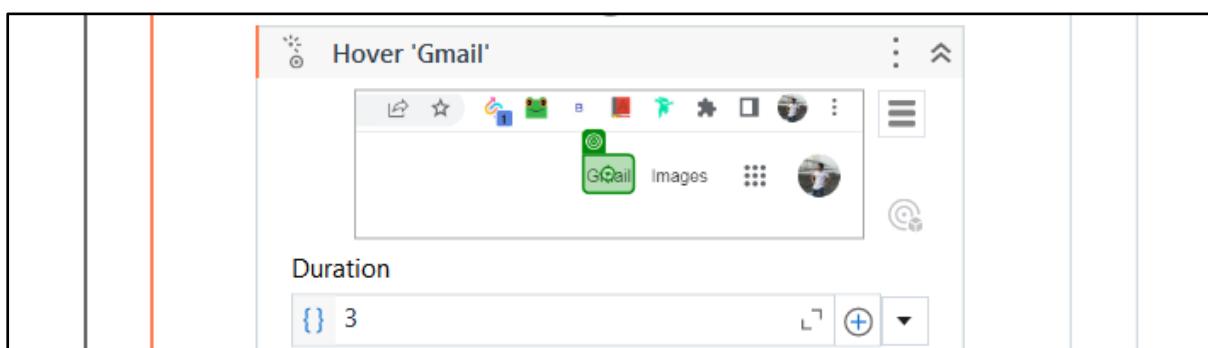
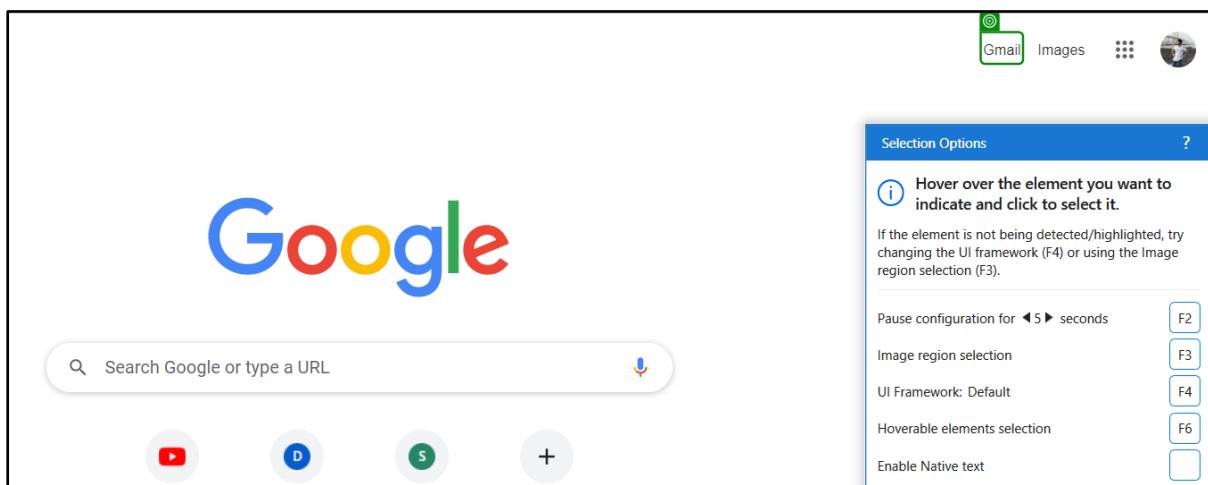
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



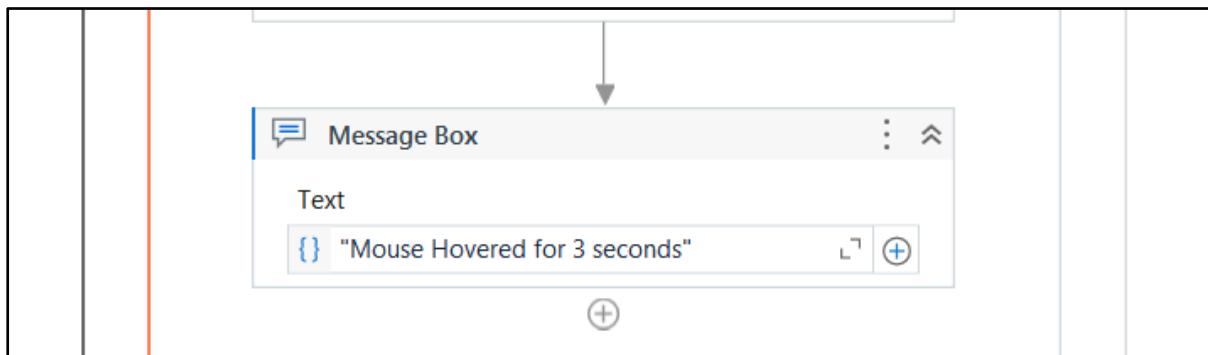
Step 3: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



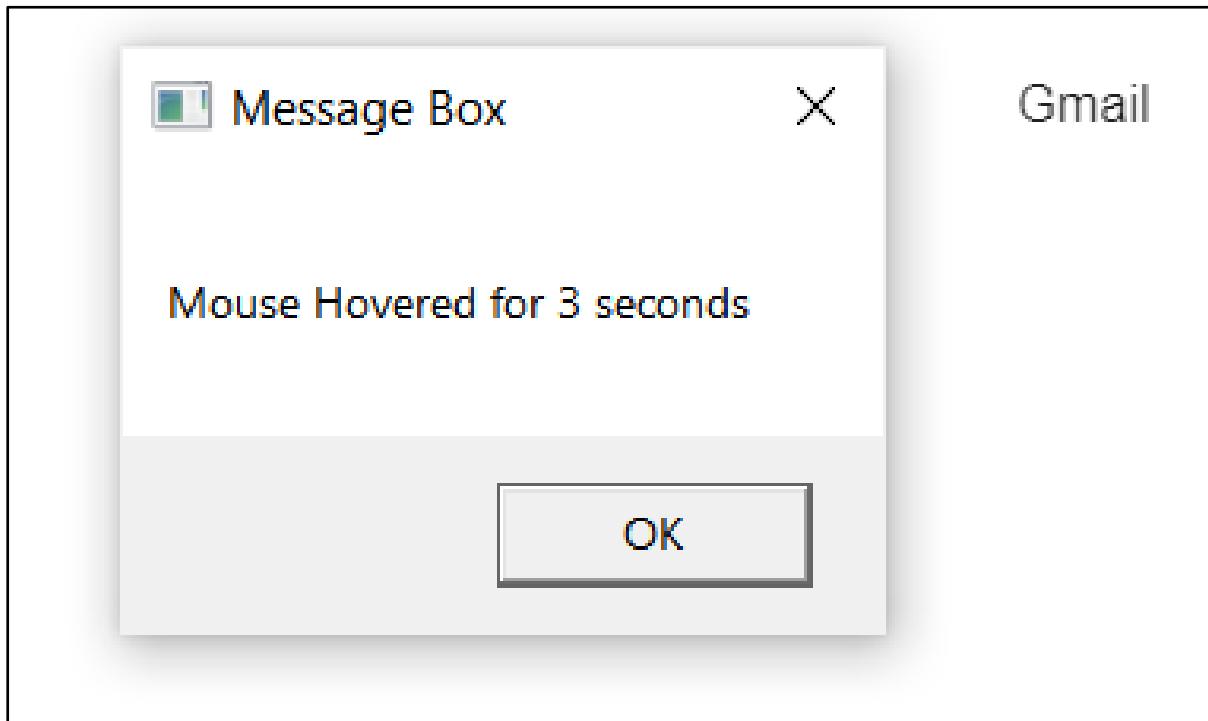
Step 4: Search for “Mouse Click” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to hover on and Click on Save & Close. Set Duration as 3 secs on any duration you want.



Step 5: Search for “Message Box” Activity in the Activities Panel and drag it inside the sequence. Enter the Output value.

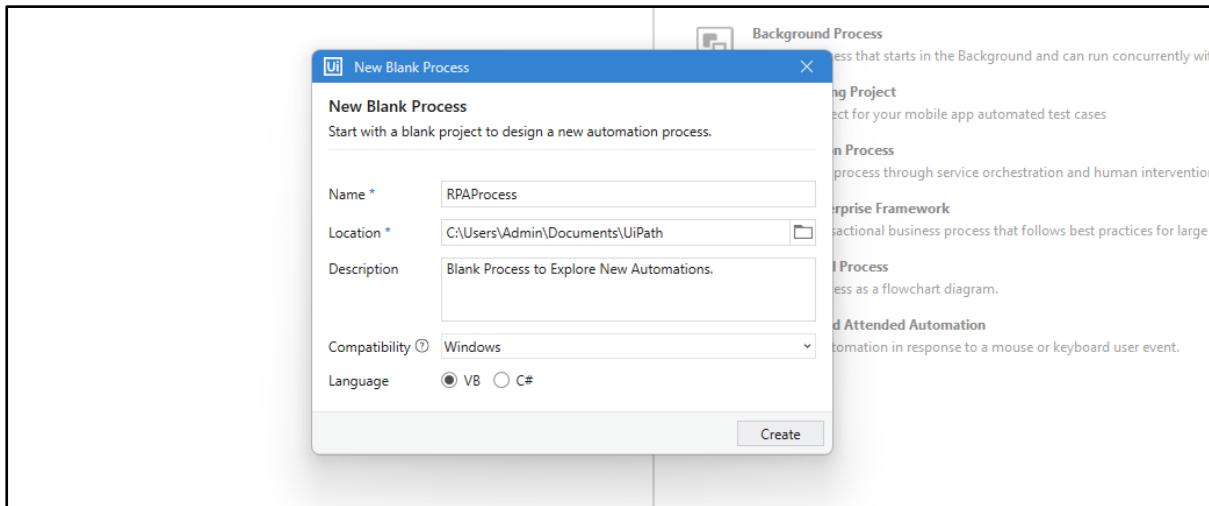


Step 6: Click the Run button and see the result.

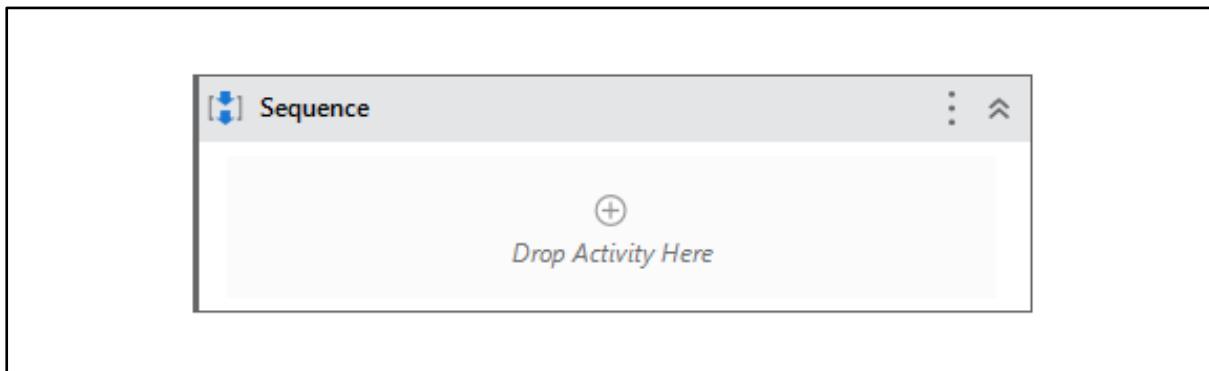


[II] Type into

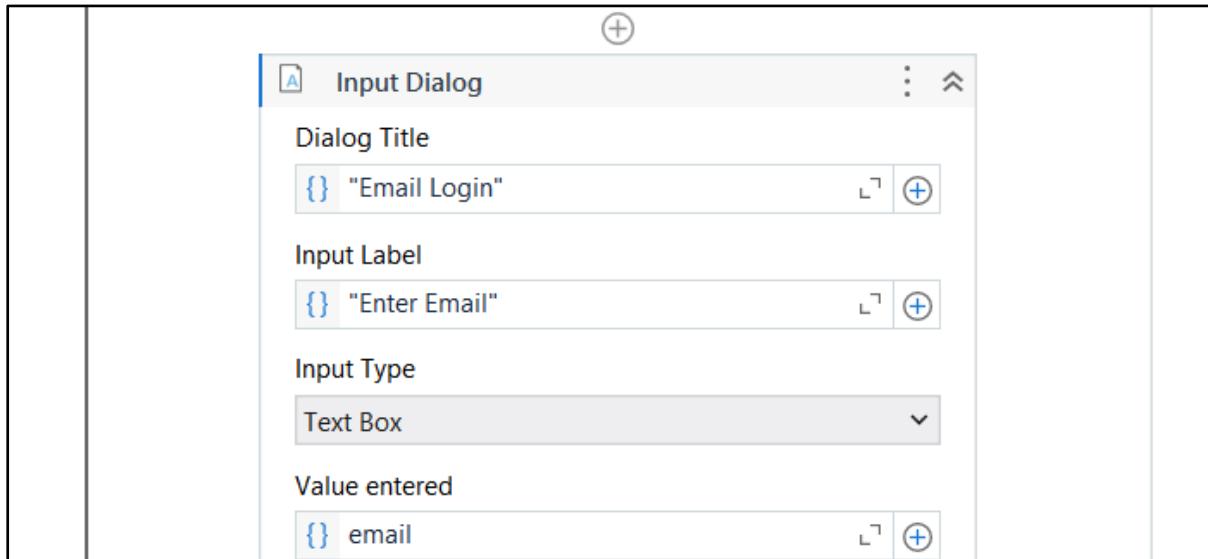
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



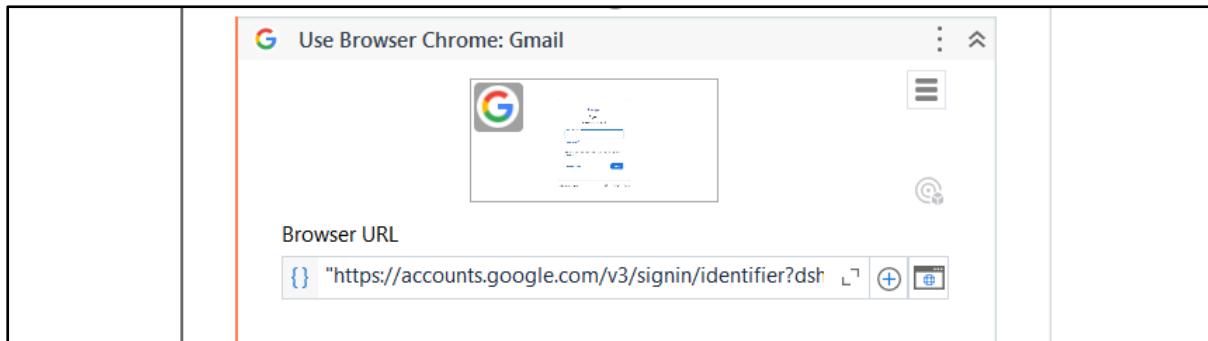
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



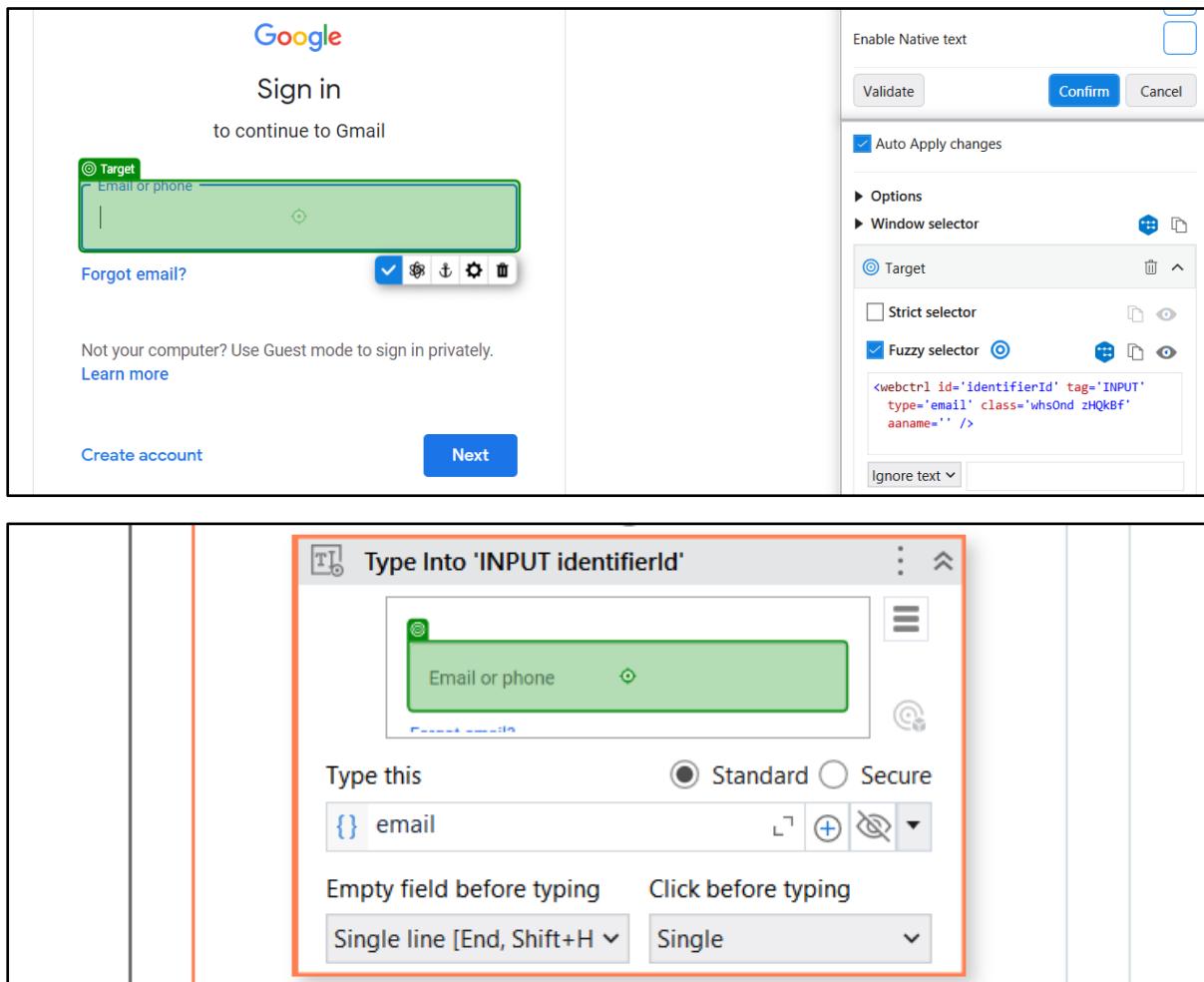
Step 3: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create a variable and specify the variable in the Result property of the Input dialog box.



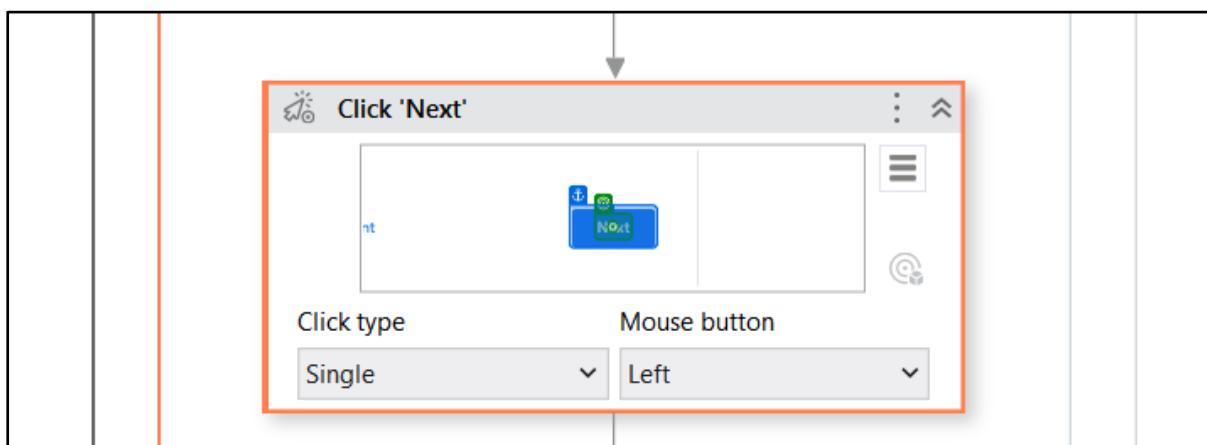
Step 4: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



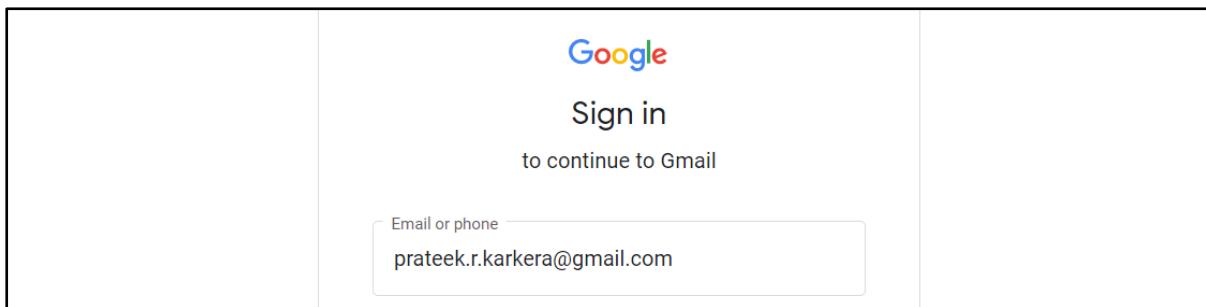
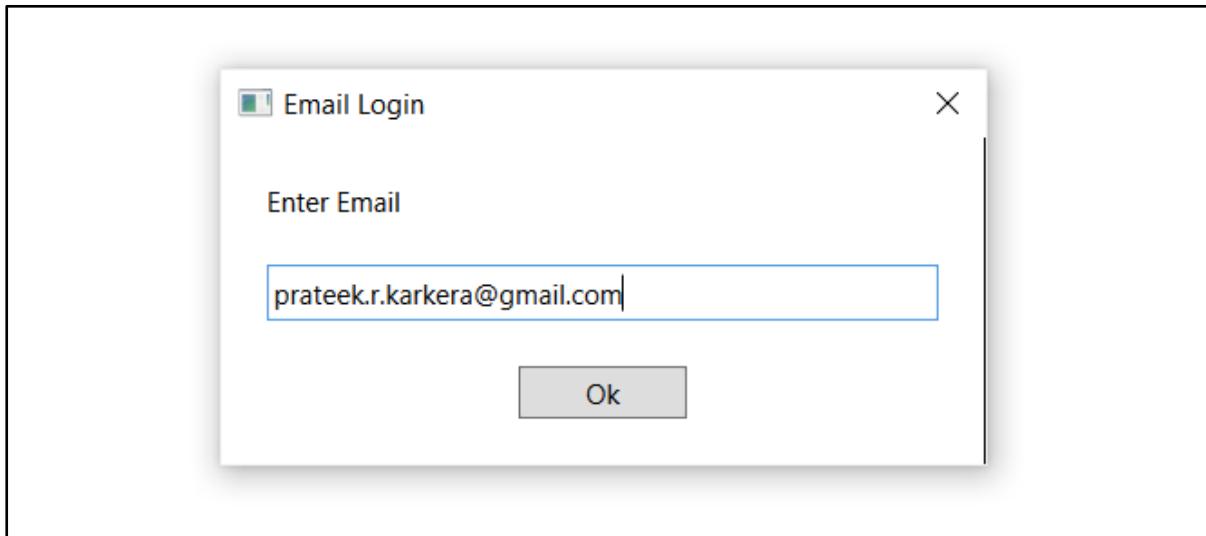
Step 5: Search for “Type Into” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to click on and Click on Save & Close.



Step 6: Search for “Click” Activity in the Activities Panel and drag it inside the sequence. Indicate the “Next” button.

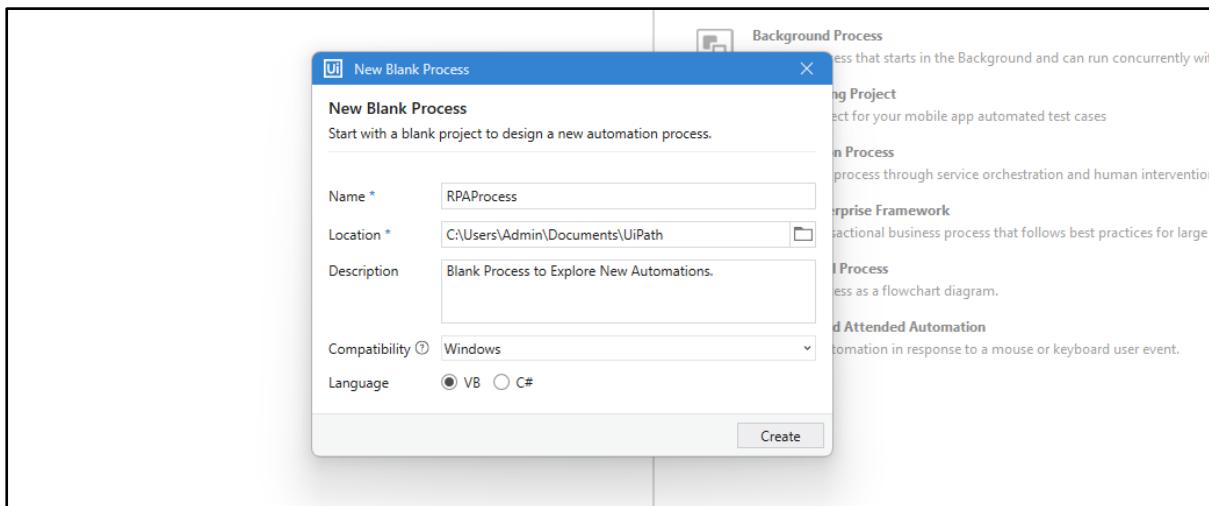


Step 7: Click the Run button and see the result.

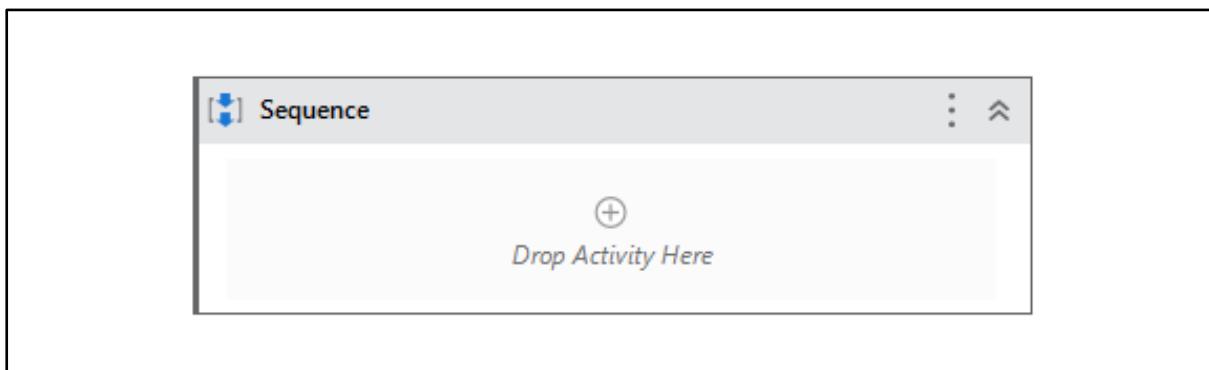


[III] Type Secure Text

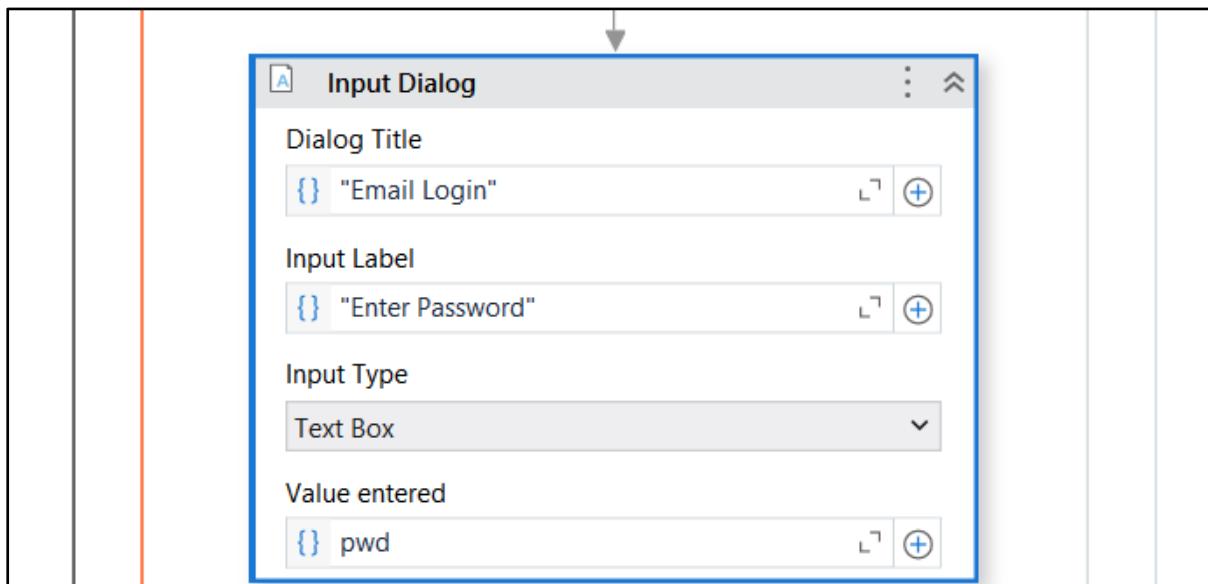
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



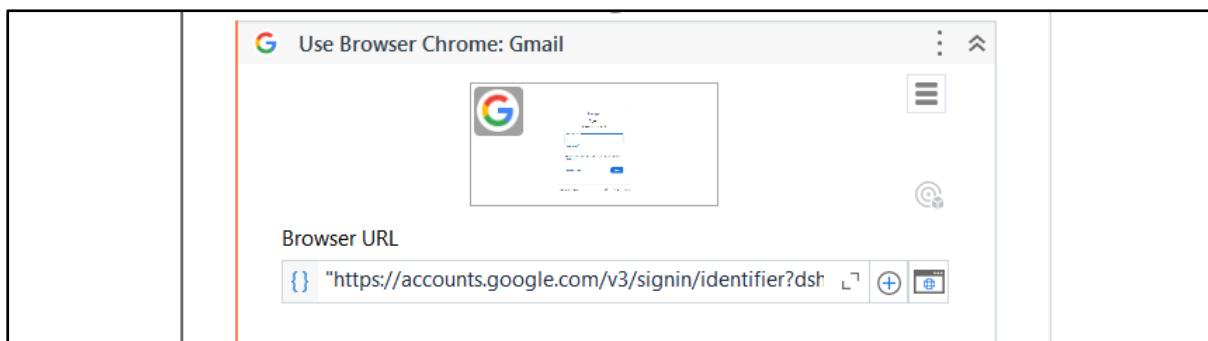
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



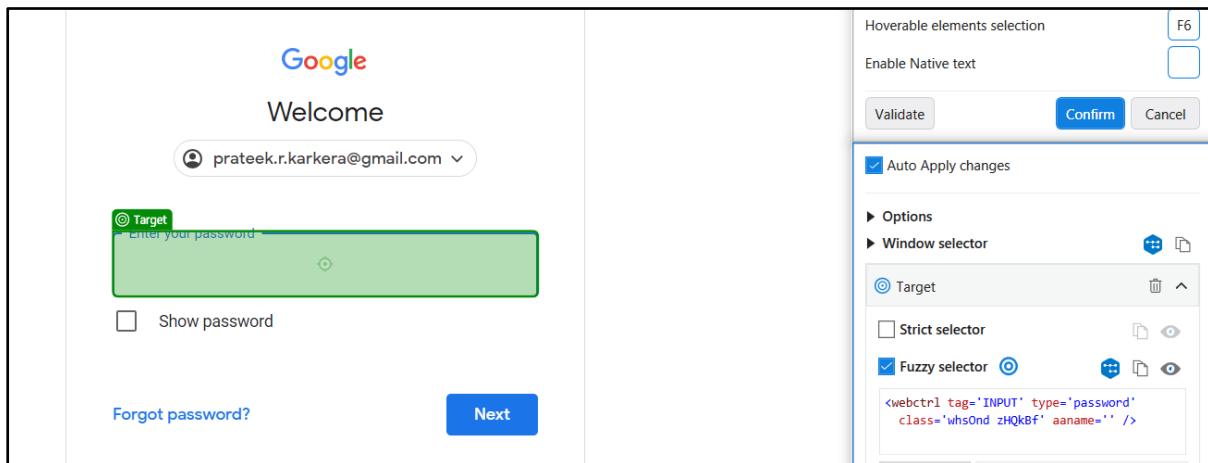
Step 3: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create a variable and specify the variable in the Result property of the Input dialog box. Check the IsPassword property.



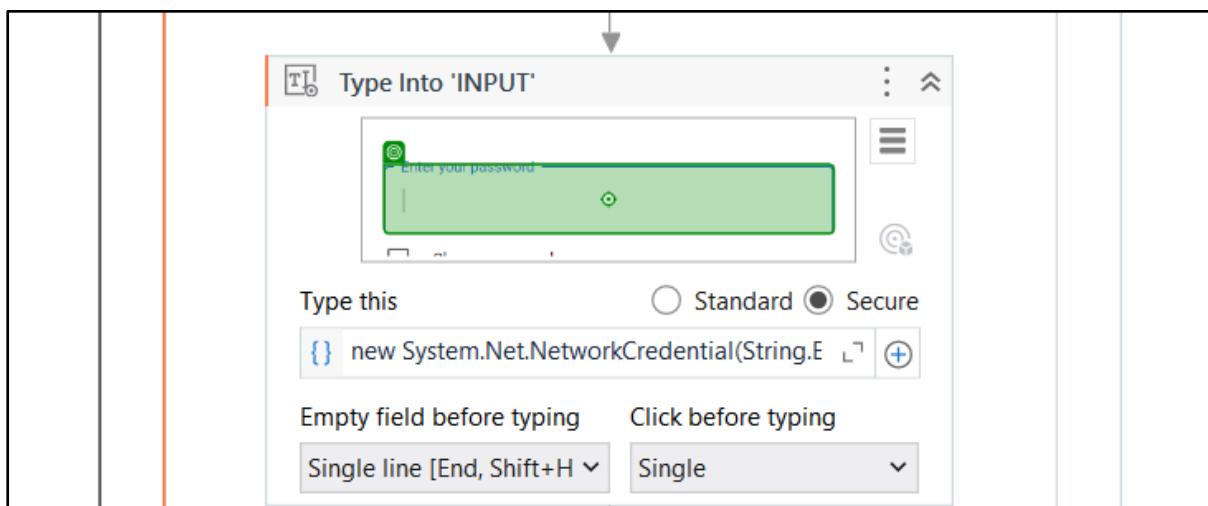
Step 4: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



Step 5: Search for “Type Into” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to click on and Click on Save & Close.

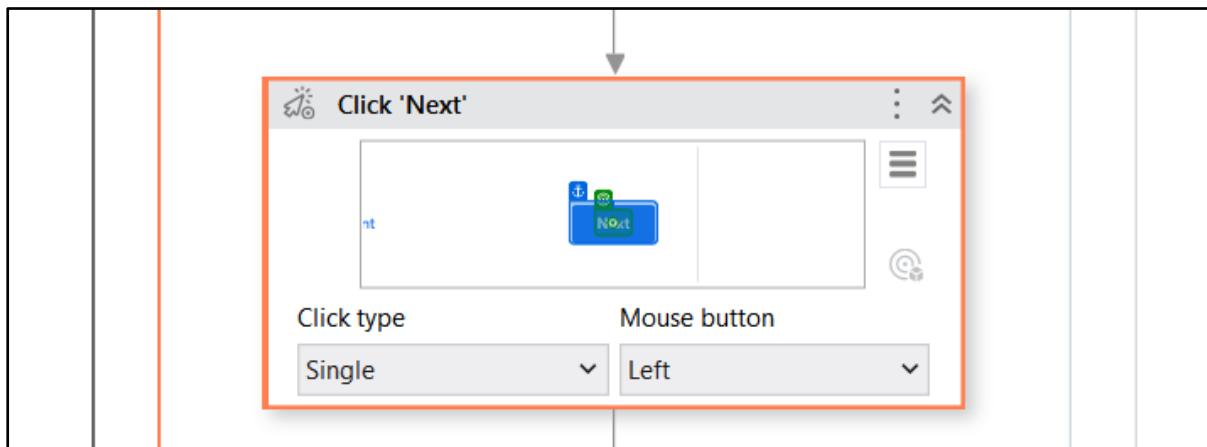


Step 6: Select the Secure Radio Button. Set the variable as Secure String using the code – “new System.Net.NetworkCredential(String.Empty, pwd).SecurePassword”.

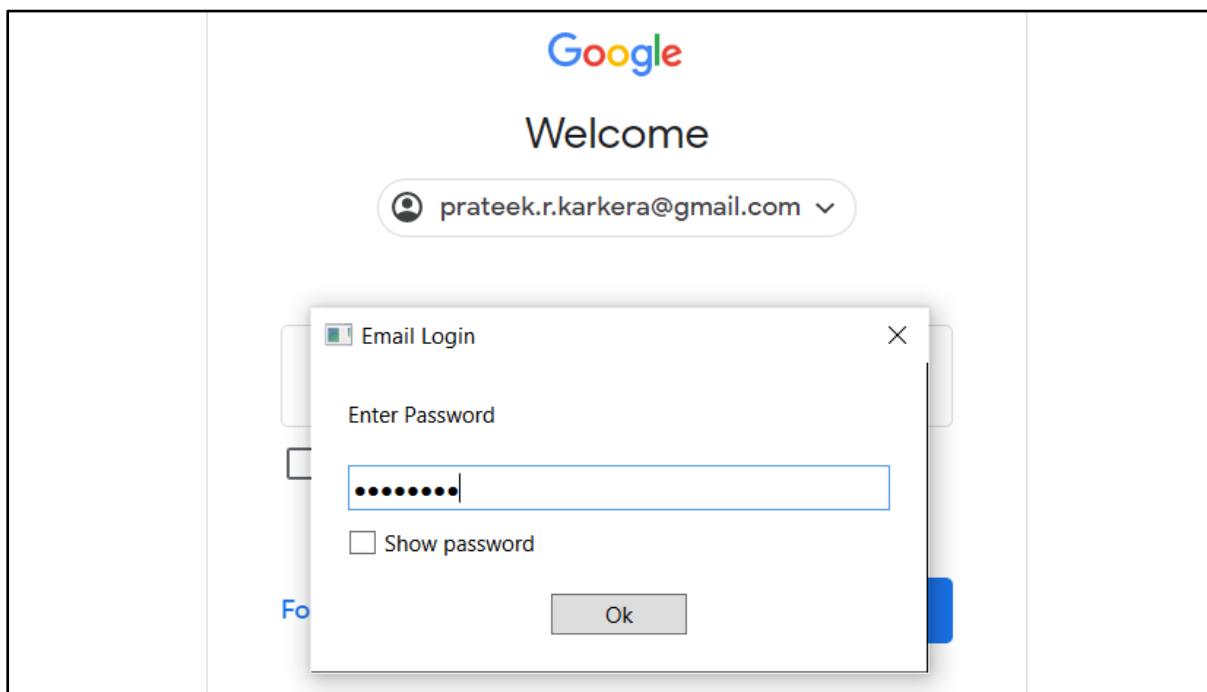


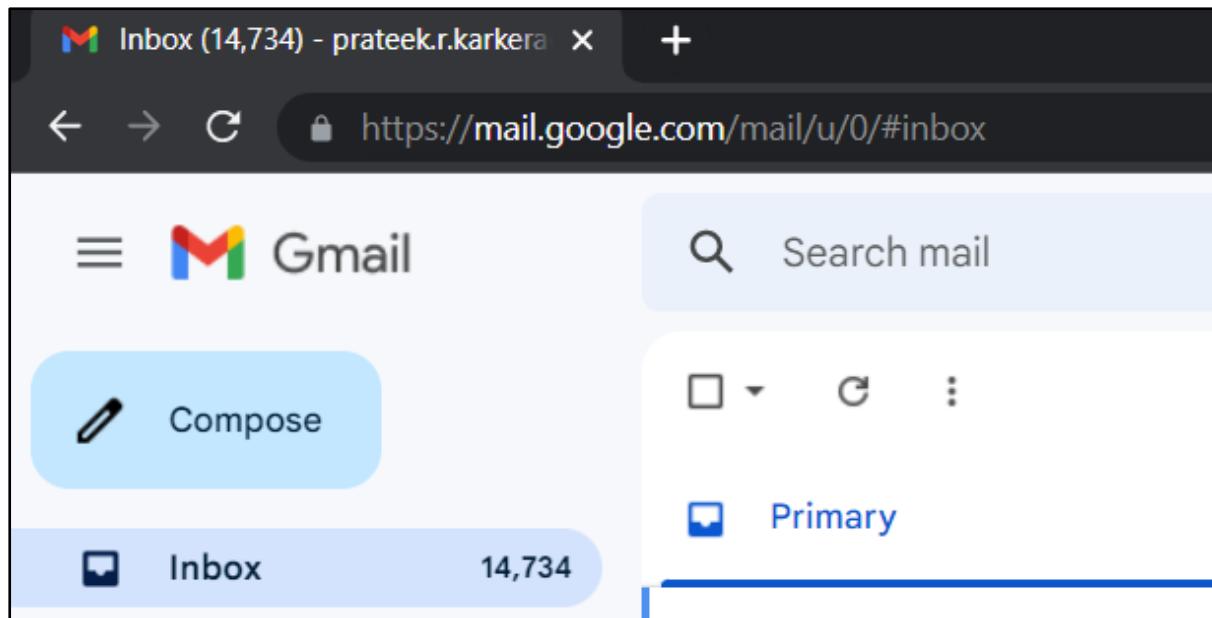
Step 7: Search for “Click” Activity in the Activities Panel and drag it inside the sequence.

Indicate the “Next” button.



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





Conclusion: The practical to demonstrate the mouse, type into, type secure text activity using UiPath is successfully completed.

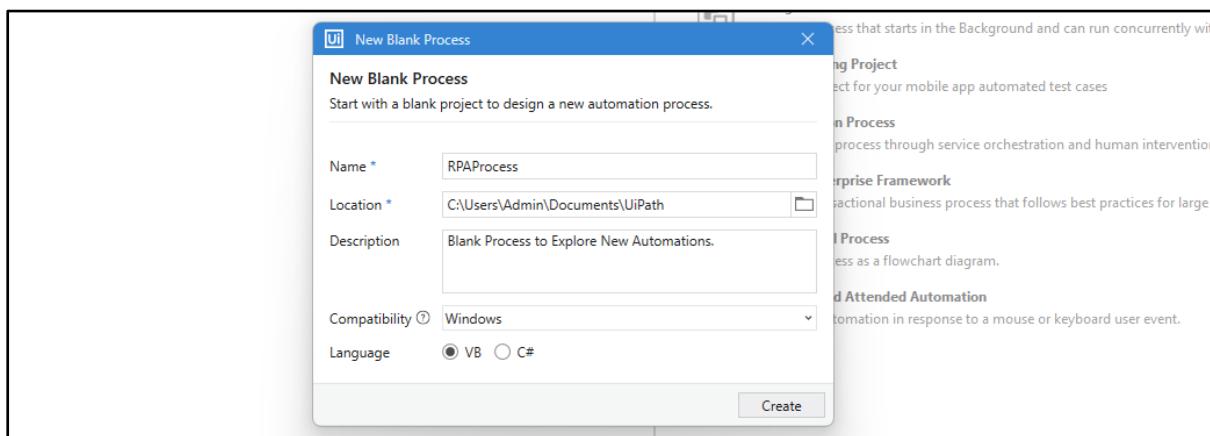
PRACTICAL 8

[A] AIM: Demonstrate the following events in UiPath.

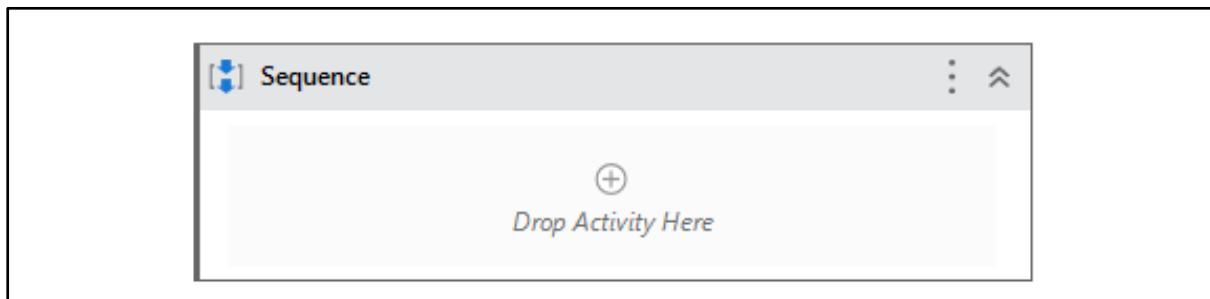
[I] Element Triggering Event

[a] Click Trigger

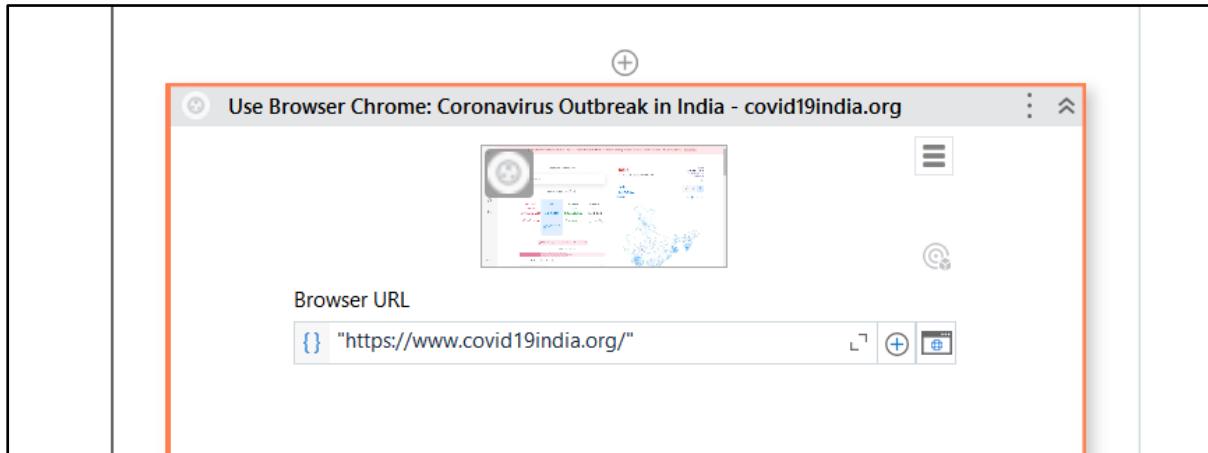
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



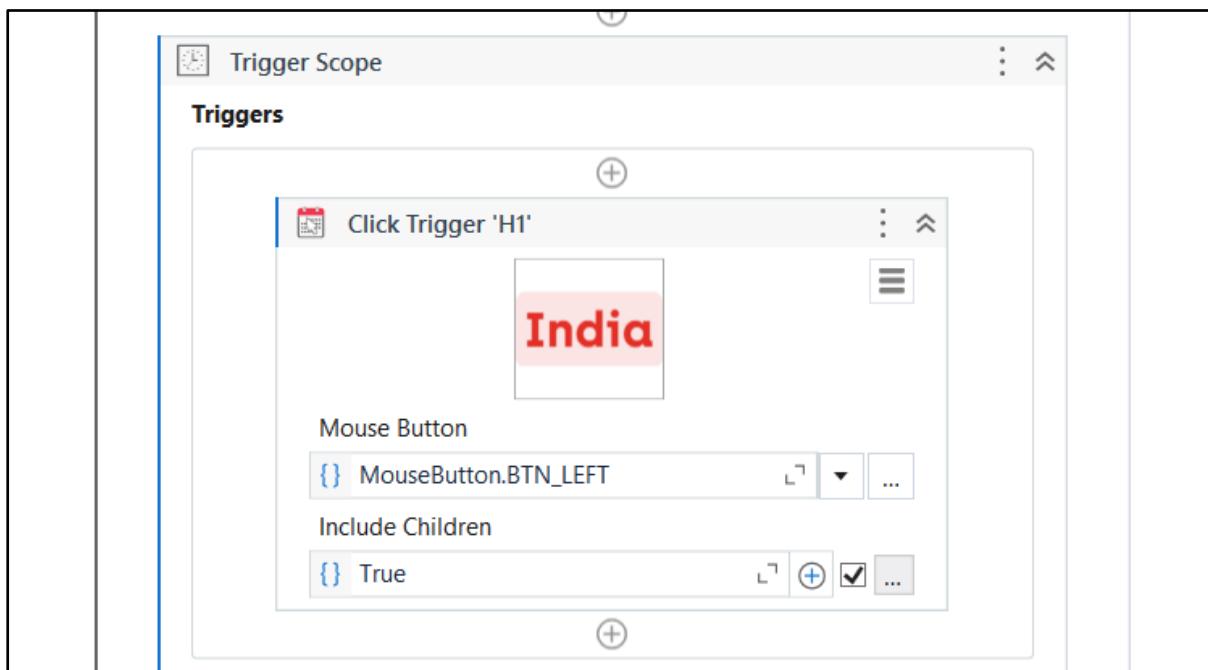
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



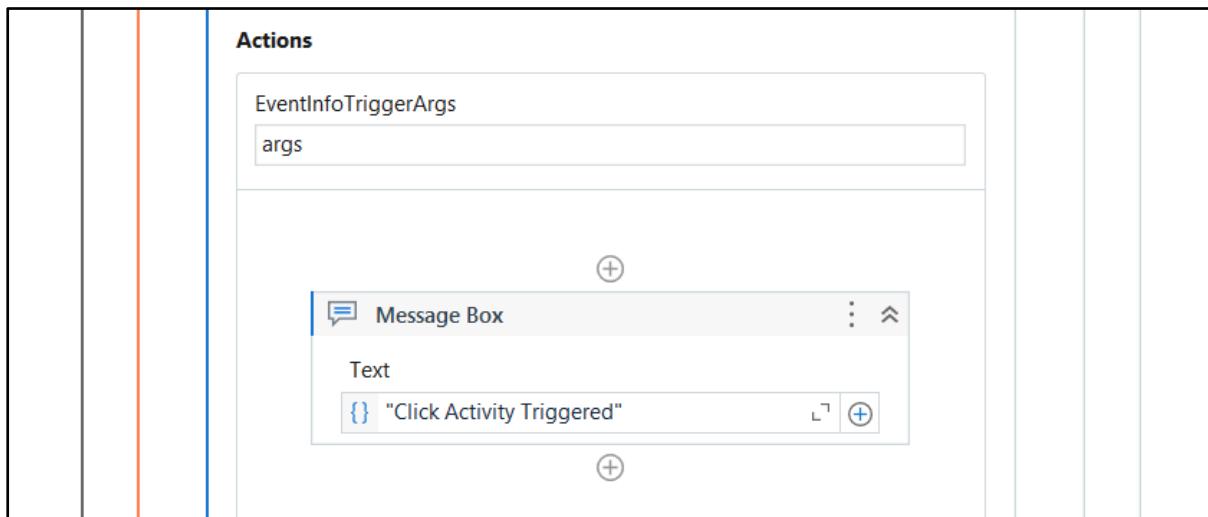
Step 3: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



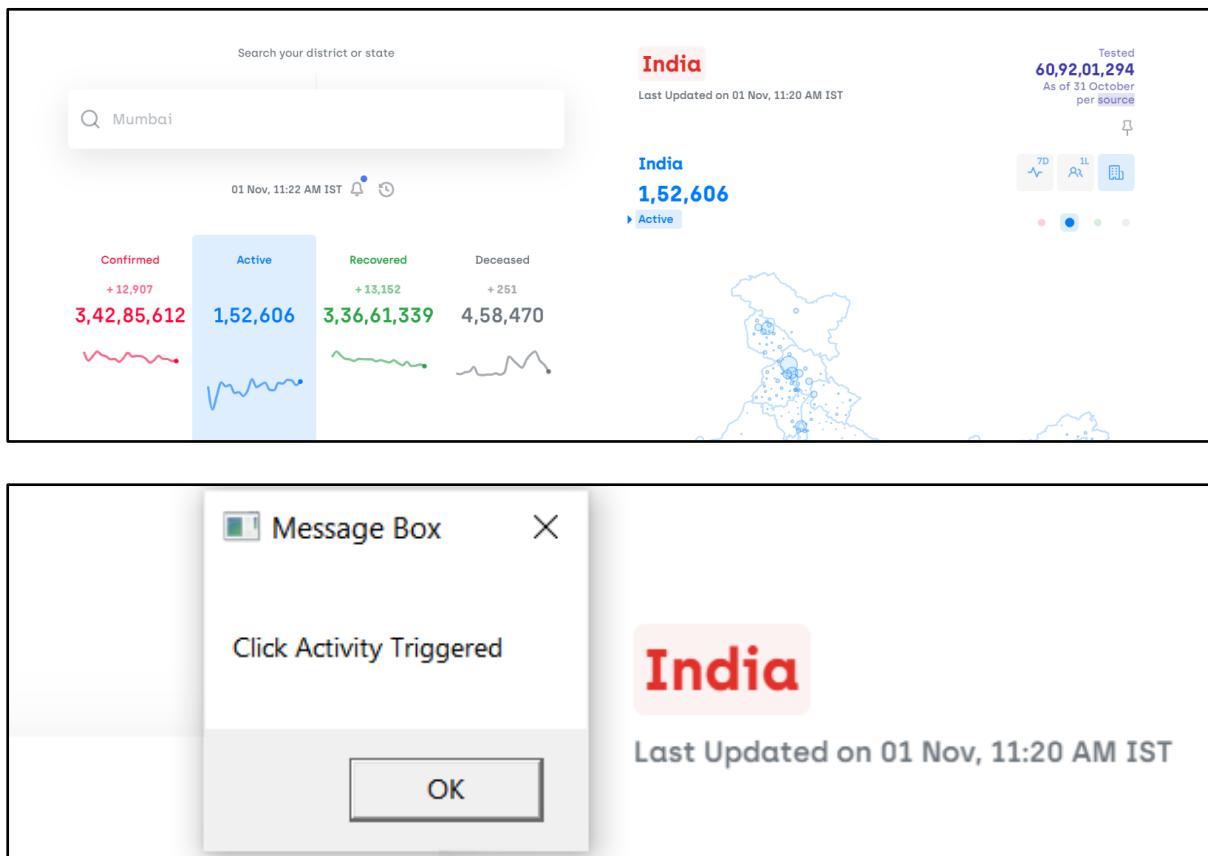
Step 4: Search for “Trigger Scope” Activity in the Activities Panel and drag it inside the sequence workflow. Search for “Click Trigger” in the Activities Panel and drag it inside the sequence. Indicate the Element you want to click on and Click on Save & Close.



Step 5: Search for “Message Box” Activity in the Activities Panel and drag it inside the Action Section. Enter the Output value.

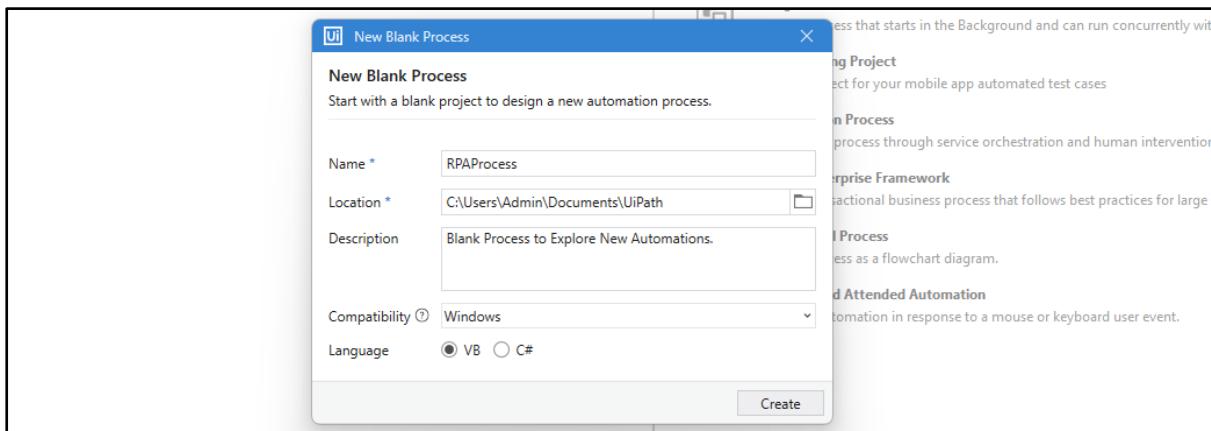


Step 6: Click the Run button and see the result.

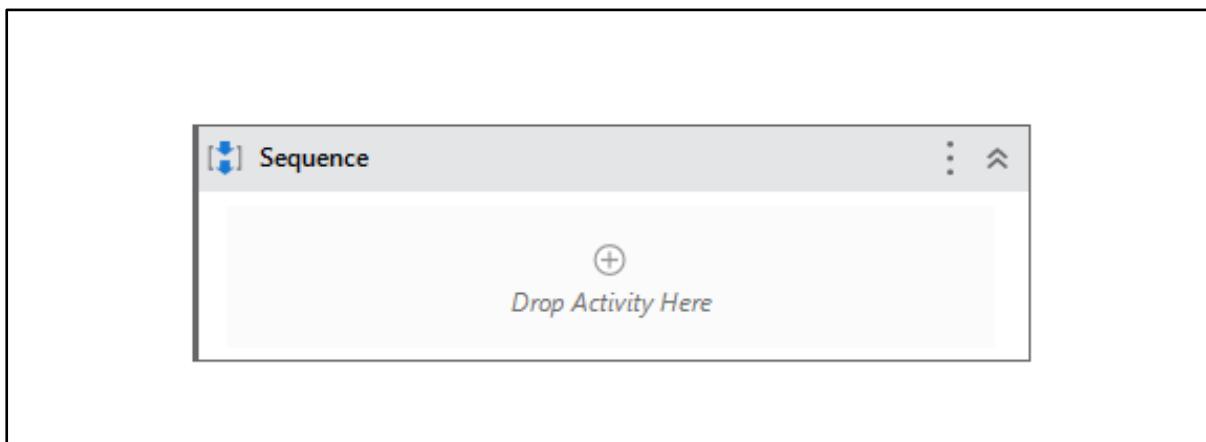


[b] Key Press Trigger

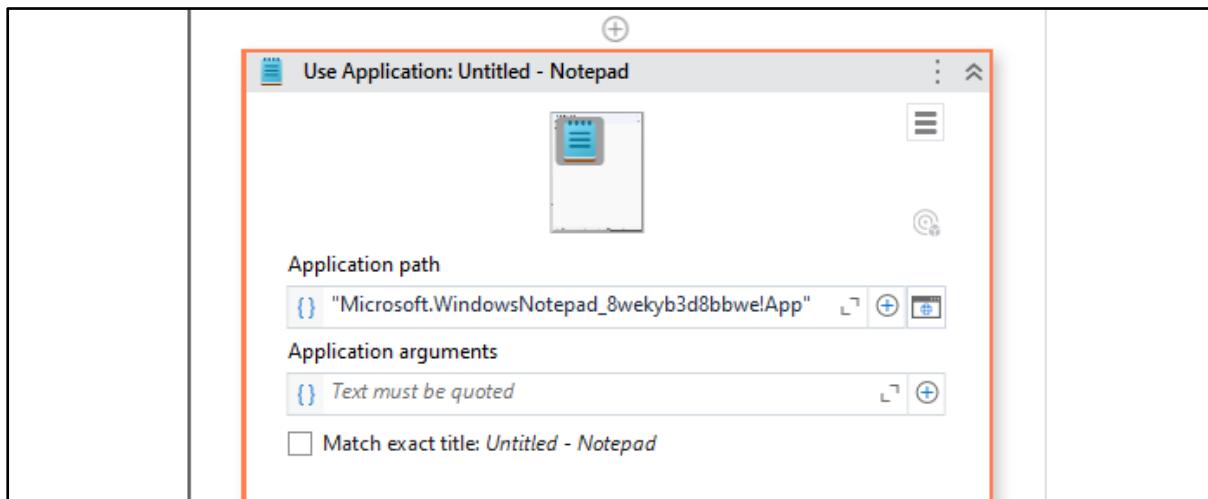
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



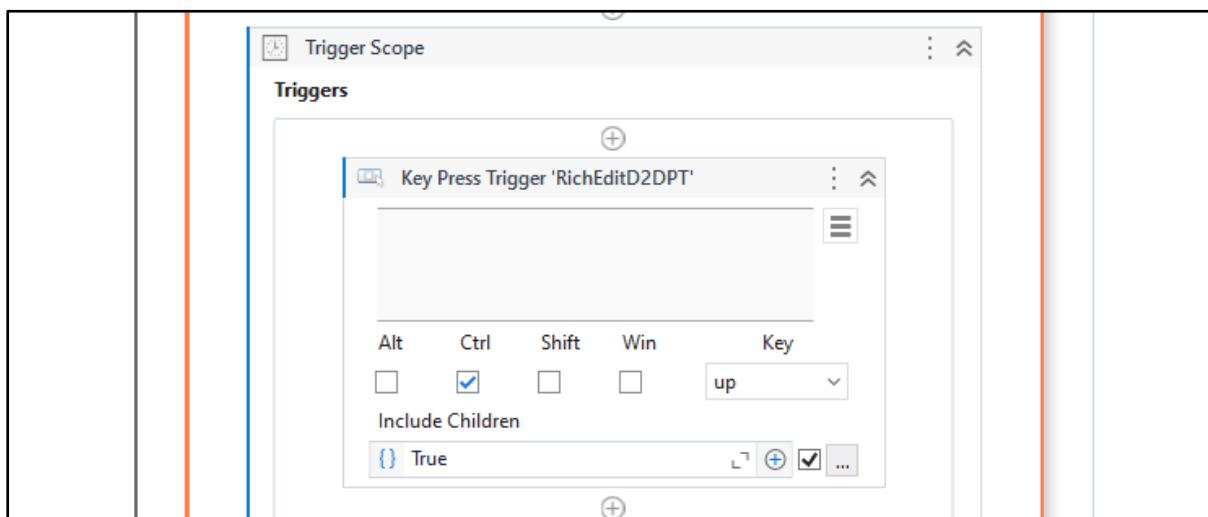
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



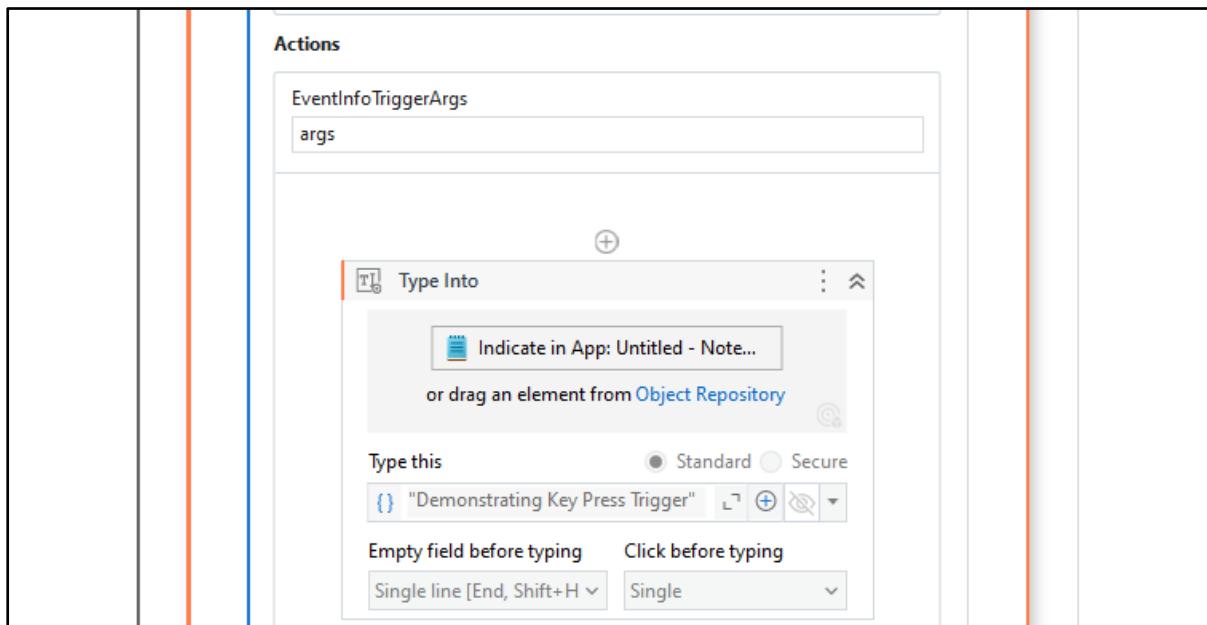
Step 3: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



Step 4: Search for “Trigger Scope” Activity in the Activities Panel and drag it inside the sequence workflow. Search for “Key Press Trigger” in the Activities Panel and drag it inside the sequence. Indicate the Element you want to click on and select the Key Press combination to trigger.

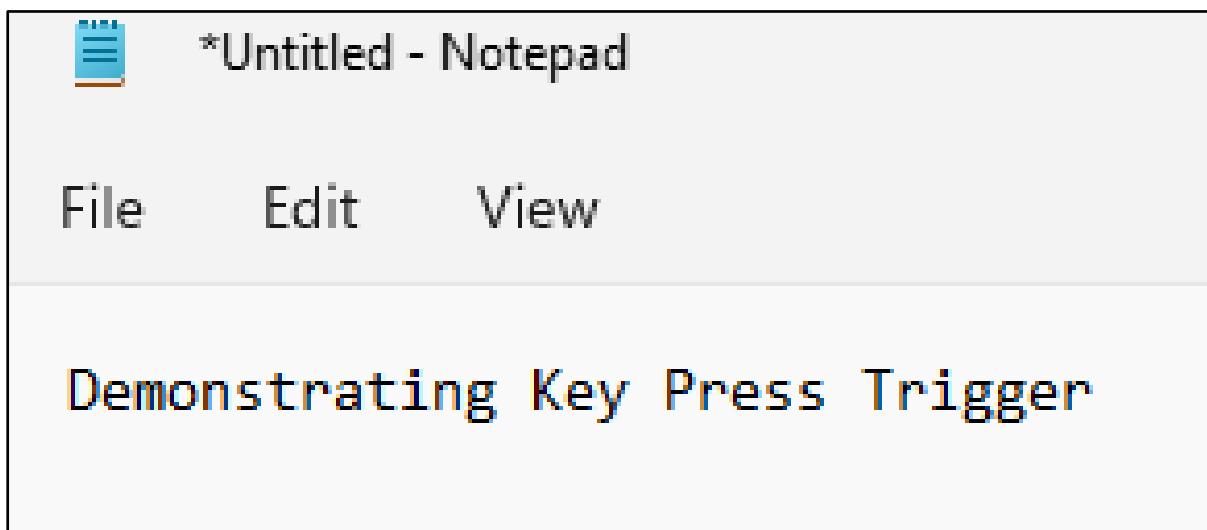


Step 5: Search for “Type Into” Activity in the Activities Panel and drag it inside the Action Section. Indicate the screen and enter the text to type.



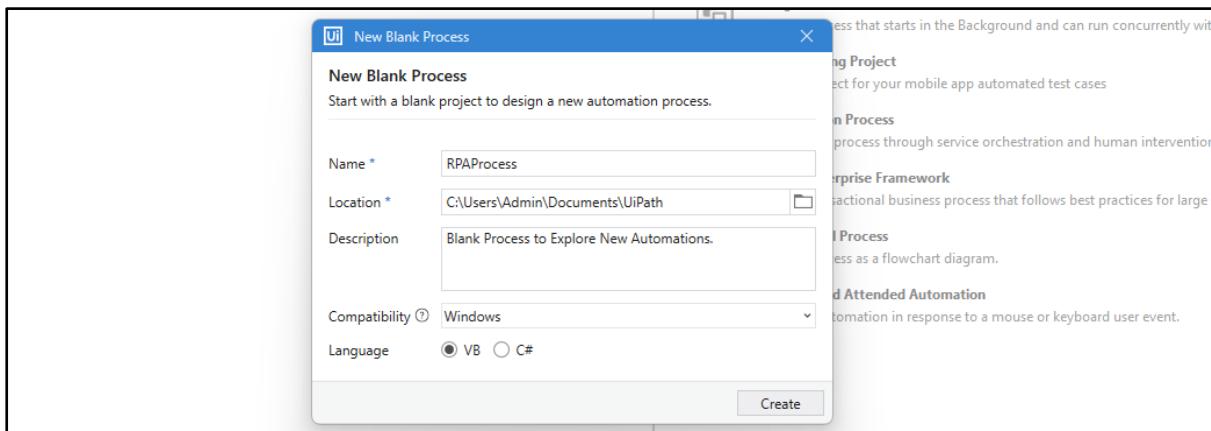
Step 6: Click the Run button and see the result.

After entering Key Press Combination.

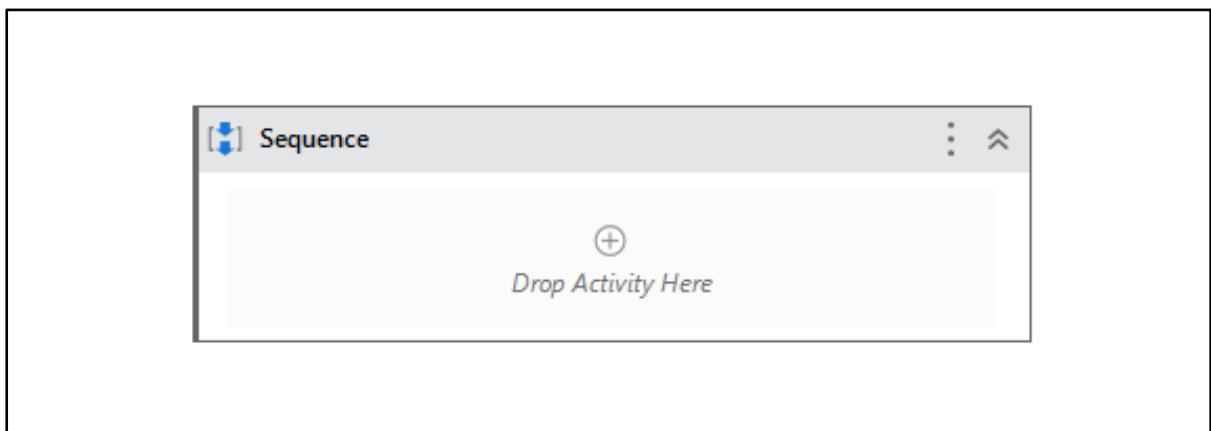


[II] Image Triggering Event

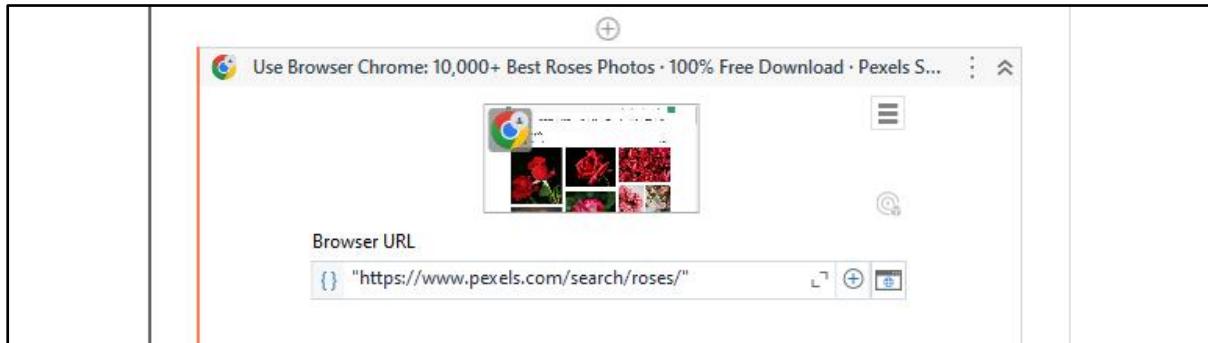
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



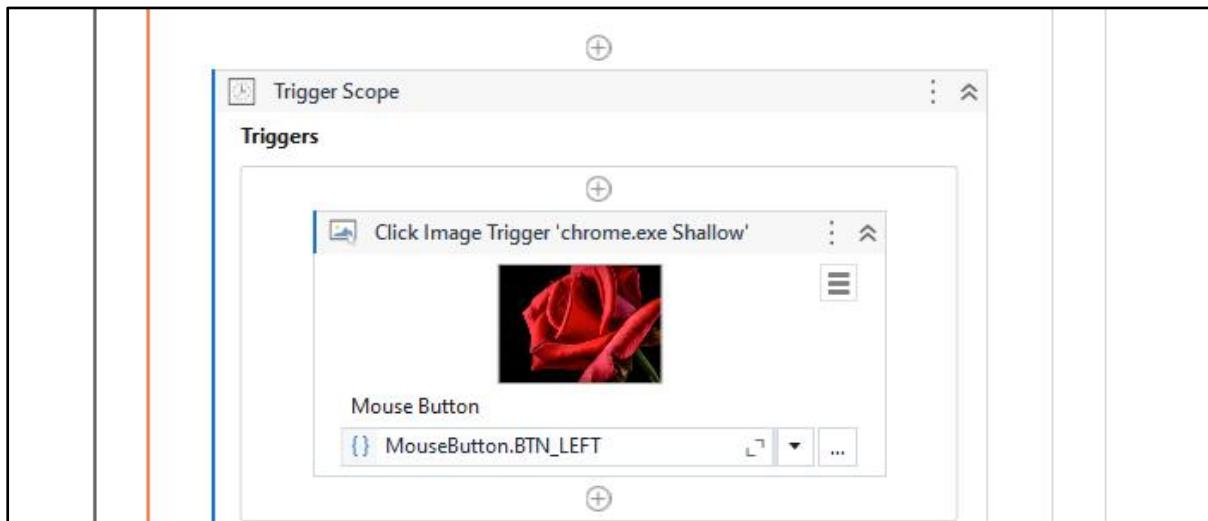
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



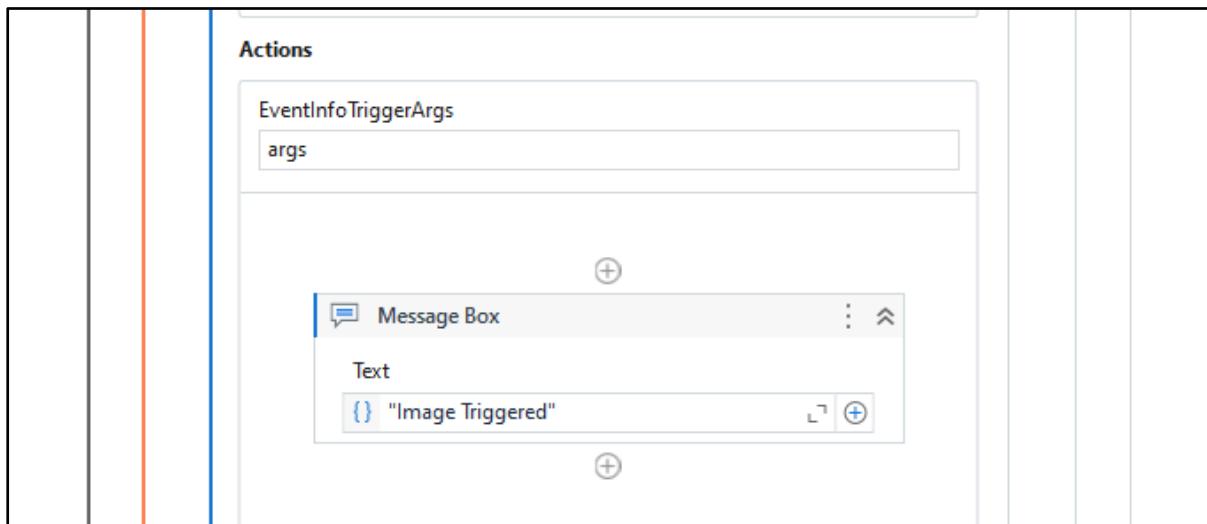
Step 3: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



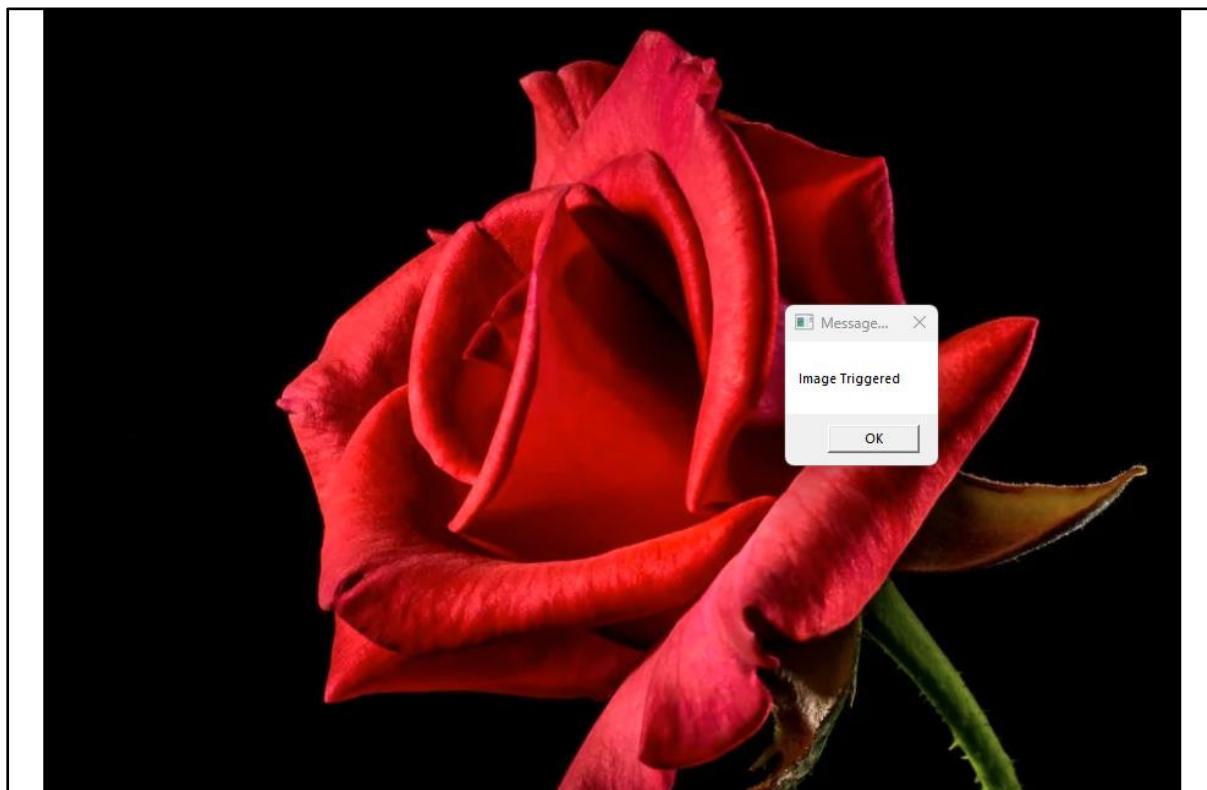
Step 4: Search for “Trigger Scope” Activity in the Activities Panel and drag it inside the sequence workflow. Search for “Click Image Trigger” in the Activities Panel and drag it inside the sequence. Indicate the Image you want to click on and Click on Save & Close.



Step 5: Search for “Message Box” Activity in the Activities Panel and drag it inside the Action Section. Enter the Output value.



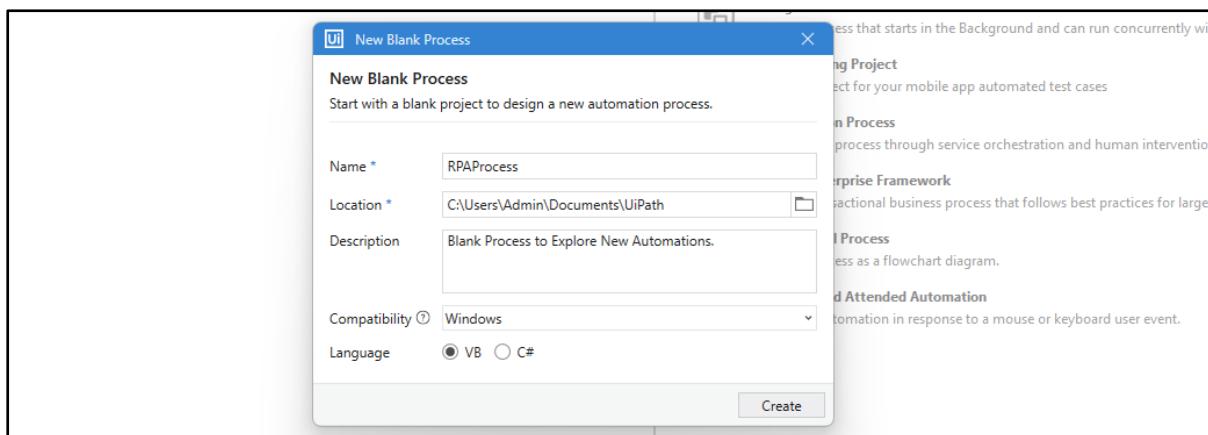
Step 6: Click the Run button and see the result.



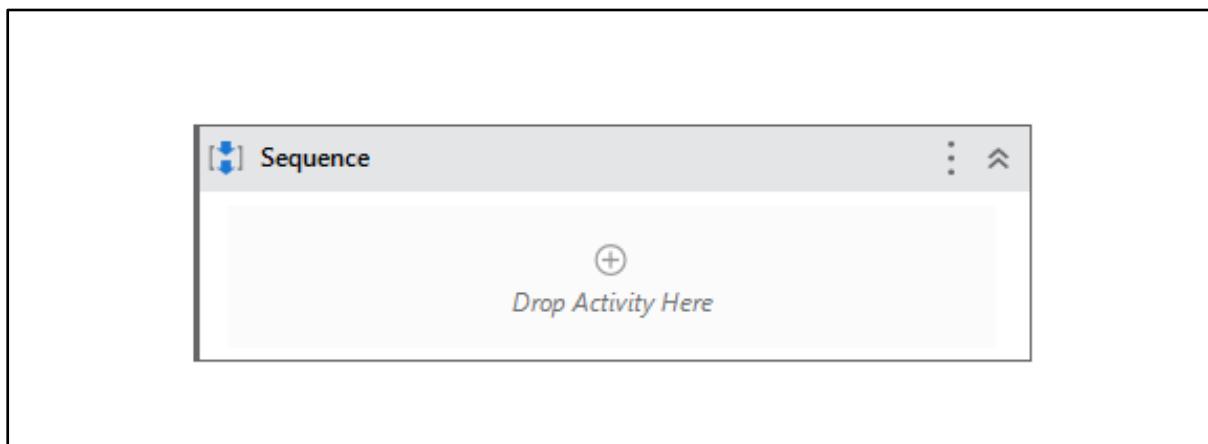
[III] System Triggering Event

[a] Hotkey Trigger

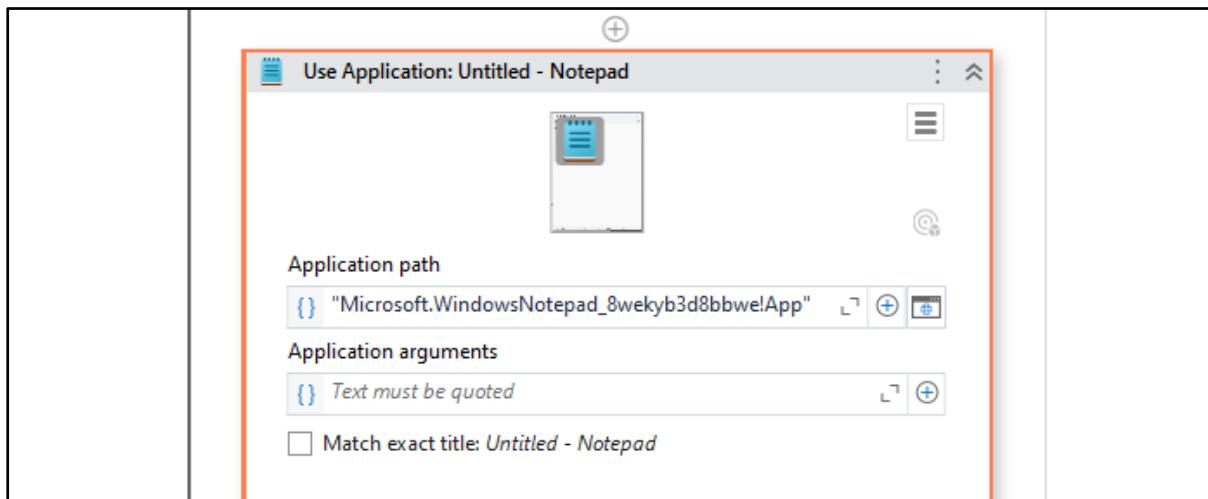
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



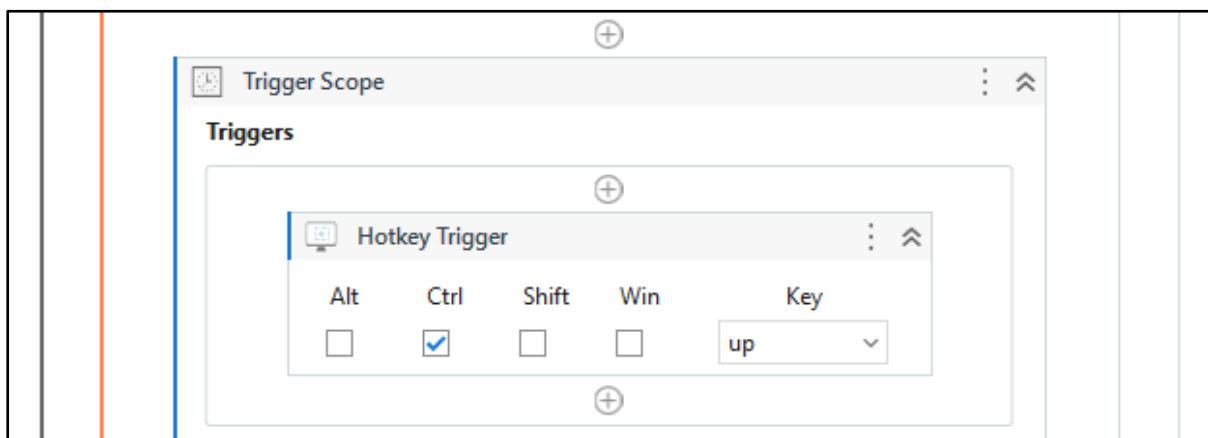
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



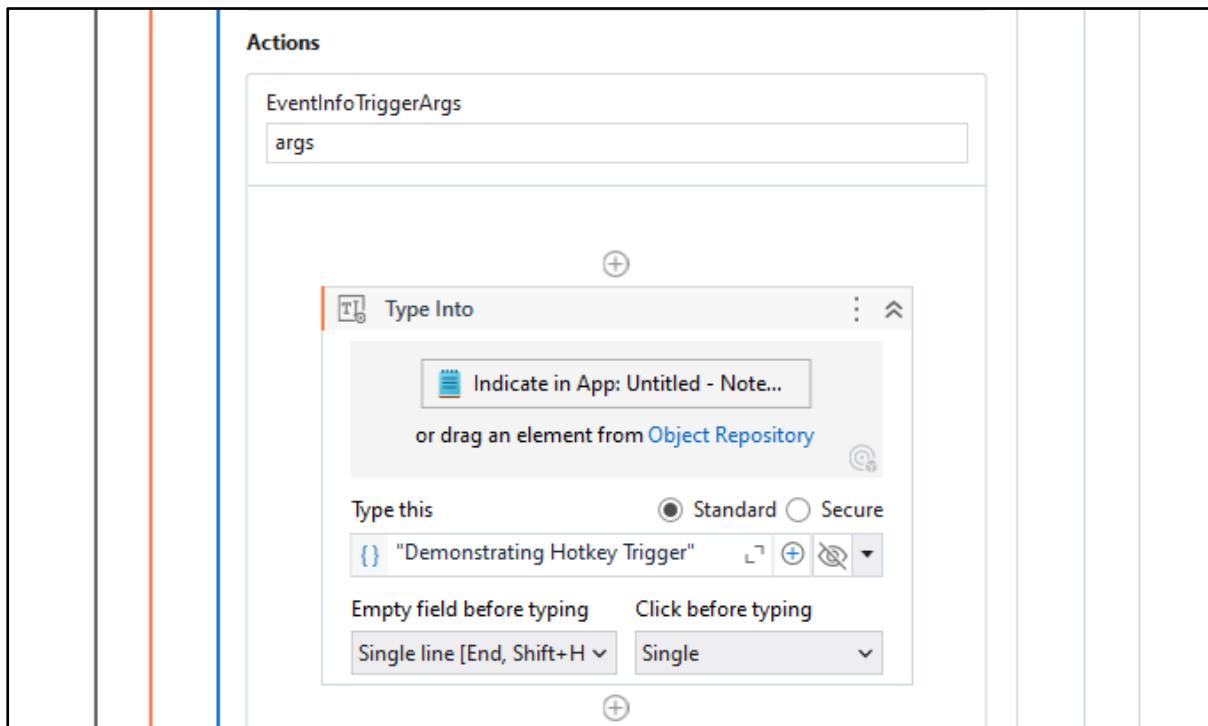
Step 3: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



Step 4: Search for “Trigger Scope” Activity in the Activities Panel and drag it inside the sequence workflow. Search for “Hotkey Trigger” in the Activities Panel and drag it inside the sequence. Indicate the Element you want to click on and select the Hotkey combination to trigger.

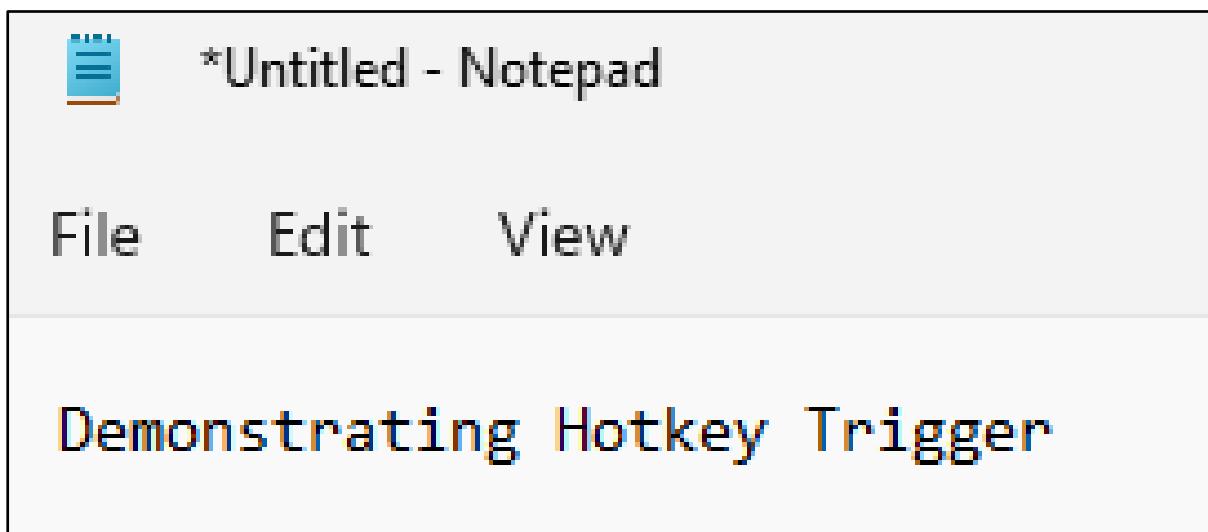


Step 5: Search for “Type Into” Activity in the Activities Panel and drag it inside the Action Section. Indicate the screen and enter the text to type.



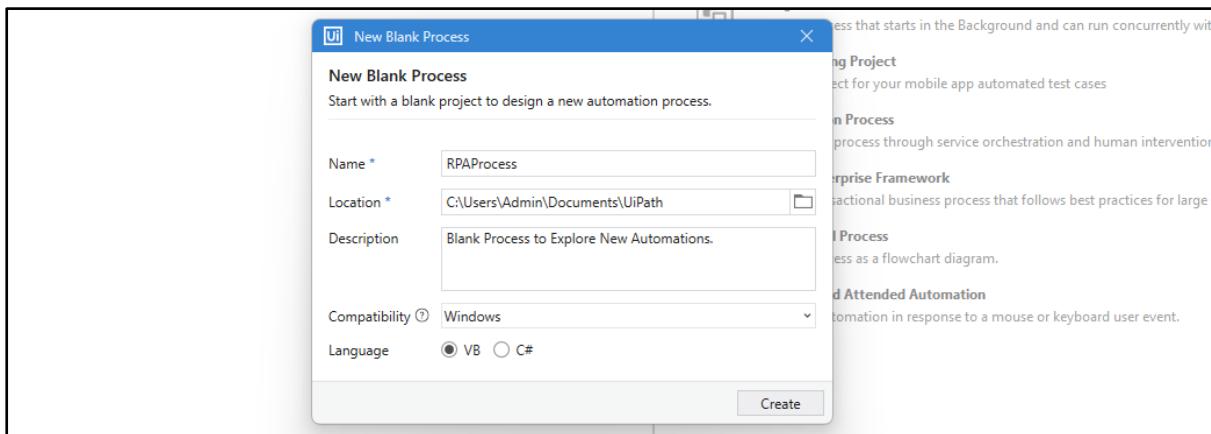
Step 6: Click the Run button and see the result.

After entering Hotkey Combination.

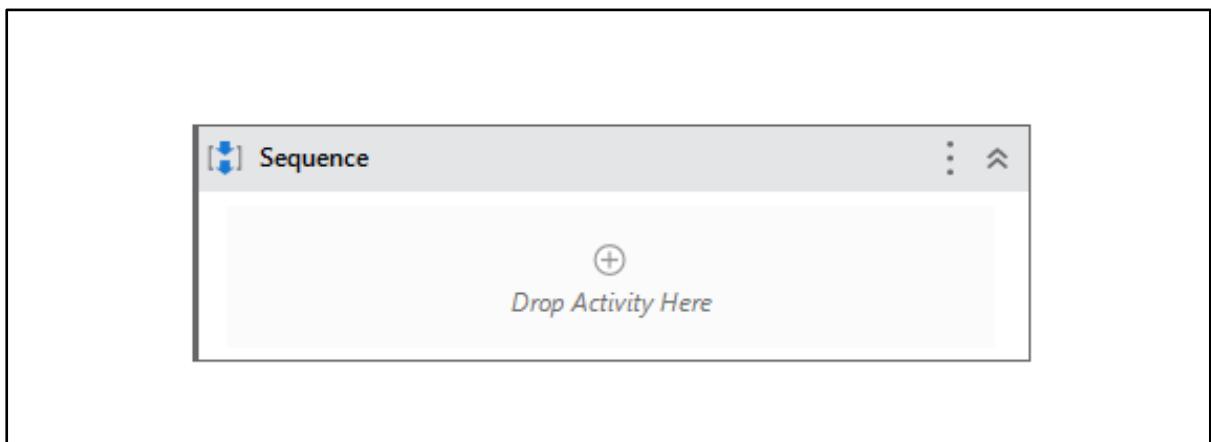


[b] Mouse Trigger

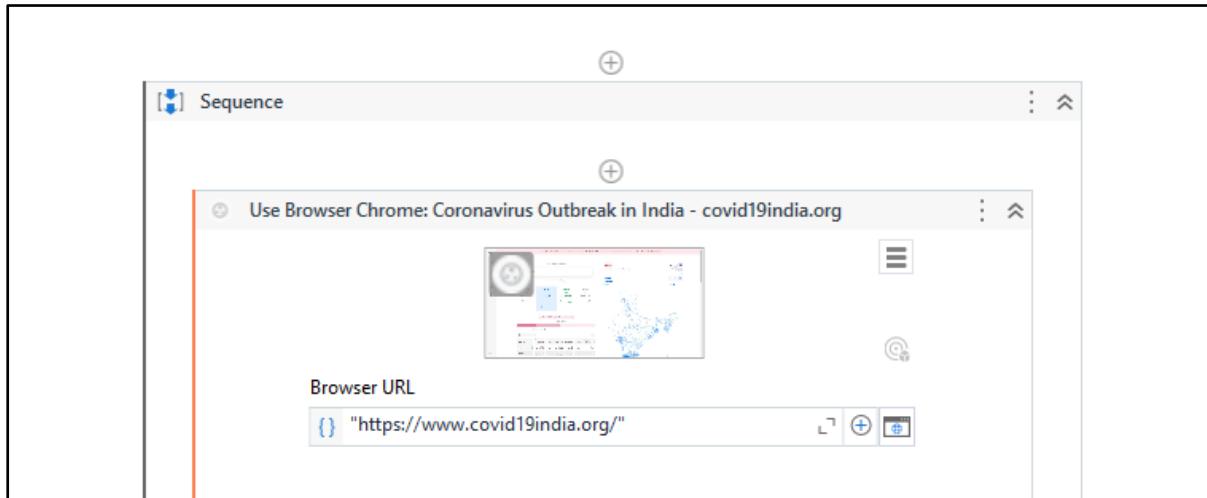
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



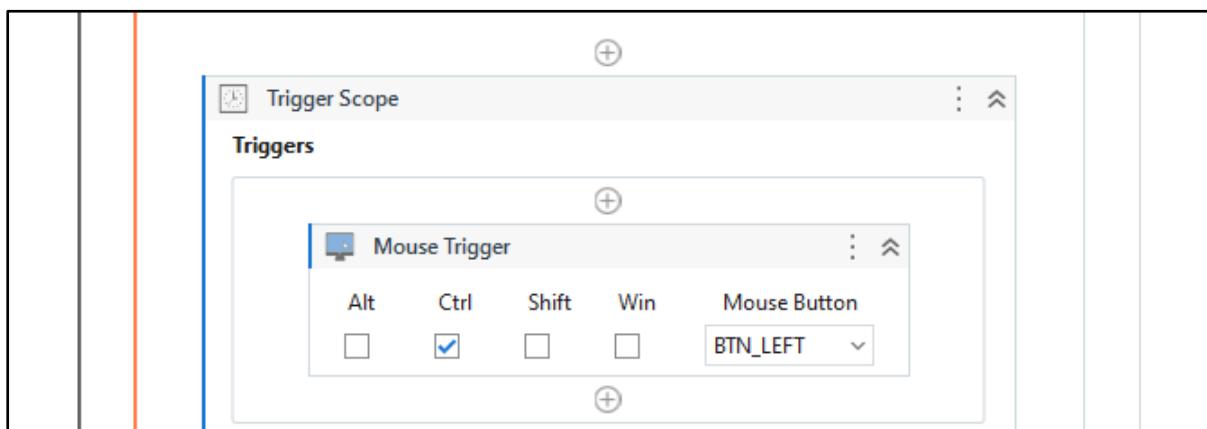
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



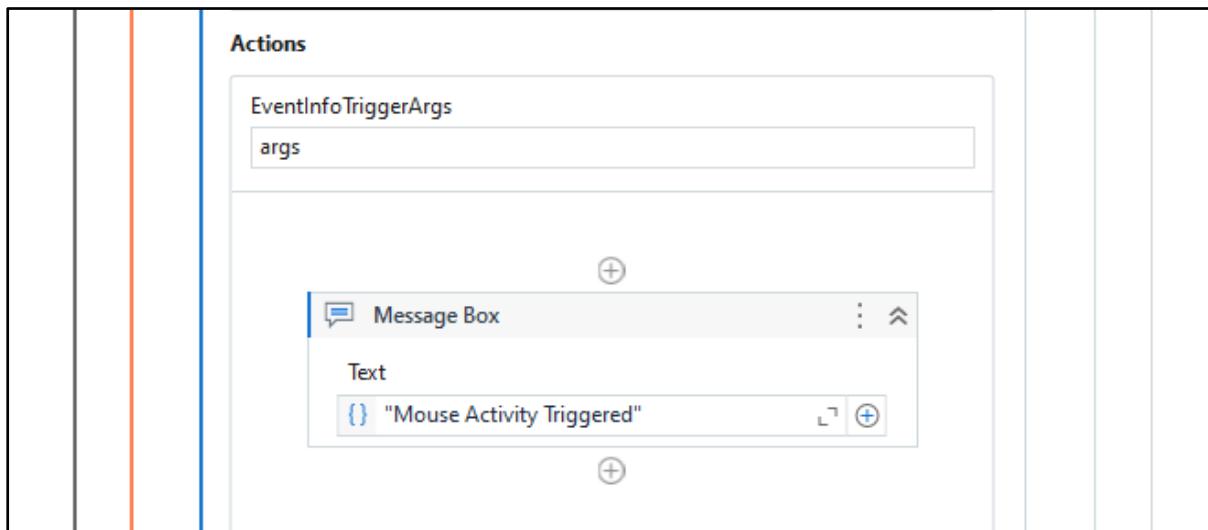
Step 3: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



Step 4: Search for “Trigger Scope” Activity in the Activities Panel and drag it inside the sequence workflow. Search for “Mouse Trigger” in the Activities Panel and drag it inside the sequence. Indicate the Element you want to click on and select the Mouse Key combination to trigger.

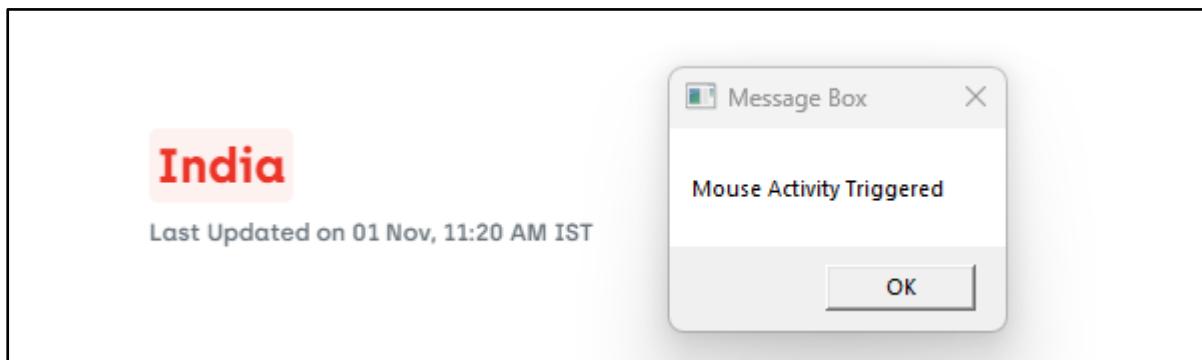


Step 5: Search for “Type Into” Activity in the Activities Panel and drag it inside the Action Section. Indicate the screen and enter the text to type.



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

After entering Mouse Key Combination.

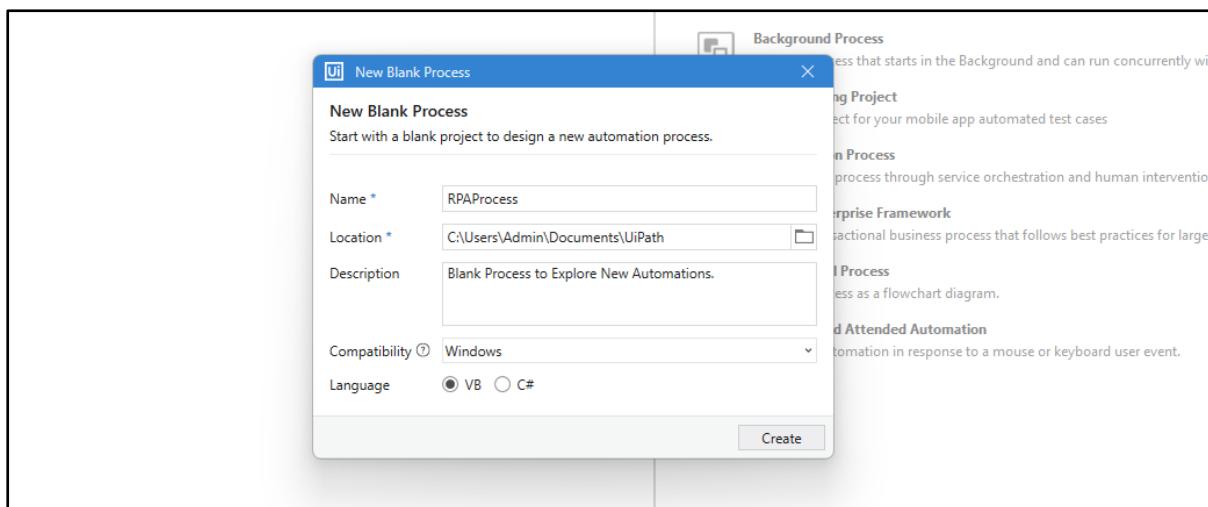


Conclusion: The practical to demonstrate Element Triggering, Image Triggering and System Triggering events in UiPath is successfully completed.

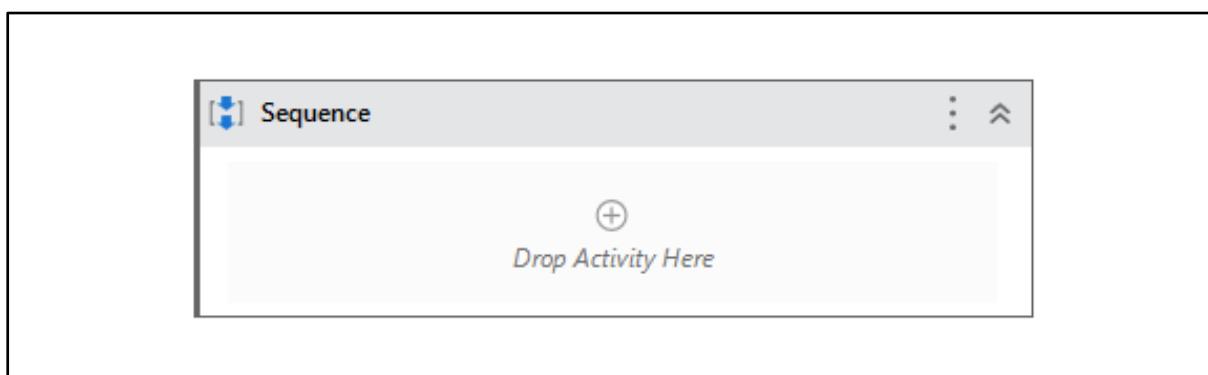
[B] Aim: Automate the following screen scraping methods using UiPath.

[I] Full Text

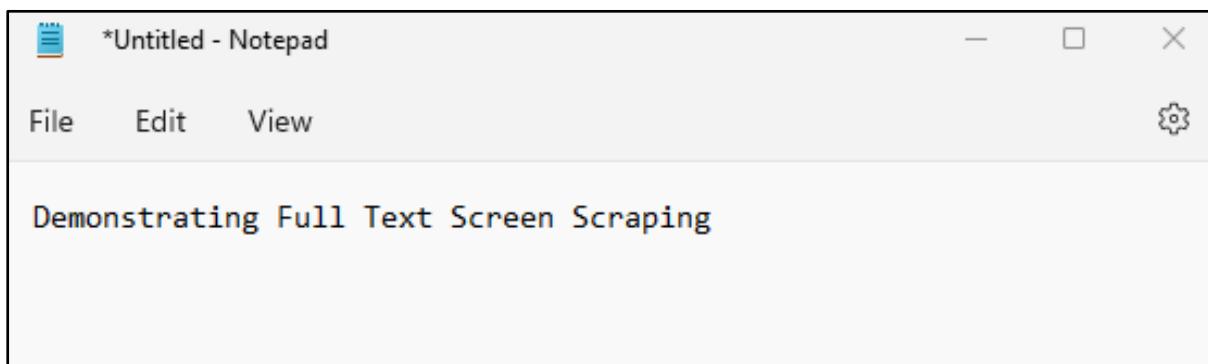
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



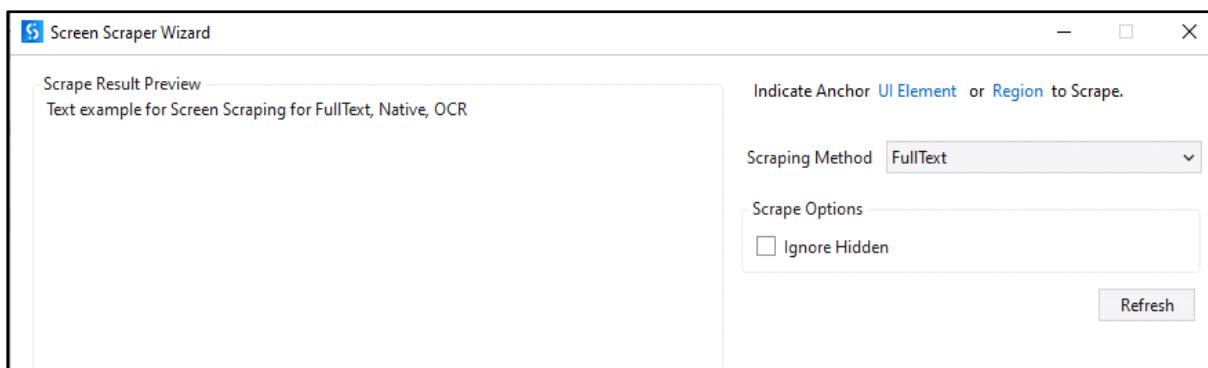
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



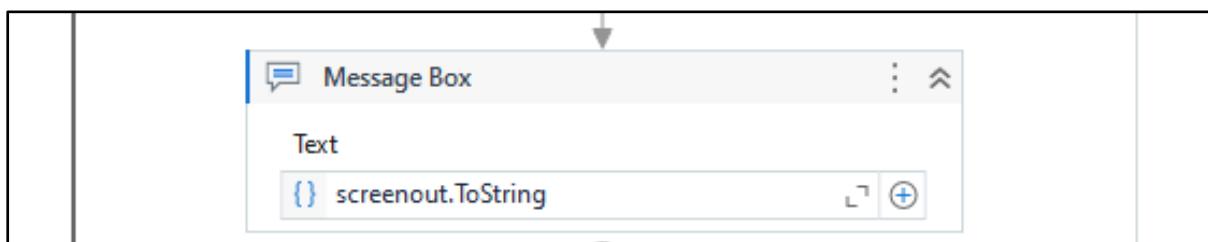
Step 3: Open a file with some text to scrape from.



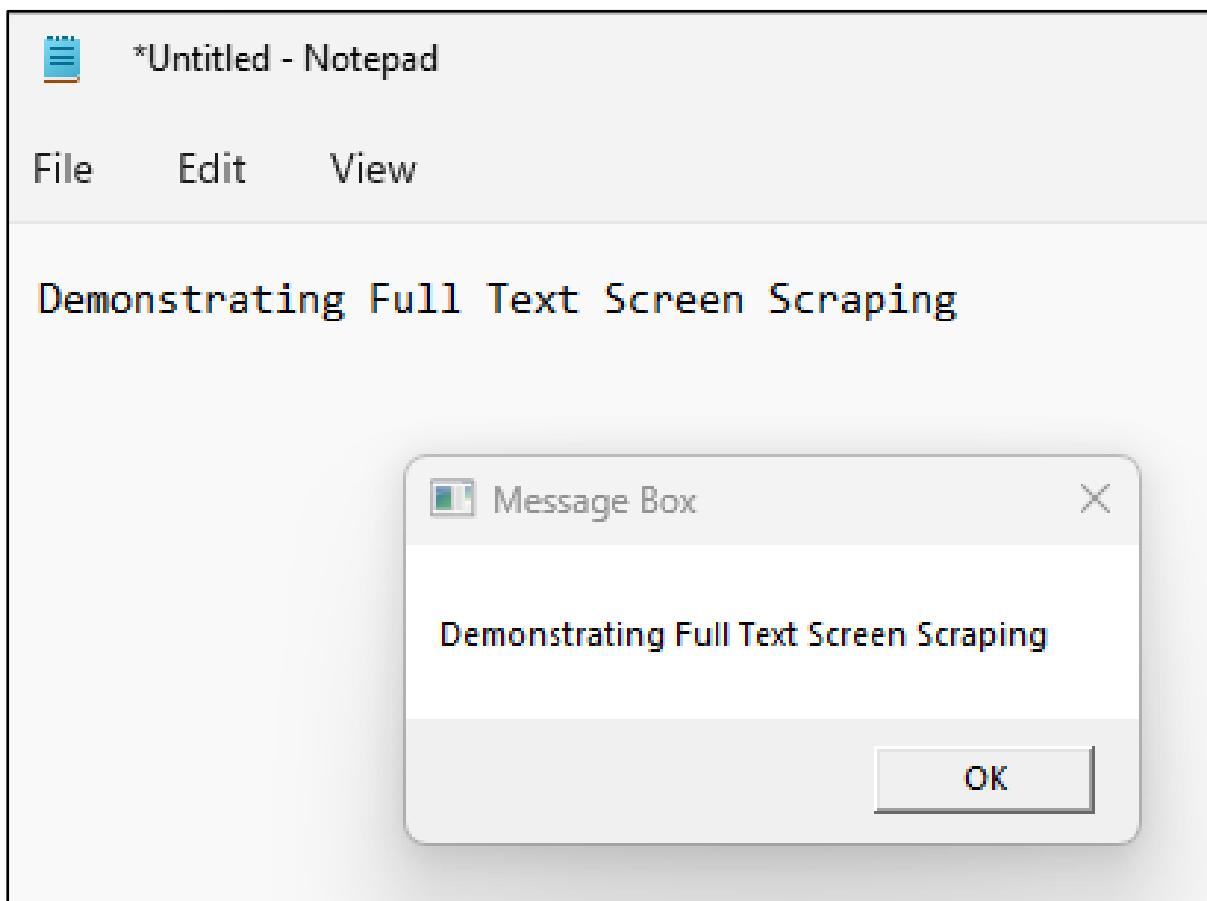
Step 4: Search for “Screen Scraping” in the Search panel of the Activities Panel and drag it inside the sequence. Set the Scraping method as Full Text. Create and set variable to store the output.



Step 5: Search for “Message Box” in Activities Panel and drag it inside the sequence workflow. Enter the output variable.

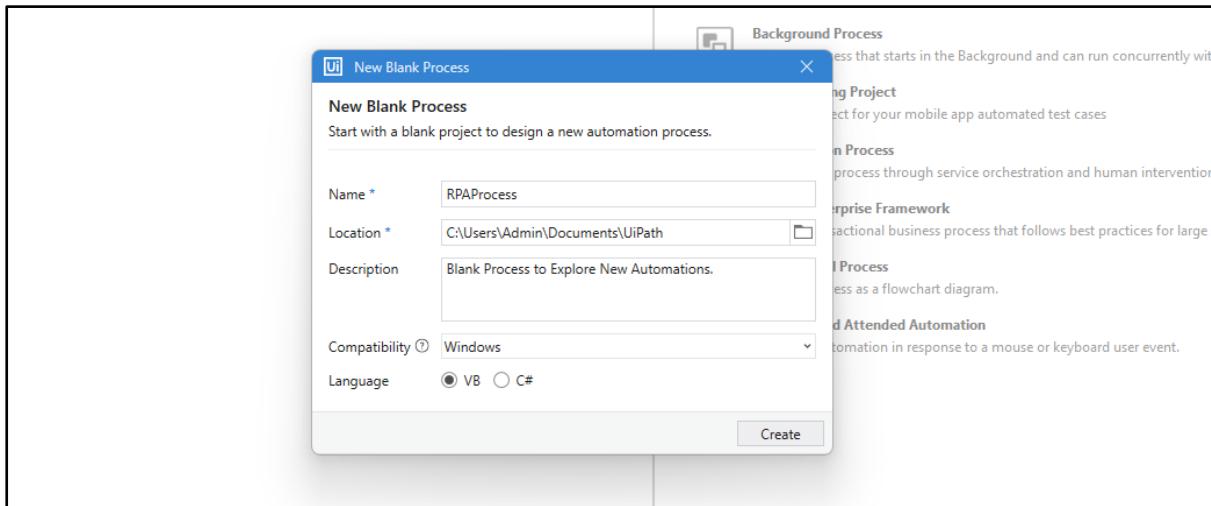


Step 6: Click on the Run button and see the Results.

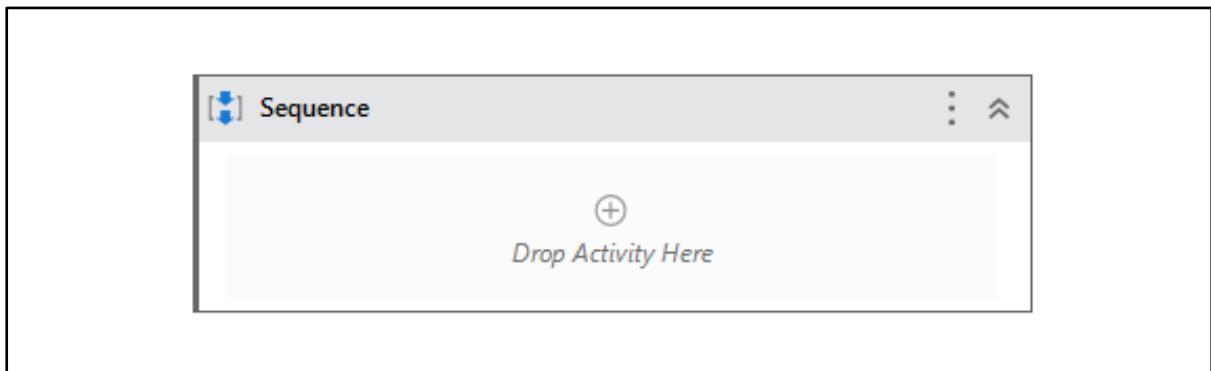


[II] Native

Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



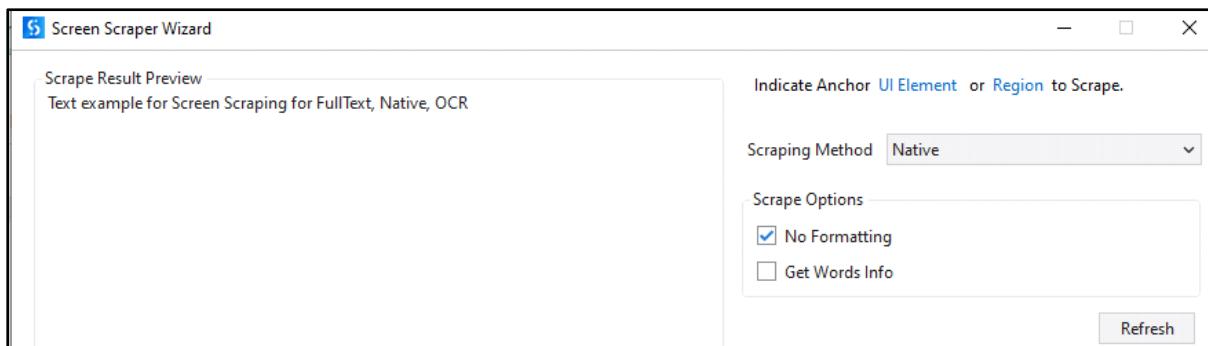
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Open a file with some text to scrape from.



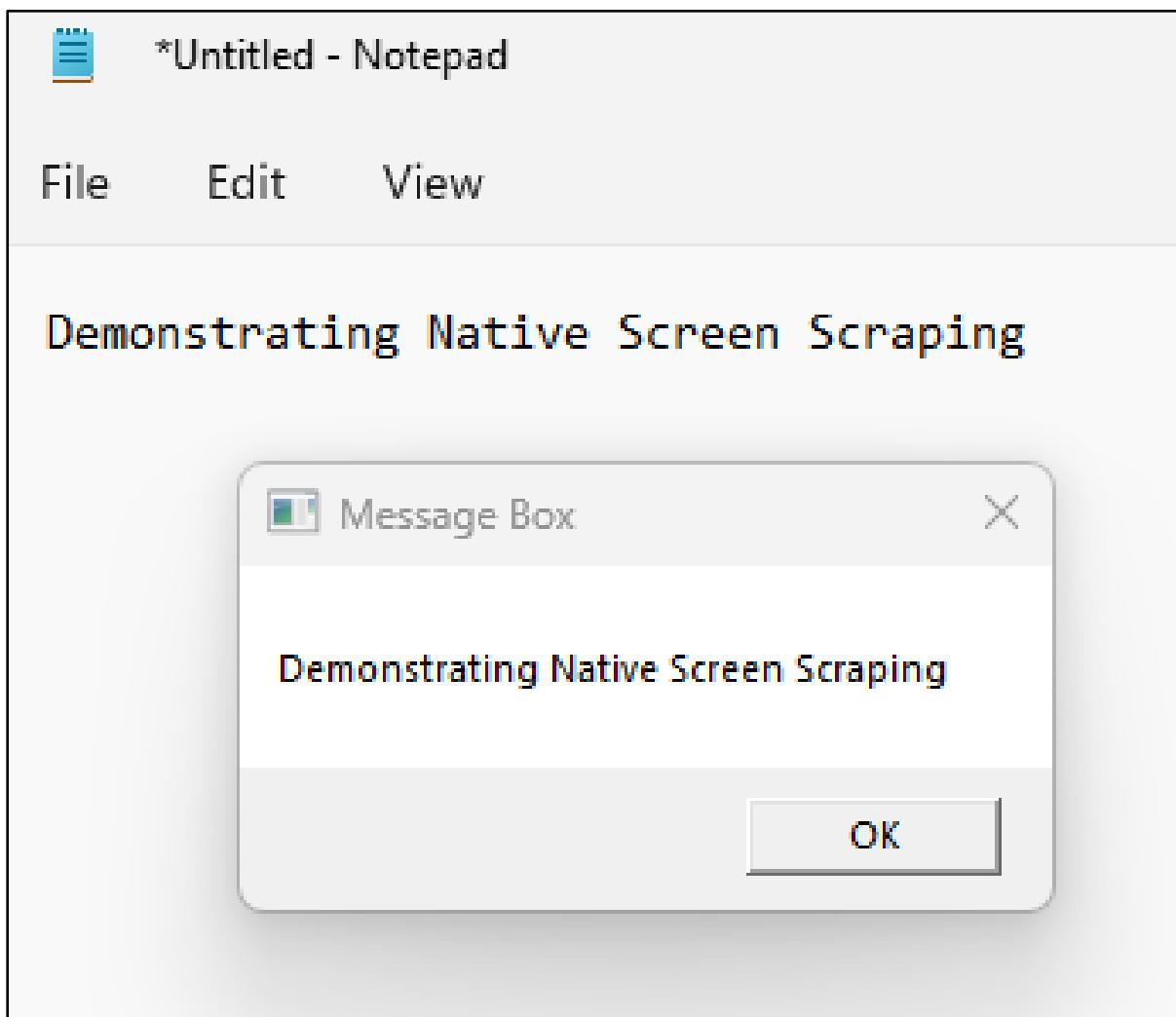
Step 4: Search for “Screen Scraping” in the Search panel of the Activities Panel and drag it inside the sequence. Set the Scraping method as Full Text. Select the “No Formatting” checkbox. Create and set variable to store the output.



Step 5: Search for “Message Box” in Activities Panel and drag it inside the sequence workflow. Enter the output variable.

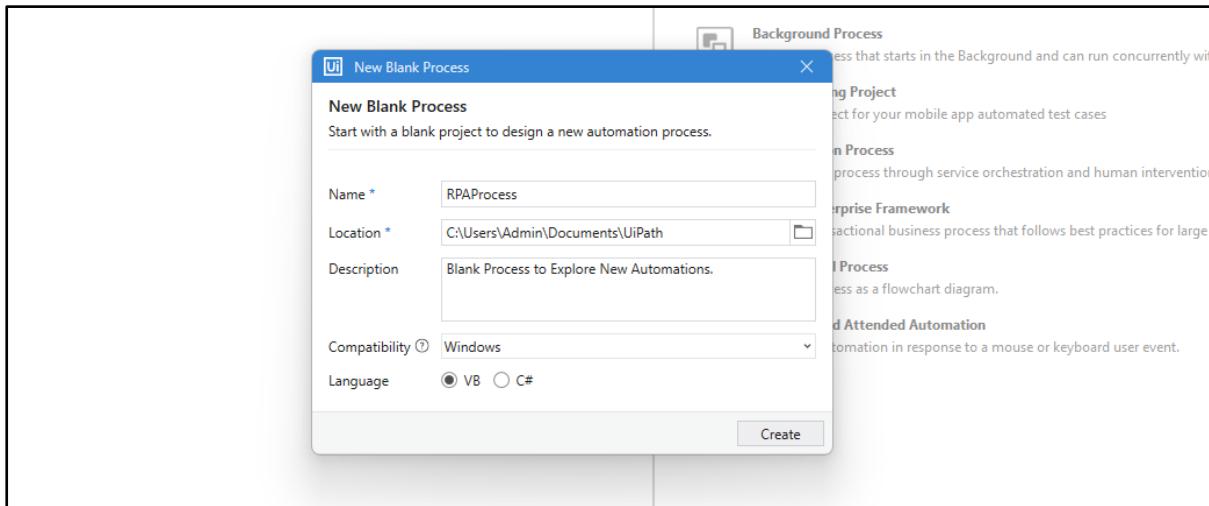


Step 6: Click on the Run button and see the Results.

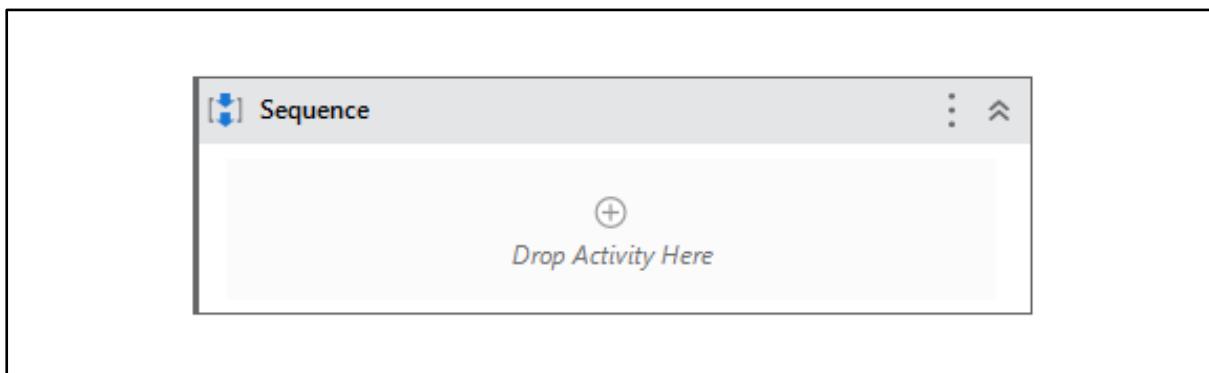


[III] OCR

Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



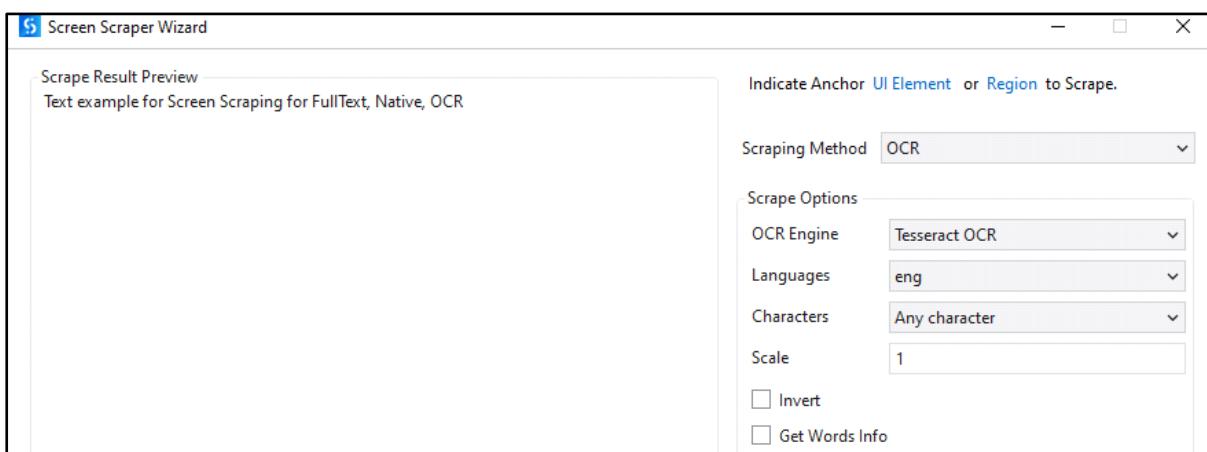
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Open a file with some text to scrape from.



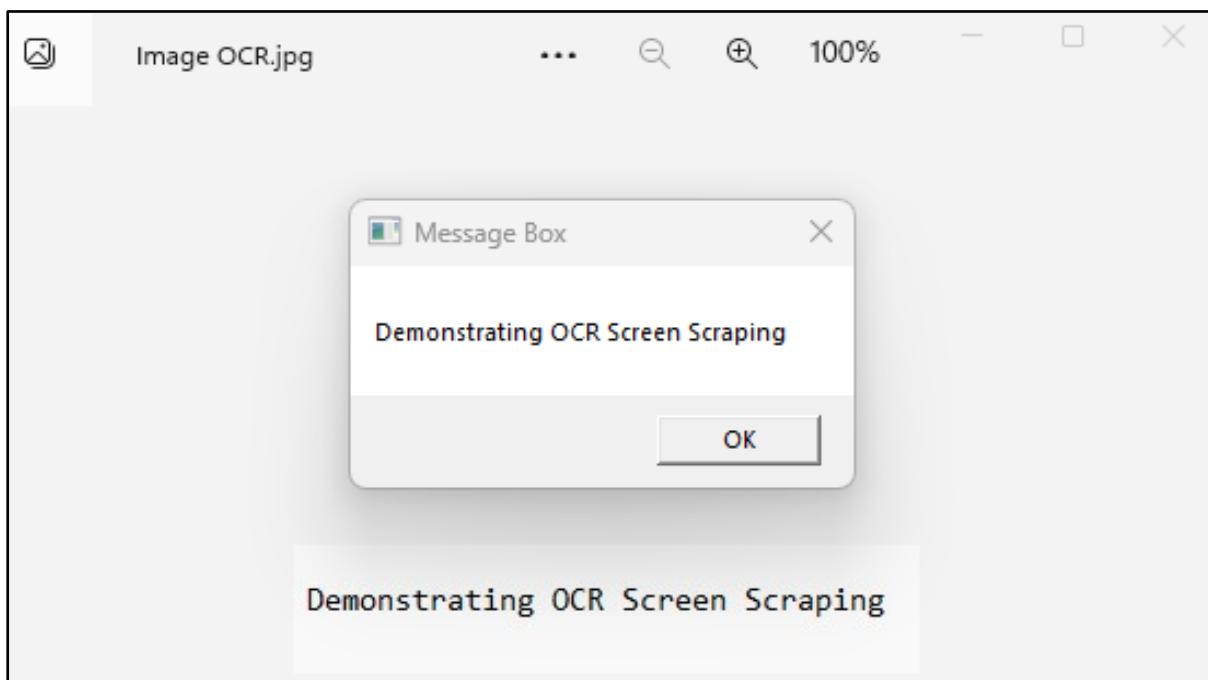
Step 4: Search for “Screen Scraping” in the Search panel of the Activities Panel and drag it inside the sequence. Set the Scrapping method as OCR. Select Tesseract OCR Engine Create and set variable to store the output.



Step 5: Search for “Message Box” in Activities Panel and drag it inside the sequence workflow. Enter the output variable.



Step 6: Click on the Run button and see the Results.

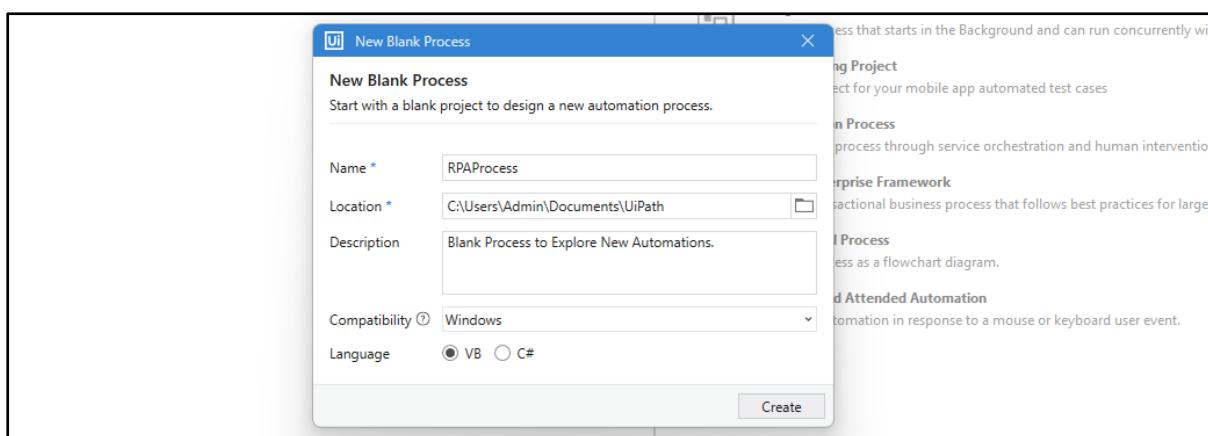


Conclusion: The practical to automate Full-Text, Native and OCR screen scraping methods using UiPath is successfully completed.

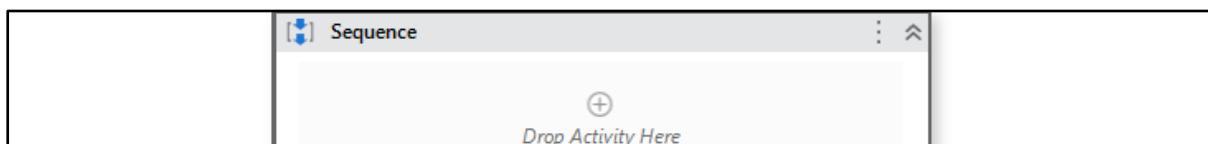
[C] Aim: Install and automate any process using UiPath with the following plug-ins:

[I] Java Plugin

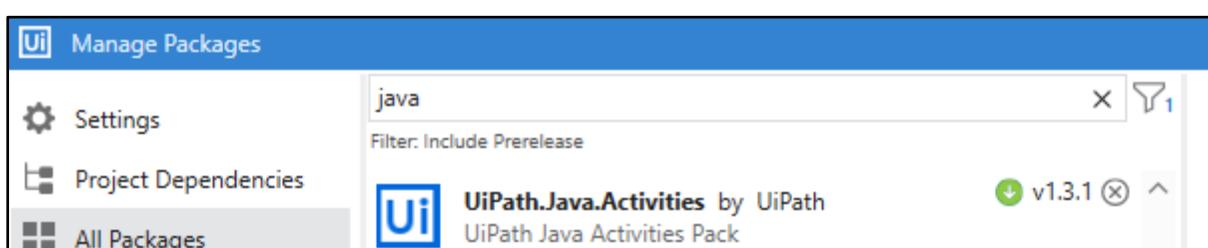
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel

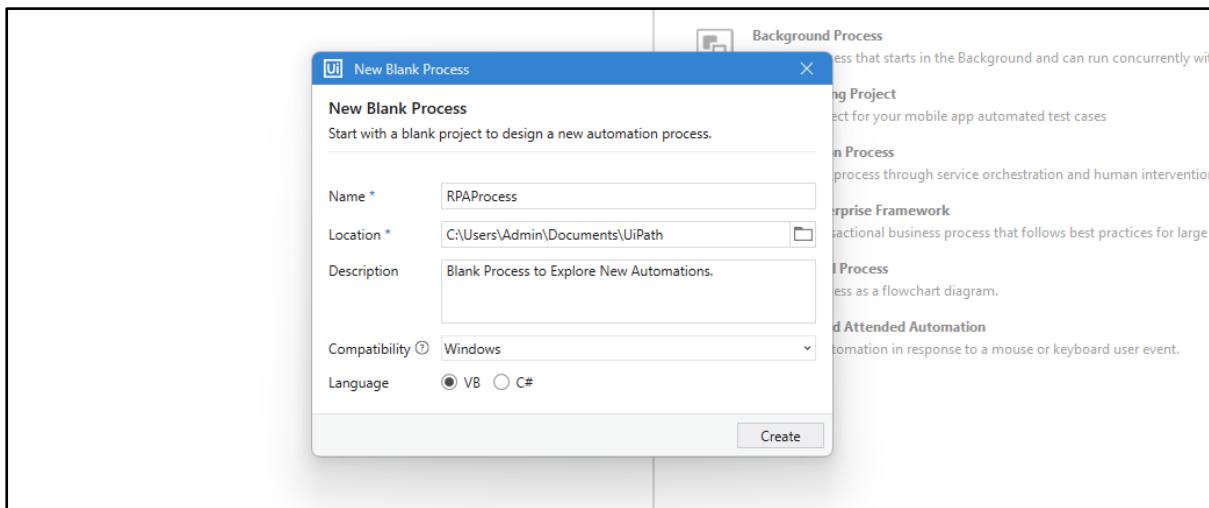


Step 3: Search for “Java” in the Search panel of the Manage Packages Tab and install “UiPath.Java.Activities”.

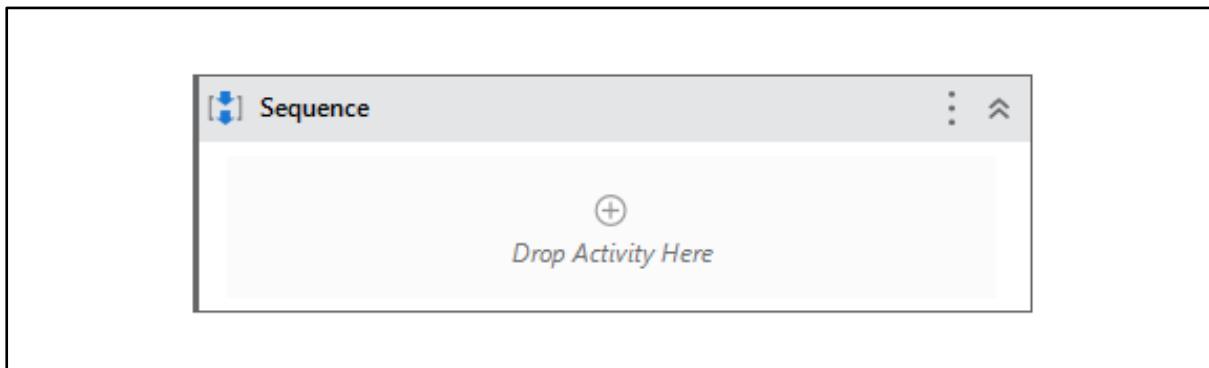


[II] Mail Plugin

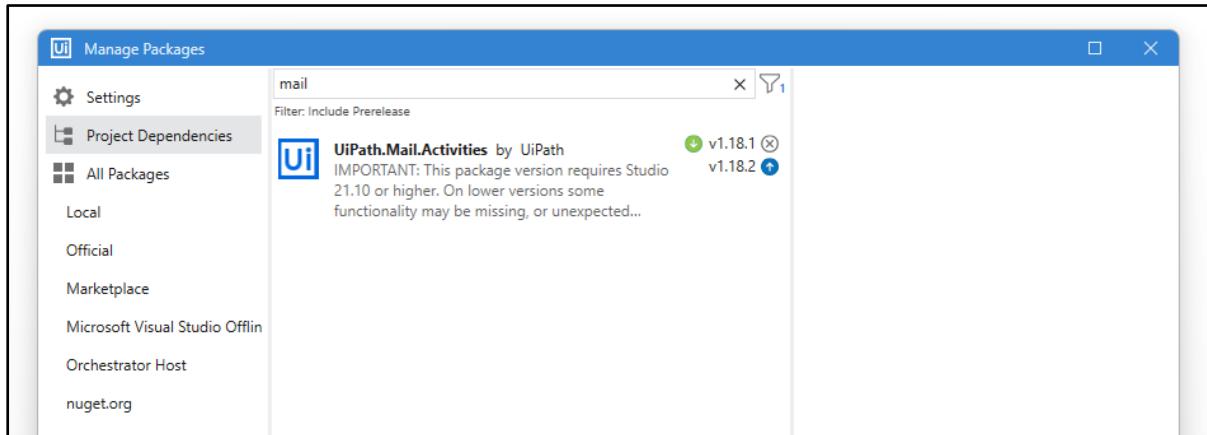
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



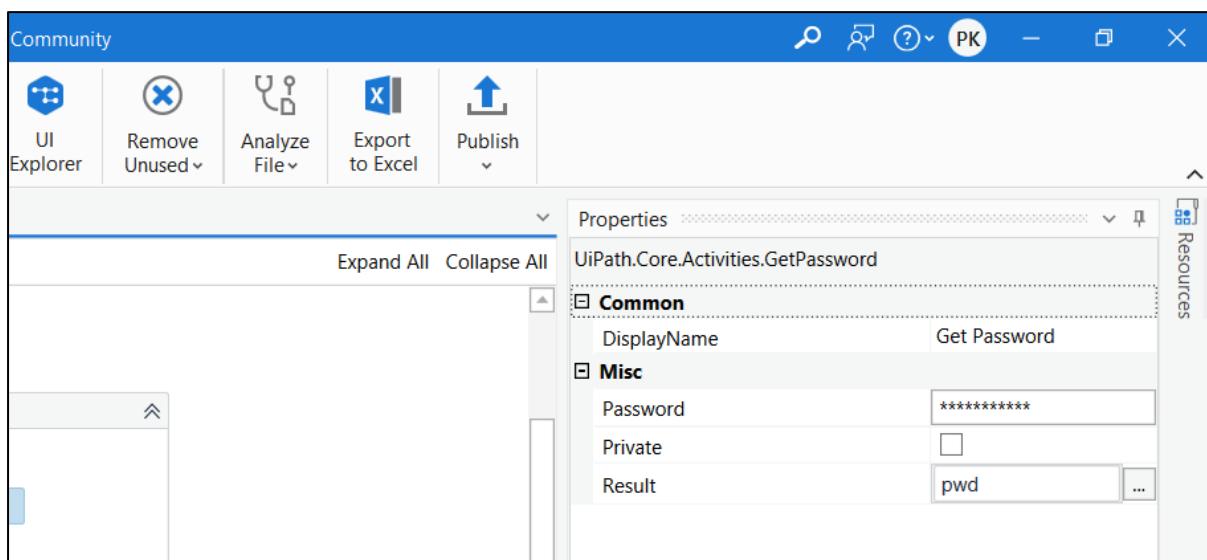
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



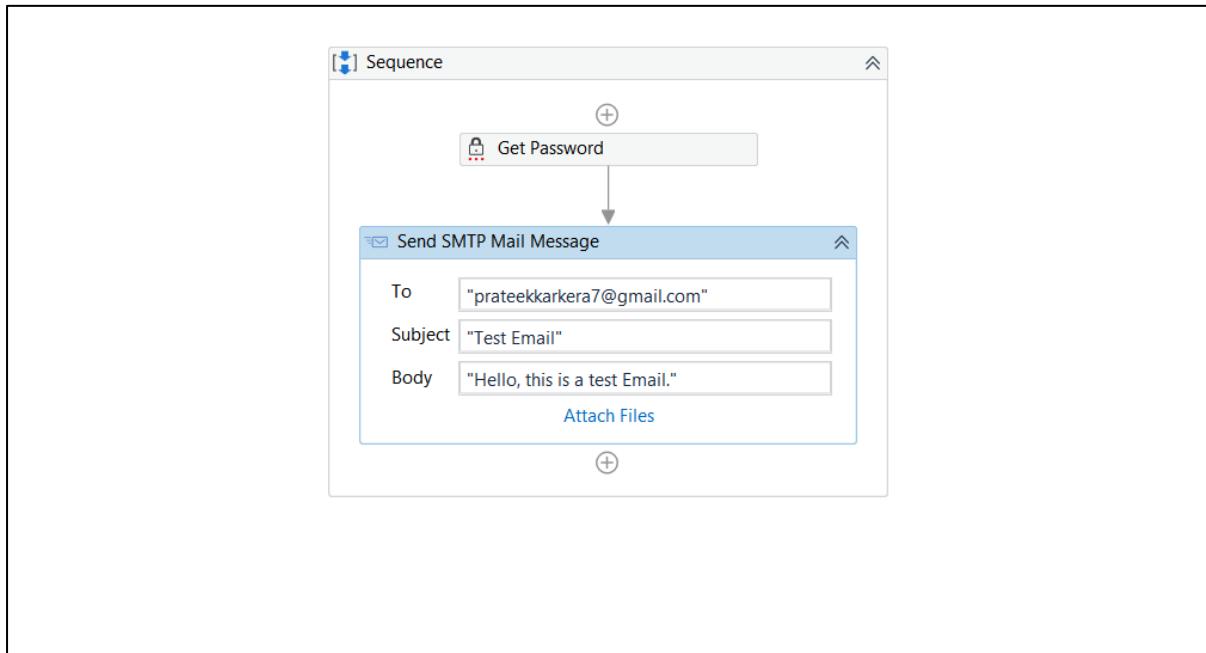
Step 3: Search for “Mail” in the Search panel of the Manage Packages Tab and install “UiPath.Mail.Acitivites”.



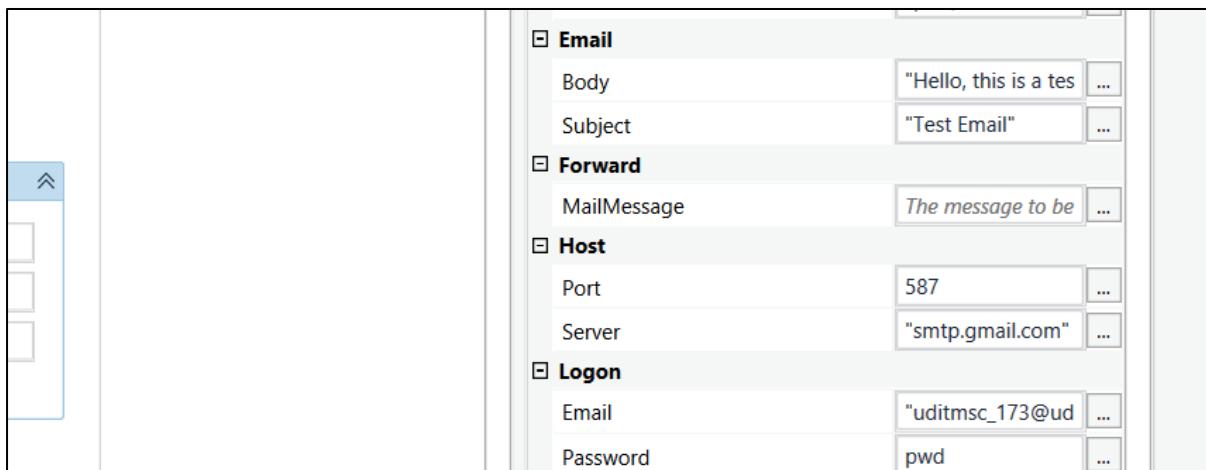
Step 4: Search for “Get Password” in Activities Panel and drag it inside the sequence workflow. Enter the password in the properties panel and assign it to variable pwd.



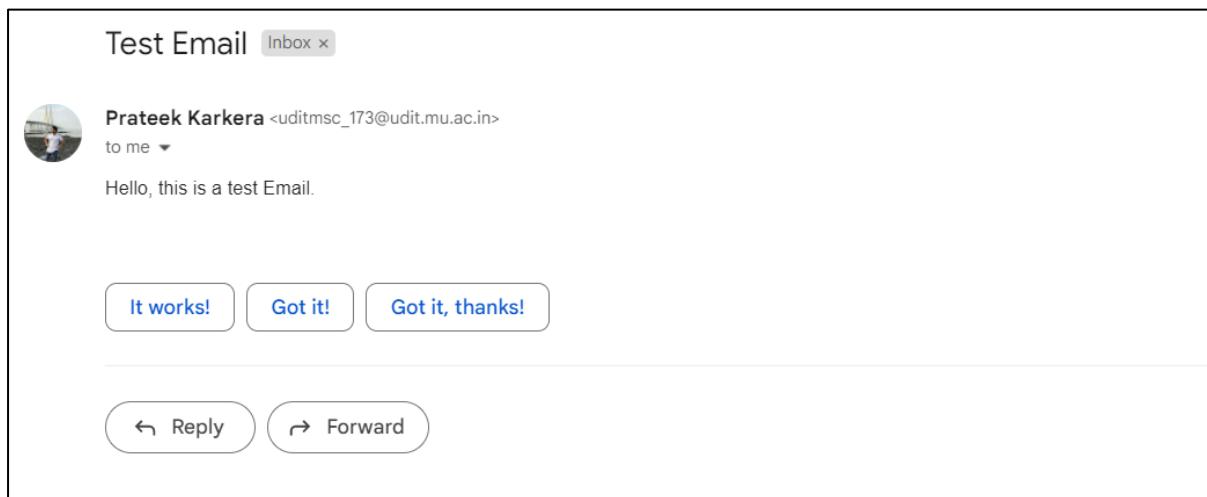
Step 5: Search for “Send SMTP Mail Message” in Activities Panel and drag it inside the sequence workflow. Enter the recipient’s email address, subject line and message.



Step 6: Enter the password, port number, mail server name in the properties panel.



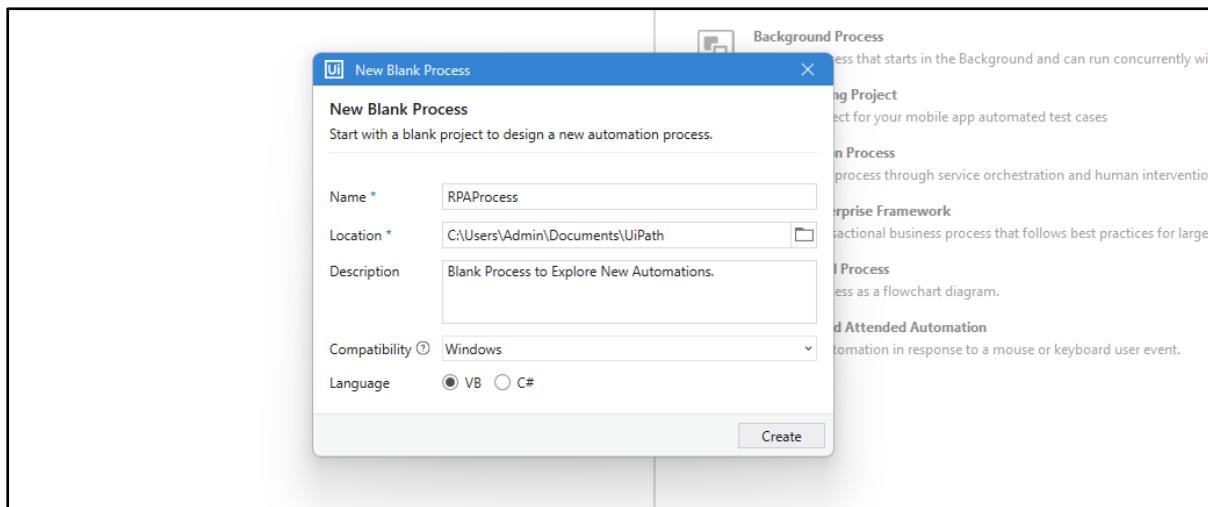
Step 7: Click on the Run button and check the output console. Done.



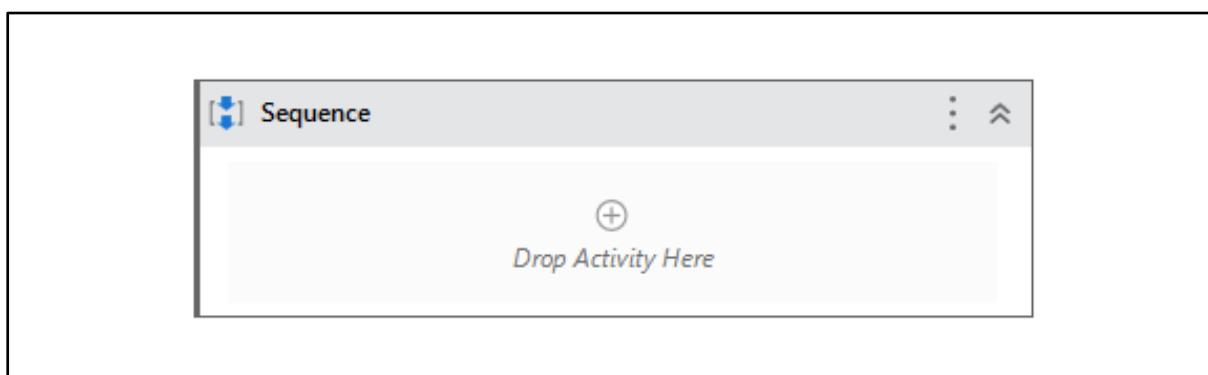
[III] PDF Plugin

[a] Read PDF Text

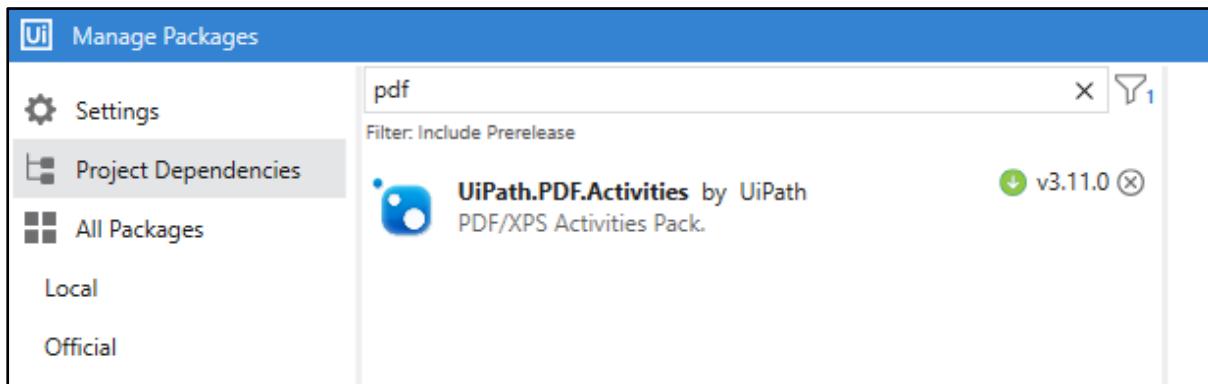
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



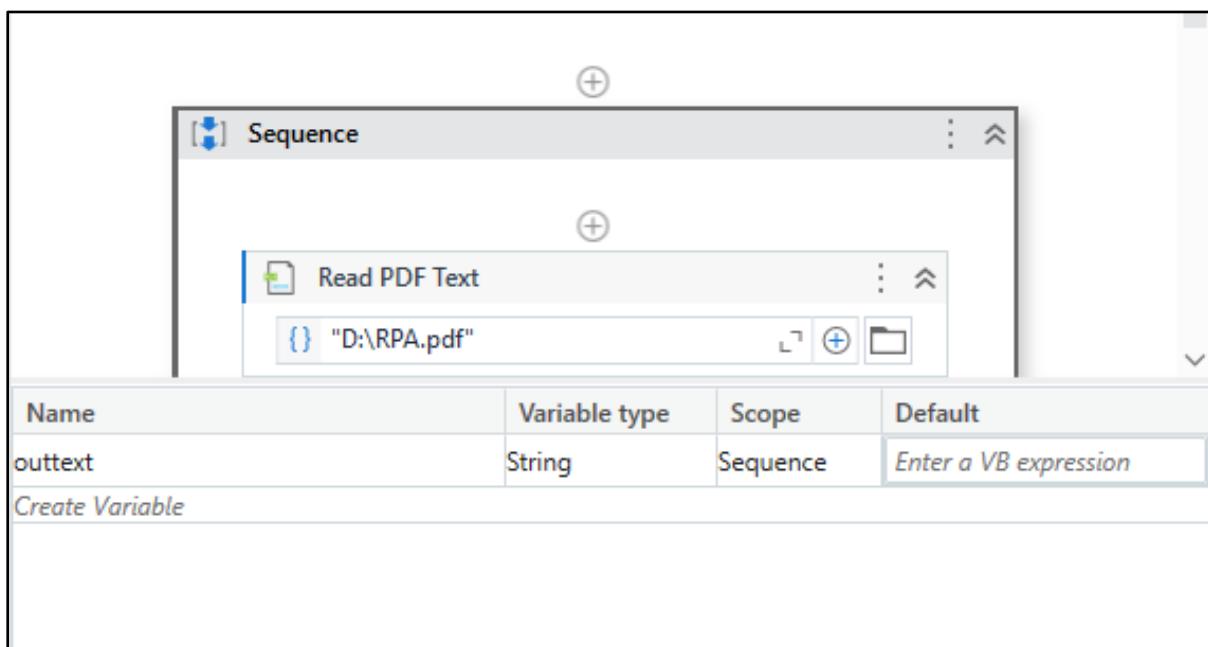
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



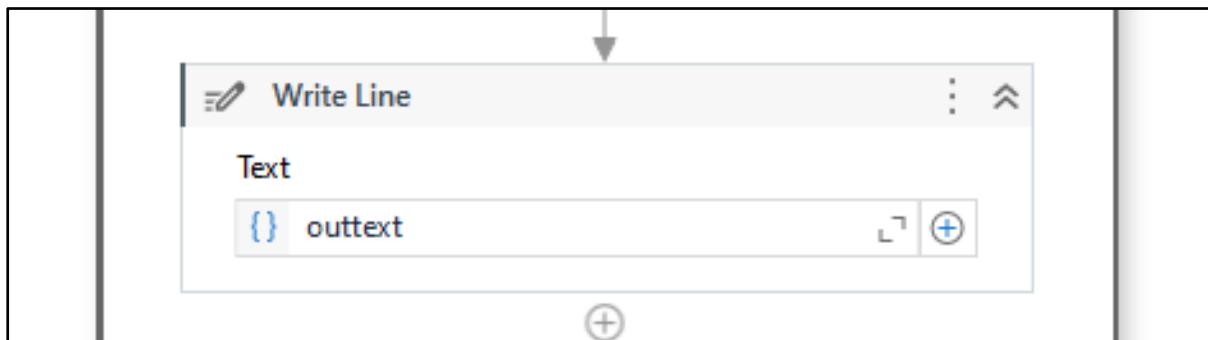
Step 3: Search for “PDF” in the Search panel of the Manage Packages Tab and install “UiPath.PDF.Activities”.



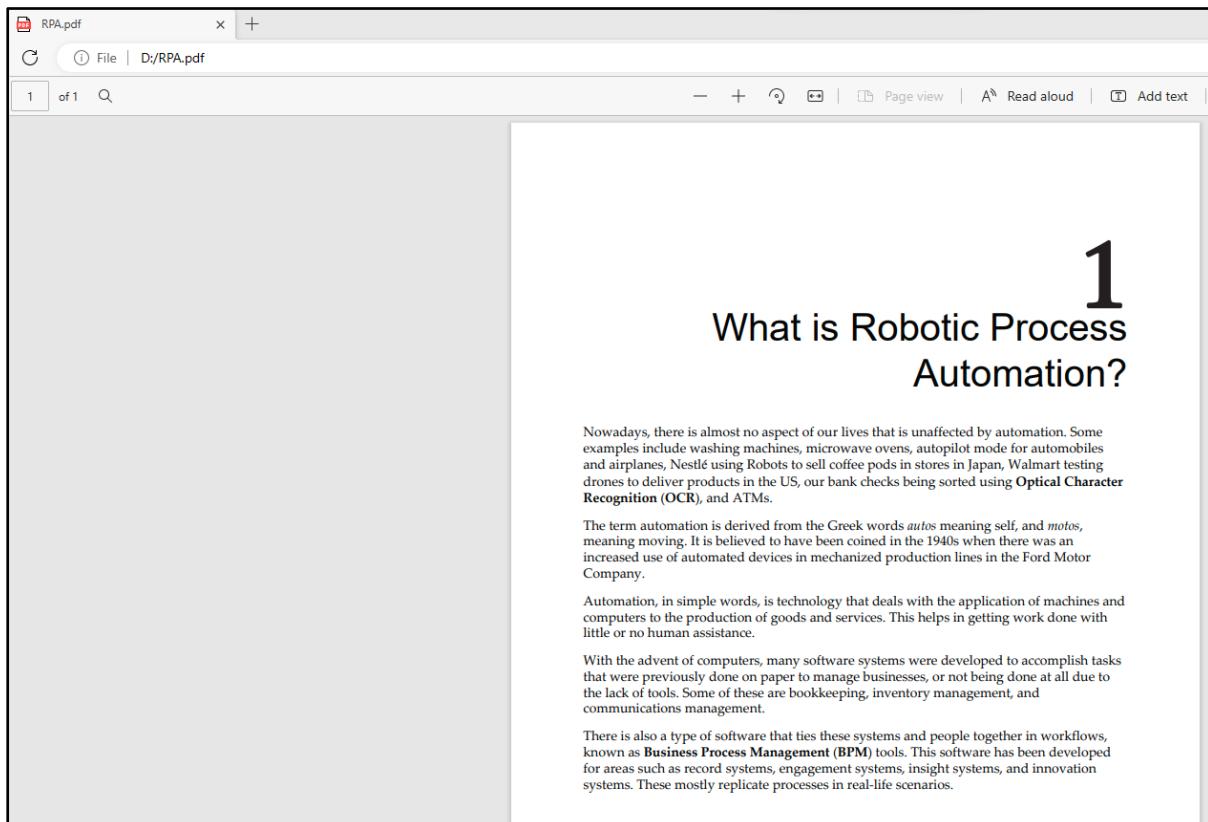
Step 4: Search for “Read PDF Text” in Activities Panel and drag it inside the sequence workflow. Enter the file location of the PDF to read from. Create and assign an output variable.



Step 5: Search for “Write Line” in Activities Panel and drag it inside the sequence workflow. Enter the output text variable.



Step 6: Click on the Run button and see the Results.



⑤ RPAProcess execution started

⑥ 1

What is Robotic Process

Automation?

Nowadays, there is almost no aspect of our lives that is unaffected by automation. Some examples include washing machines, microwave ovens, autopilot mode for automobiles and airplanes, Nestle using Robots to sell coffee pods in stores in Japan, Walmart testing drones to deliver products in the US, our bank checks being sorted using Optical Character Recognition (OCR), and ATMs.

The term automation is derived from the Greek words autos meaning self, and motos, meaning moving. It is believed to have been coined in the 1940s when there was an increased use of automated devices in mechanized production lines in the Ford Motor Company.

Automation, in simple words, is technology that deals with the application of machines and computers to the production of goods and services. This helps in getting work done with little or no human assistance.

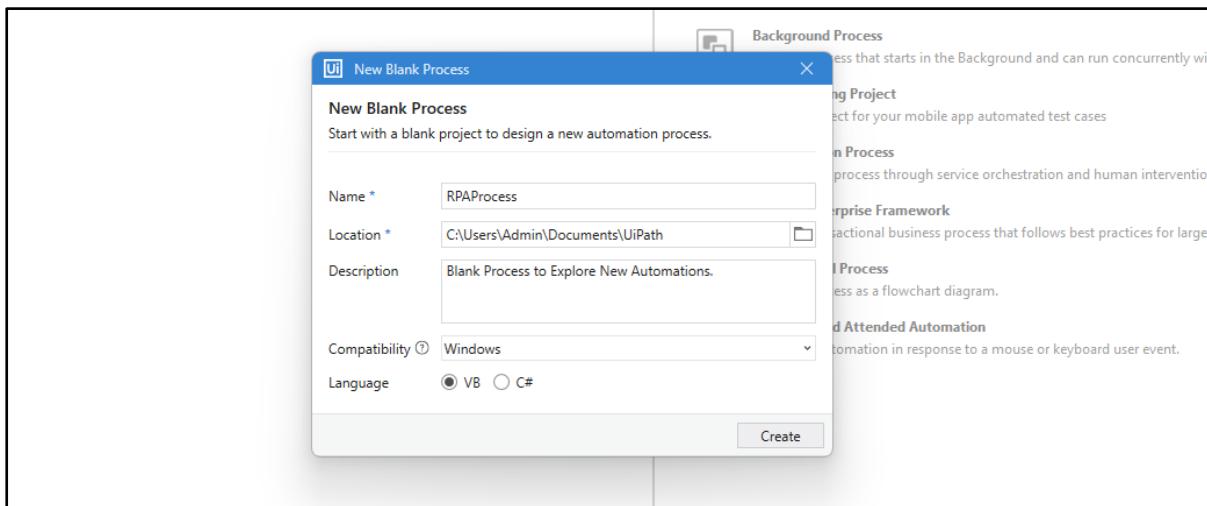
With the advent of computers, many software systems were developed to accomplish tasks that were previously done on paper to manage businesses, or not being done at all due to the lack of tools. Some of these are bookkeeping, inventory management, and communications management.

There is also a type of software that ties these systems and people together in workflows, known as Business Process Management (BPM) tools. This software has been developed for areas such as record systems, engagement systems, insight systems, and innovation systems. These mostly replicate processes in real-life scenarios.

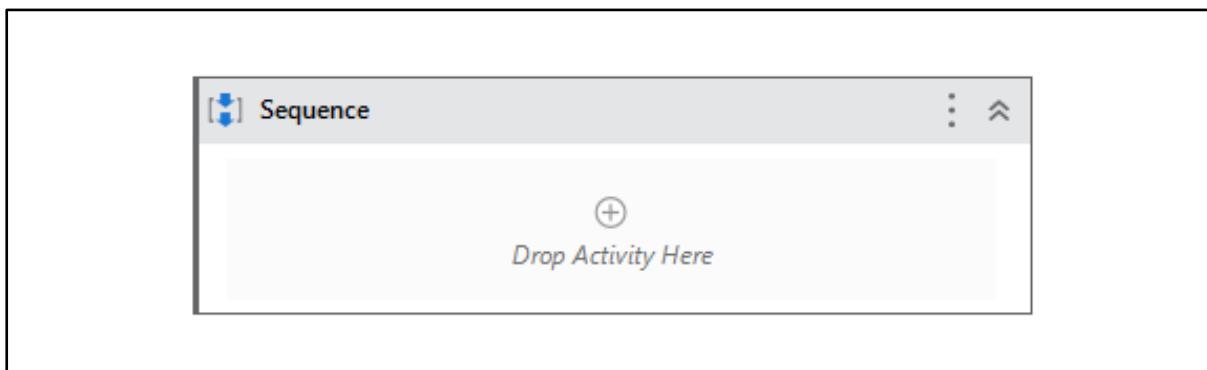
⑦ RPAProcess execution ended in: 00:00:01

[b] Read PDF with OCR

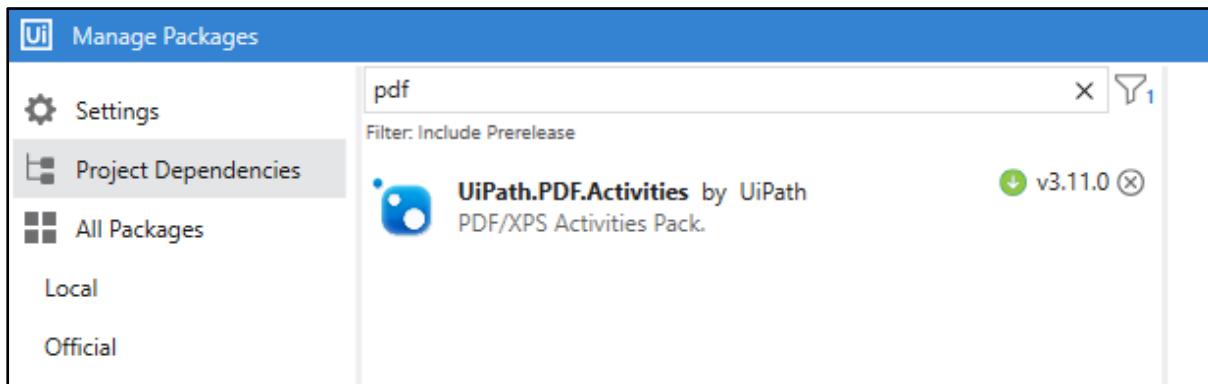
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



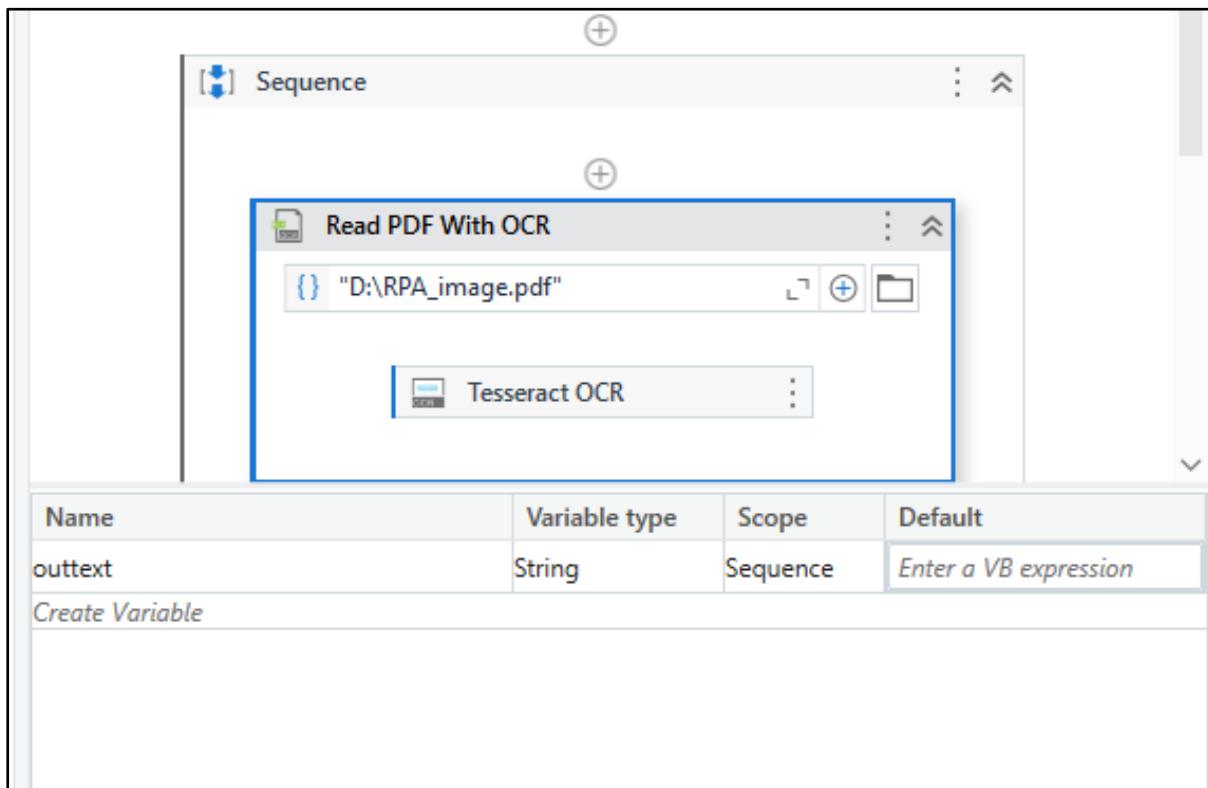
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



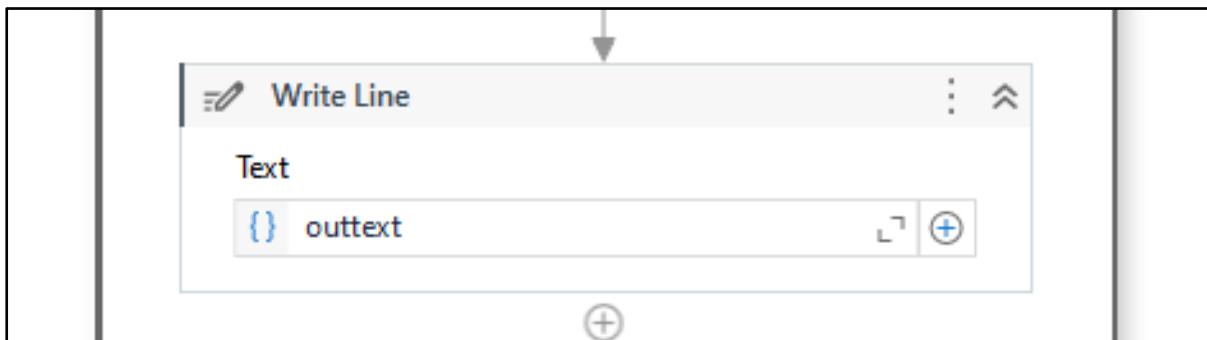
Step 3: Search for “PDF” in the Search panel of the Manage Packages Tab and install “UiPath.PDF.Activities”.



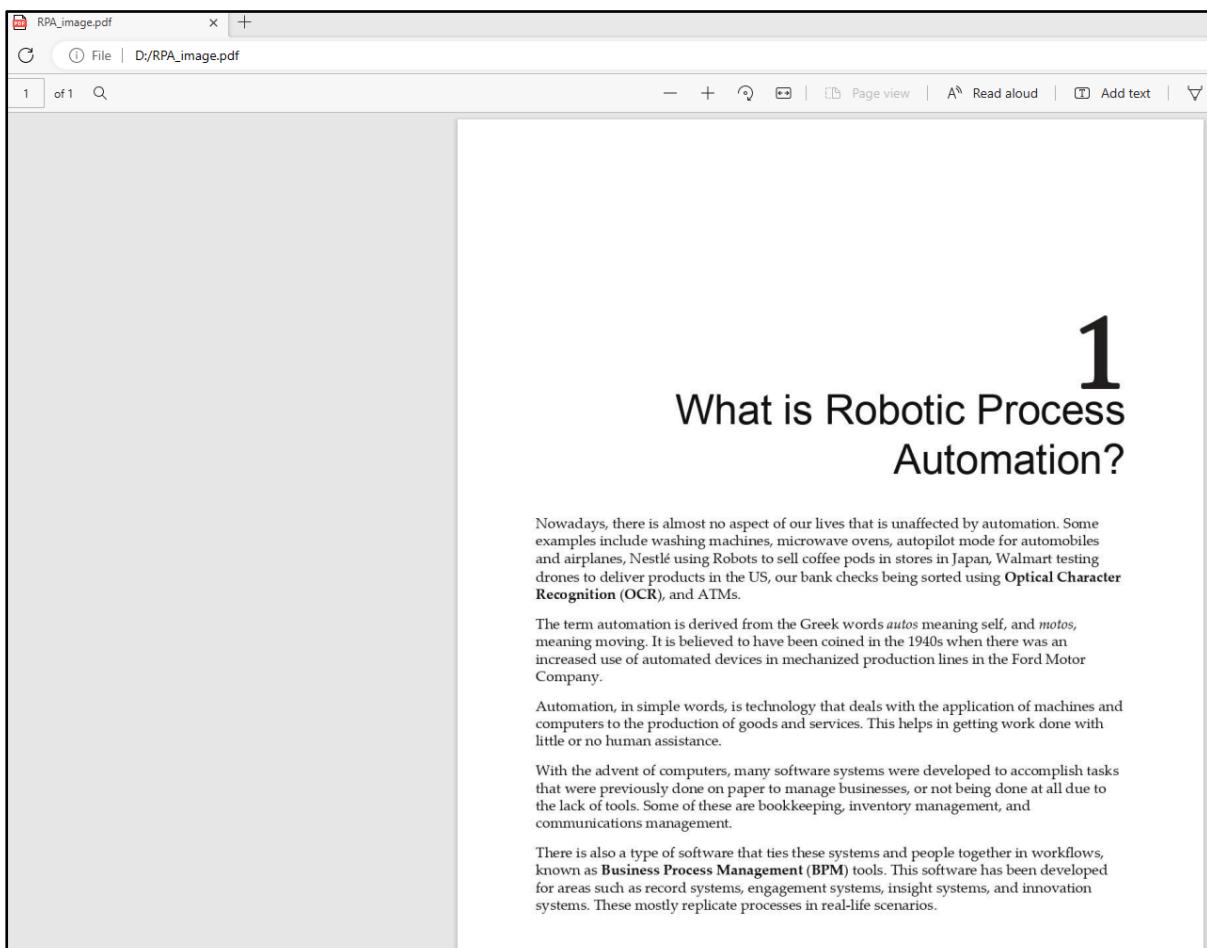
Step 4: Search for “Read PDF with OCR” in Activities Panel and drag it inside the sequence workflow. Enter the file location of the PDF to read from. Search for “Tesseract Engine” in the activities panel and drag into the body to Assign OCR Engine. Create and assign an output variable.



Step 5: Search for “Write Line” in Activities Panel and drag it inside the sequence workflow. Enter the output text variable.



Step 6: Click on the Run button and see the Results.



⑤ RPAProcess execution started

⑥ 1

What is Robotic Process

Automation?

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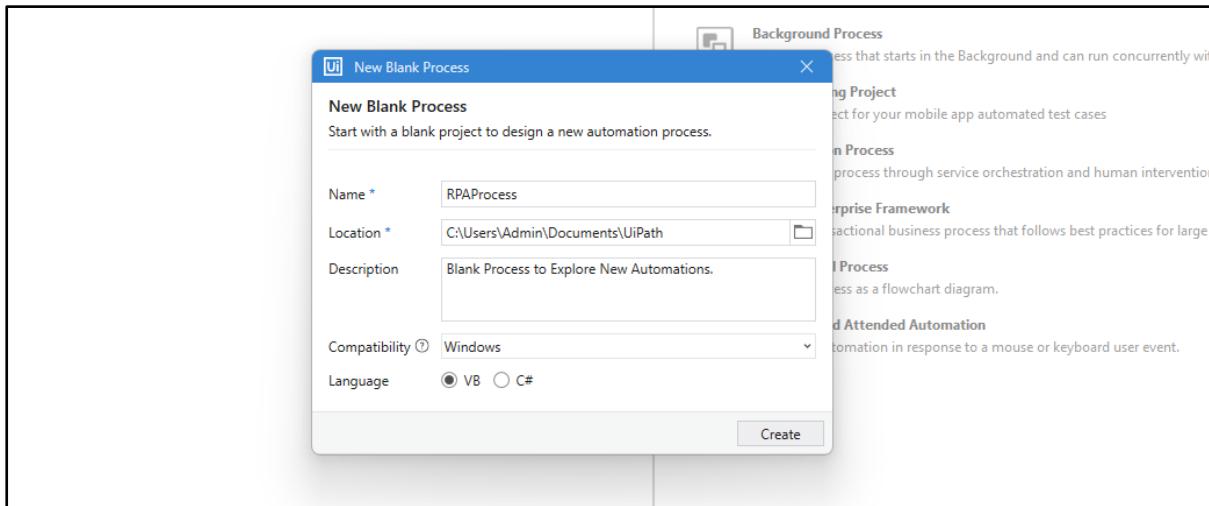
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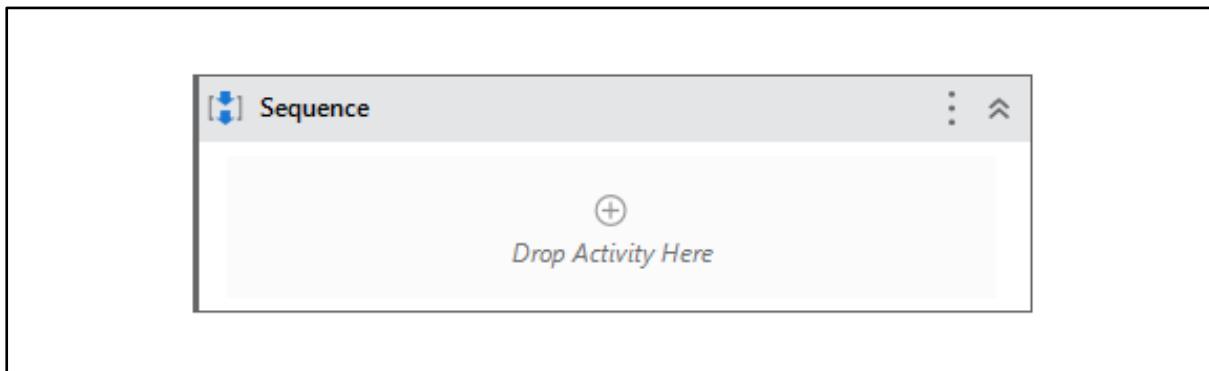
⑦ RPAProcess execution ended in: 00:00:01

[IV] Web Integration

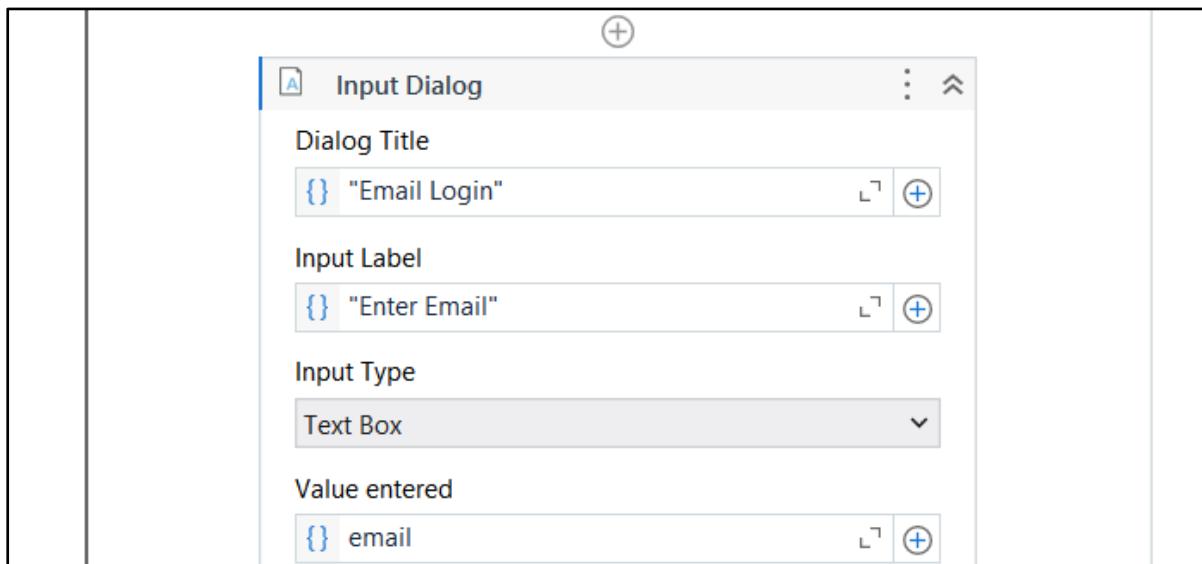
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



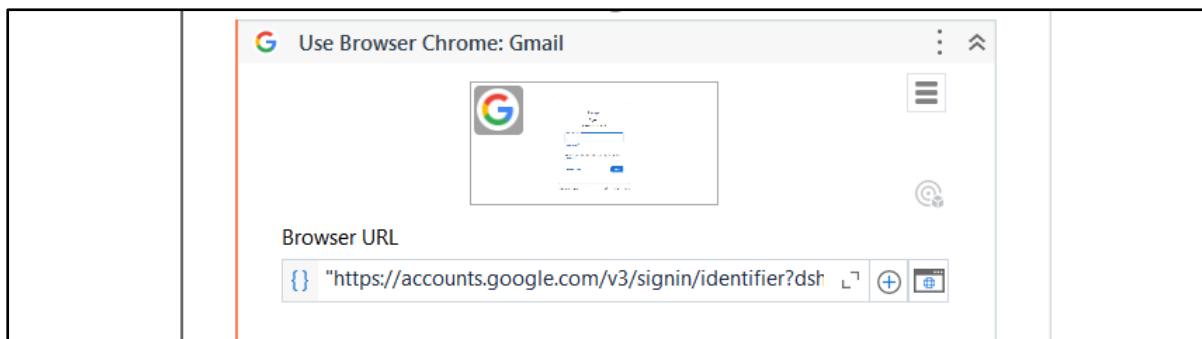
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



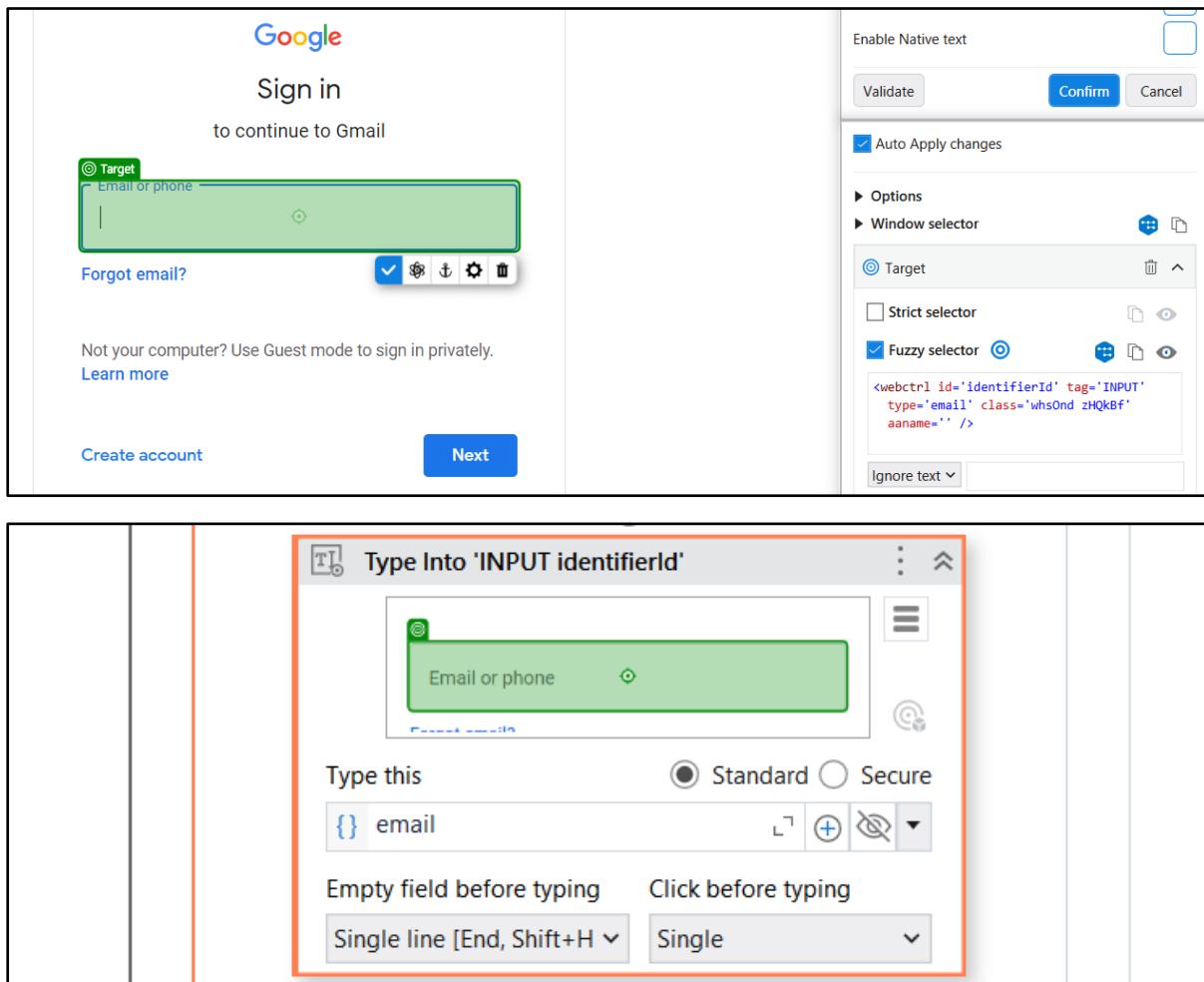
Step 3: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create a variable and specify the variable in the Result property of the Input dialog box.



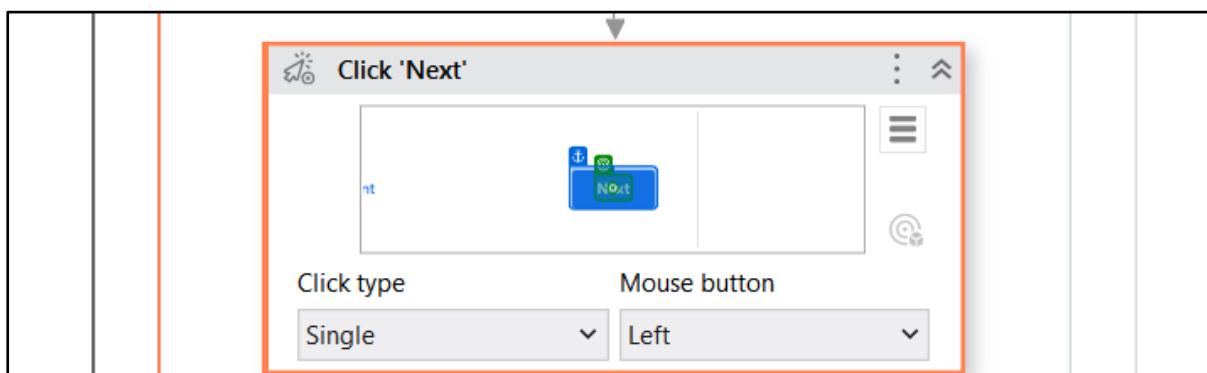
Step 4: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



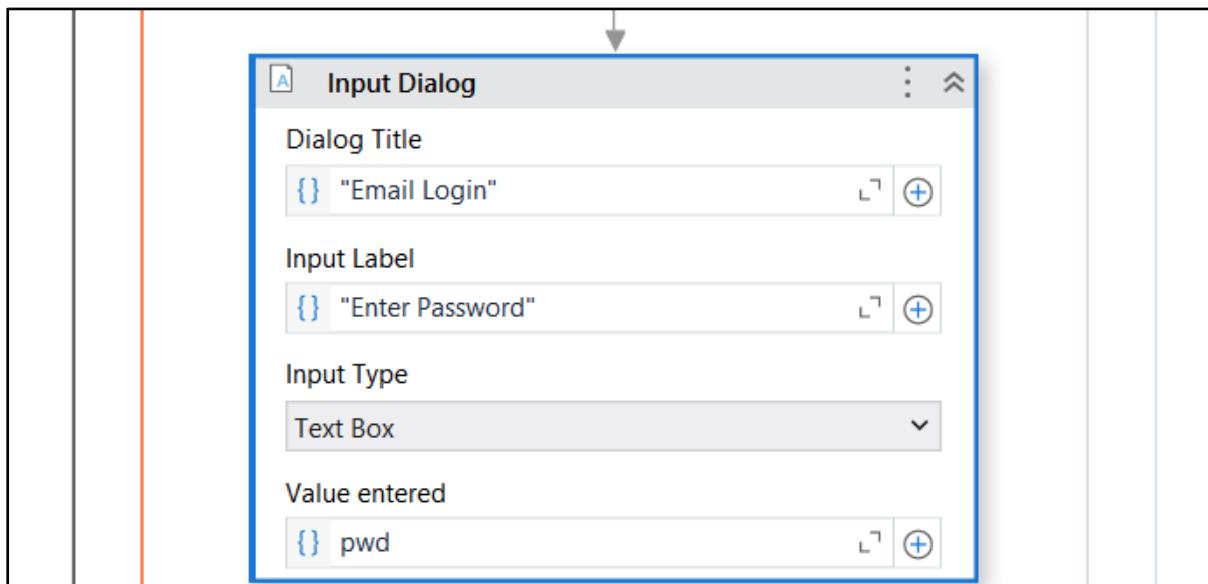
Step 5: Search for “Type Into” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to click on and Click on Save & Close.



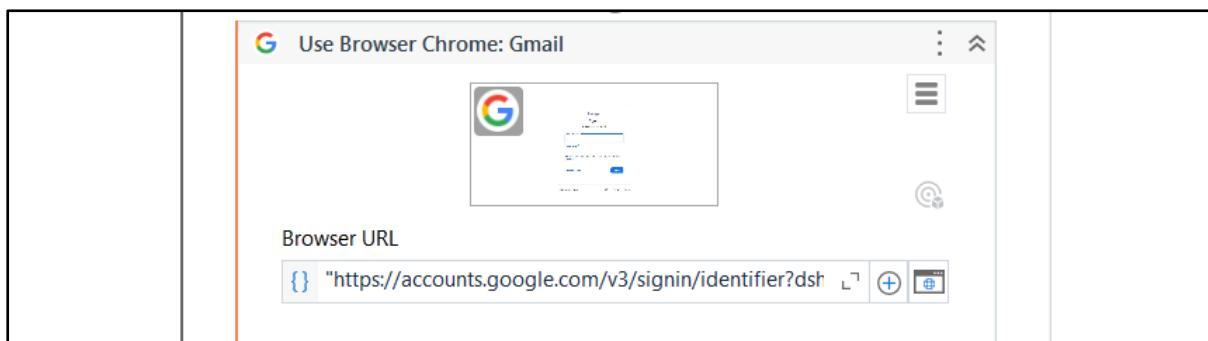
Step 6: Search for “Click” Activity in the Activities Panel and drag it inside the sequence. Indicate the “Next” button.



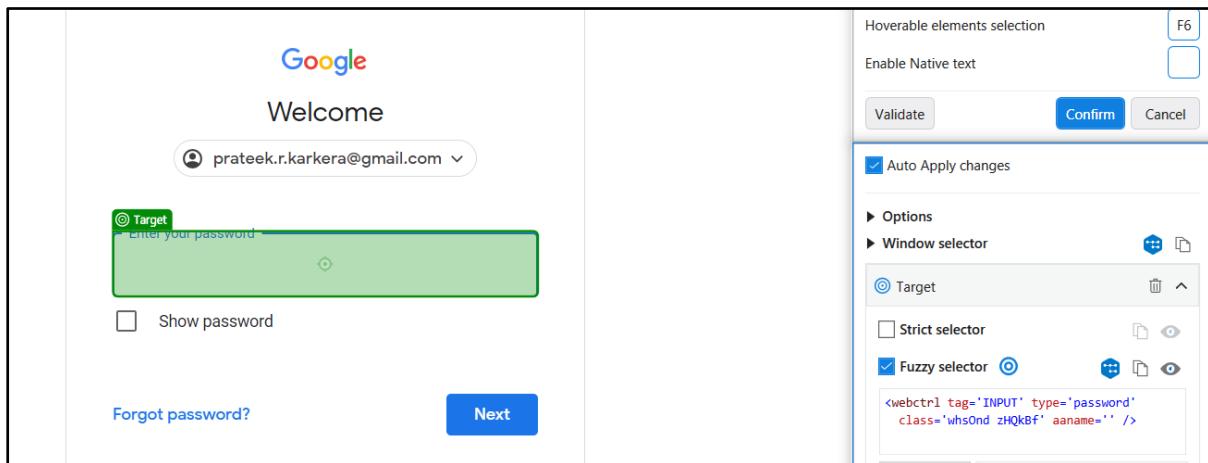
Step 7: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create a variable and specify the variable in the Result property of the Input dialog box. Check the IsPassword property.



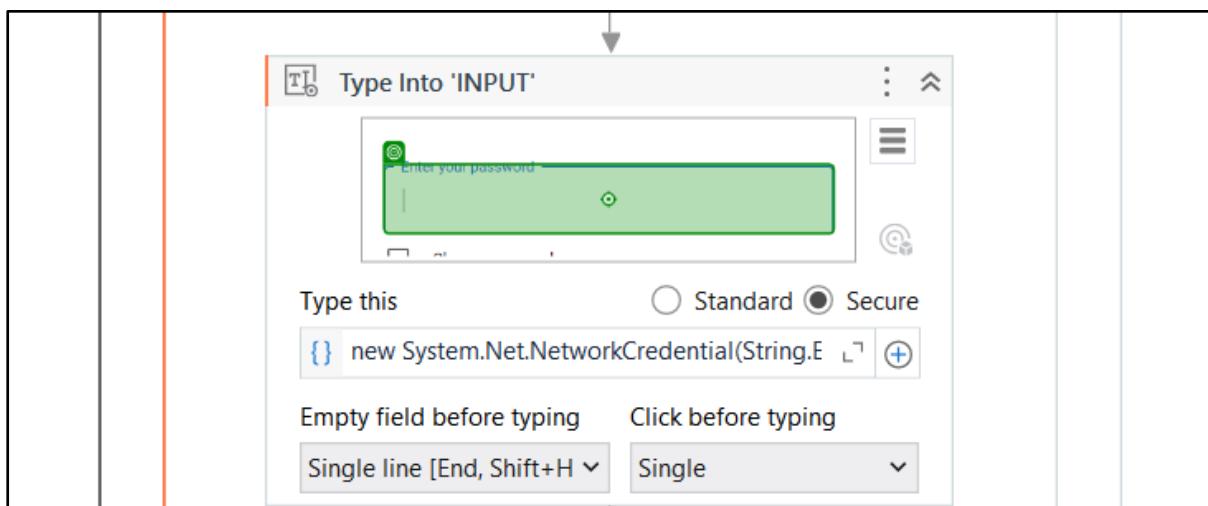
Step 8: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



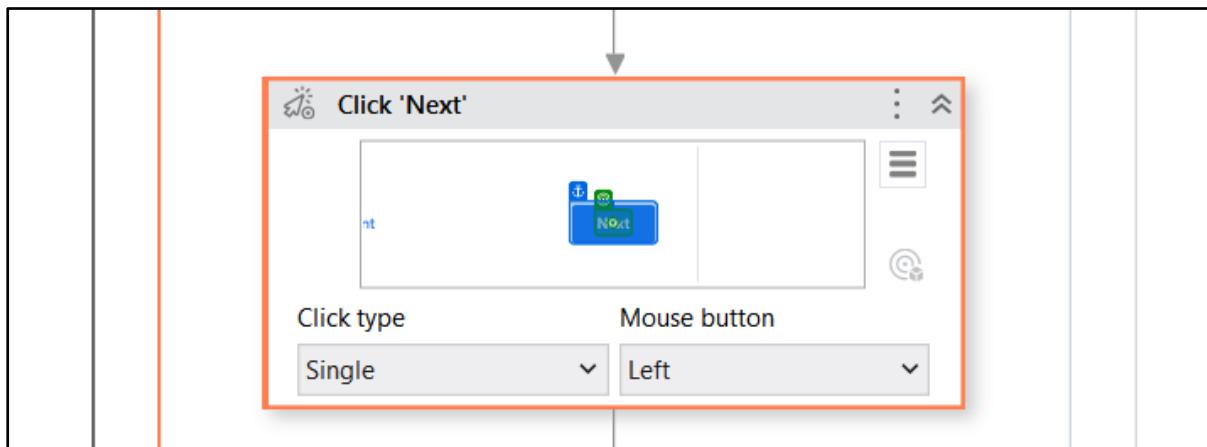
Step 9: Search for “Type Into” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to click on and Click on Save & Close.



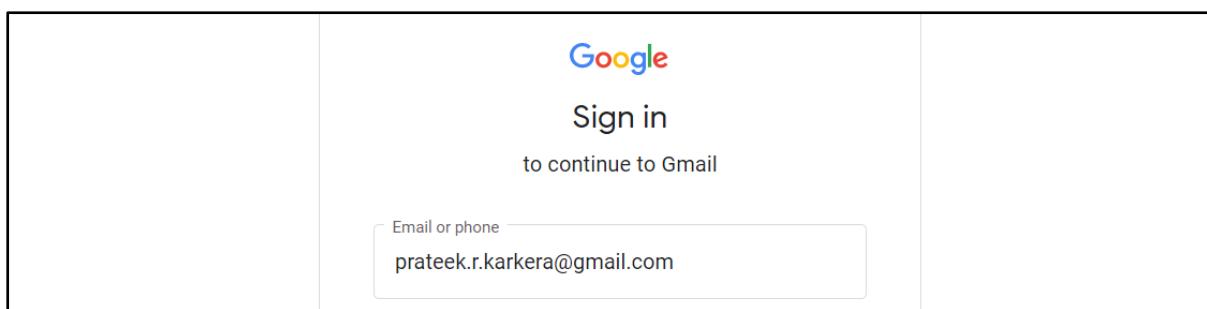
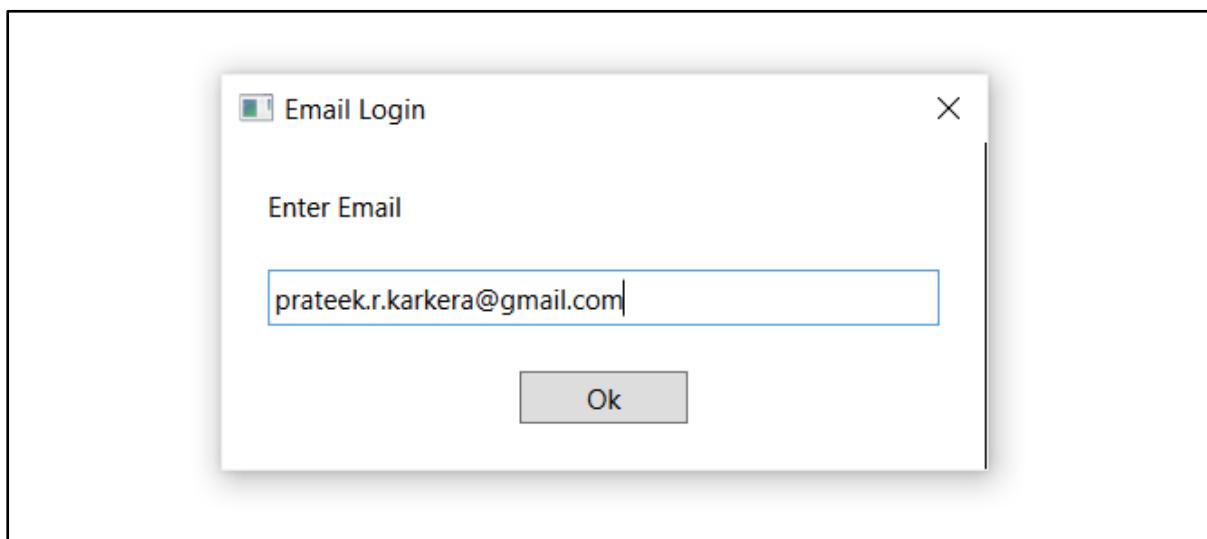
Step 10: Select the Secure Radio Button. Set the variable as Secure String using the code – “new System.Net.NetworkCredential(String.Empty, pwd).SecurePassword”.

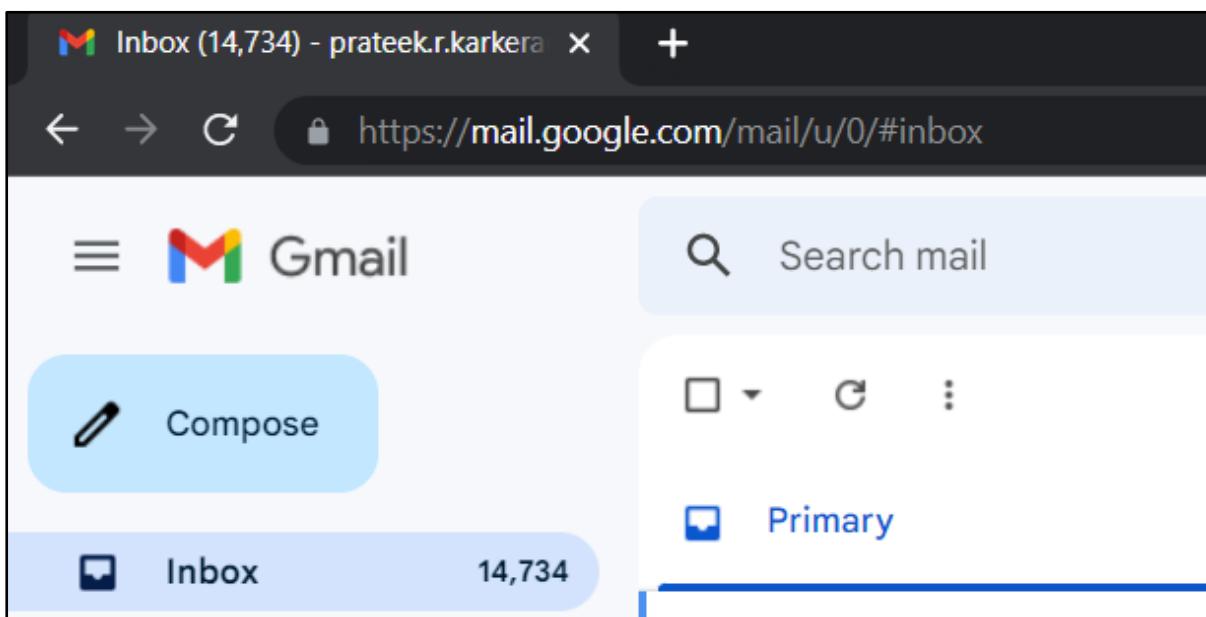
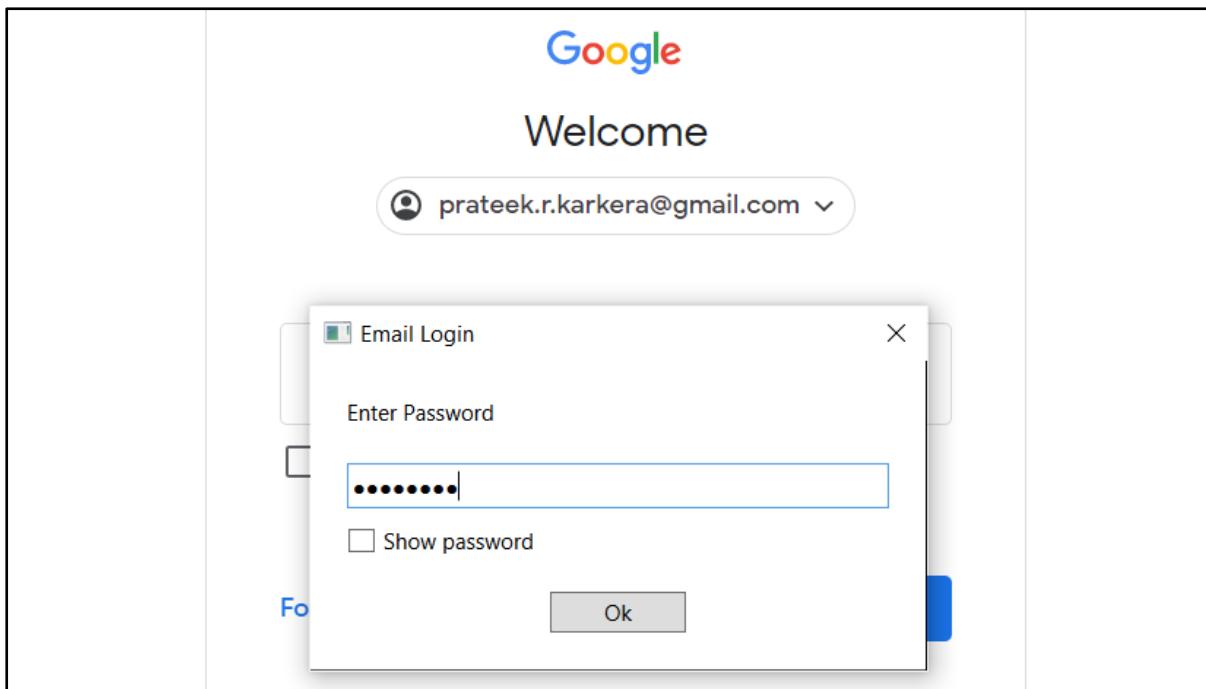


Step 11: Search for “Click” Activity in the Activities Panel and drag it inside the sequence. Indicate the “Next” button.



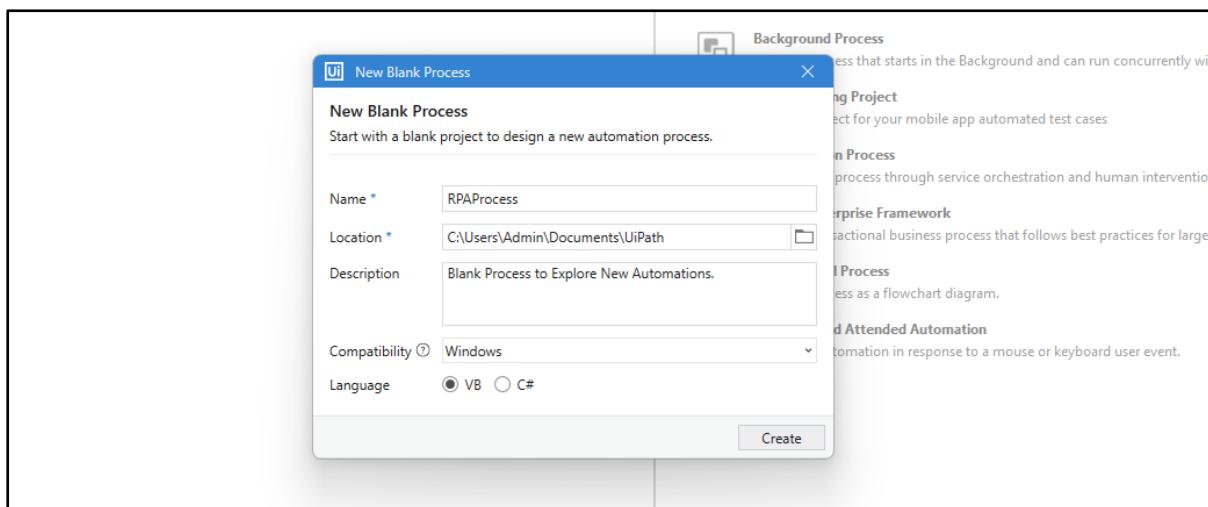
Step 12: Click the Run Button and see the results.



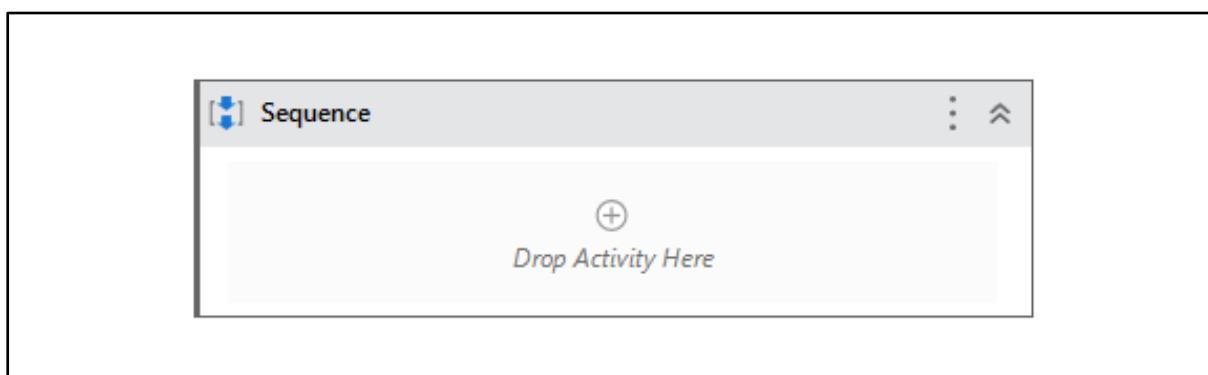


[V] Excel plugin**a] Read Cell**

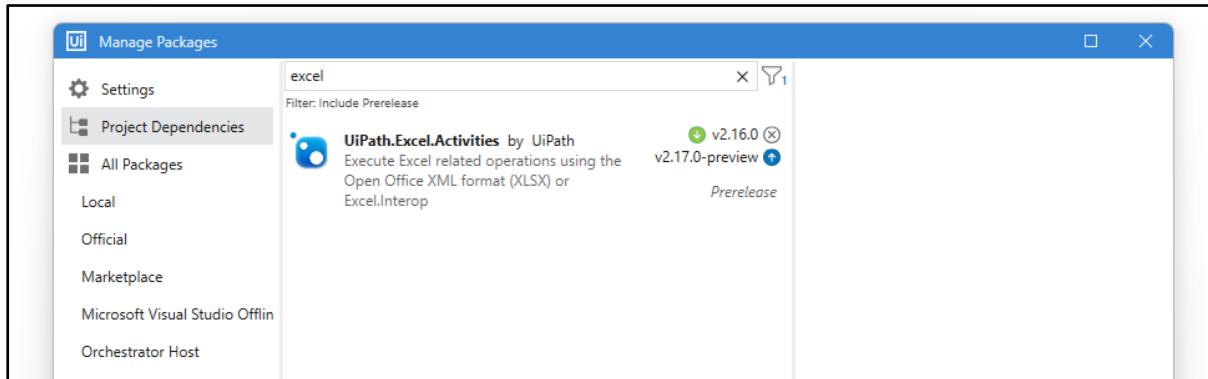
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



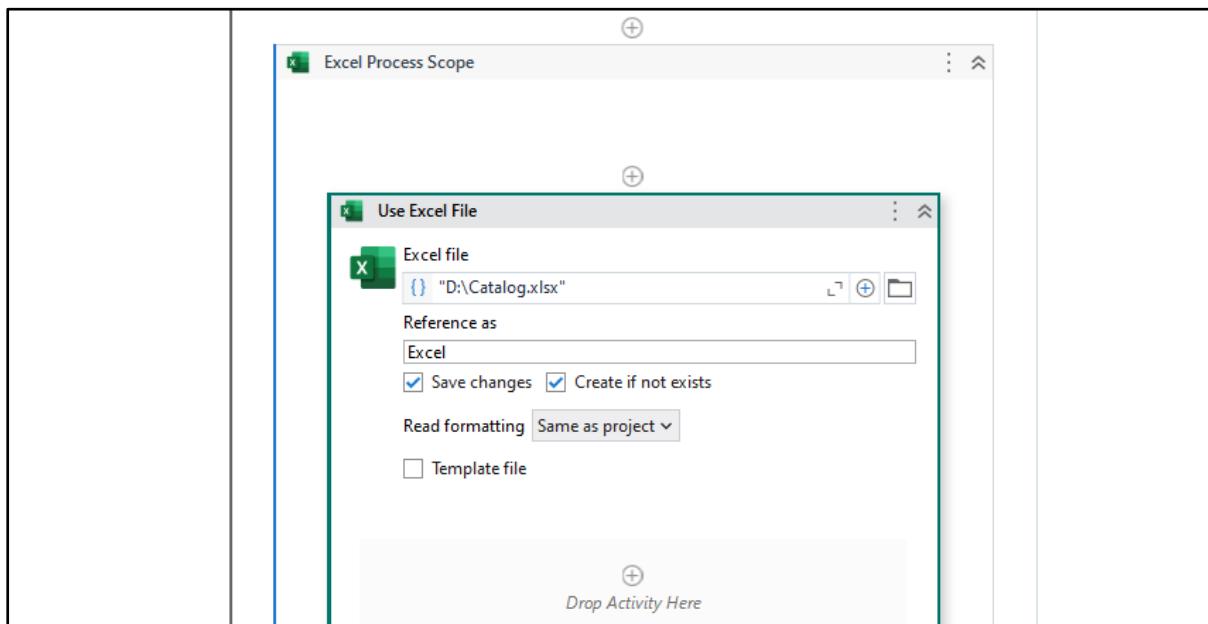
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



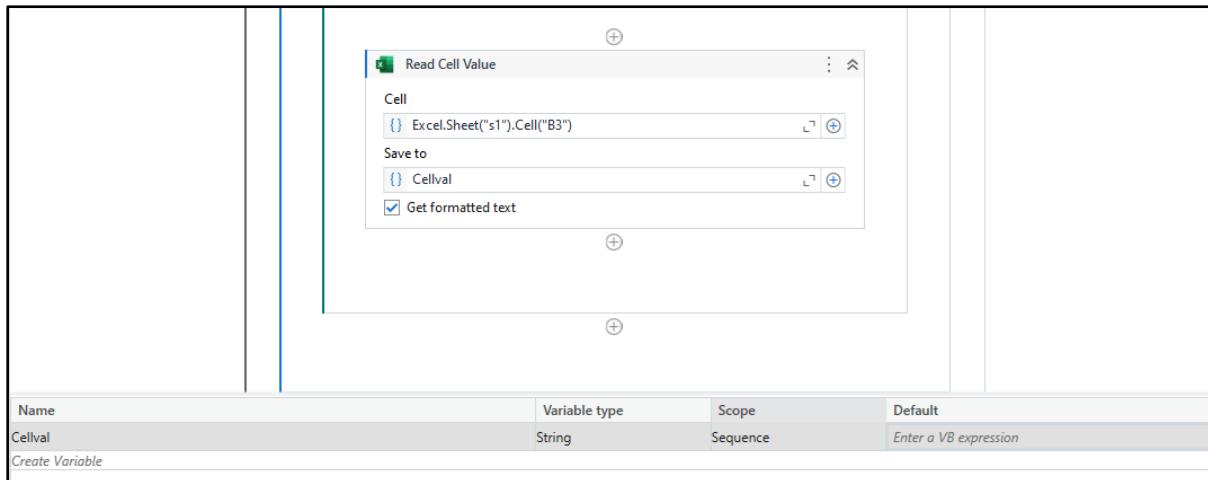
Step 3: Search for “Excel” in the Search panel of the Manage Packages Tab and install “UiPath.Excel.Activities”.



Step 4: Search for “Excel Process Scope” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Search for “Use Excel File” in the Search panel of the Activities panel. Drag and drop the activity inside the Excel Process Scope. Enter the Target File location and provide a Reference name.



Step 5: Search for “Read Cell Value” in the Search panel of the Activities panel. Drag and drop the activity inside the Body. Enter the Sheet name and Cell Location to Read from. Create an output variable to store the value of the cell.



Step 6: Search for “Message Box” in the Search panel of the Activities panel. Drag and drop Message Box activity inside the Body. Enter the output variable to display the cell value.



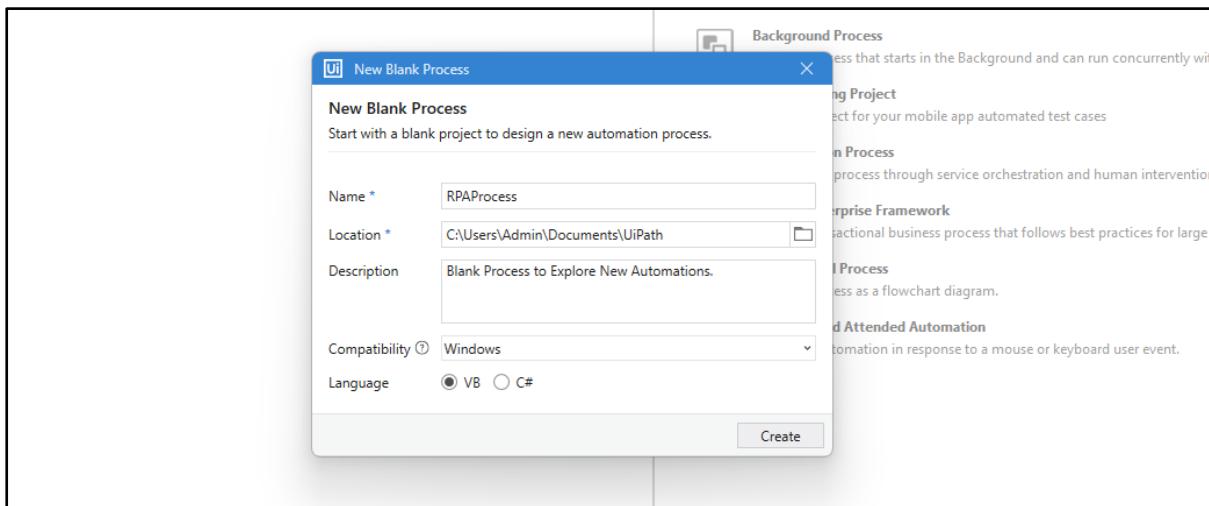
Step 7: Click the Run button and see the result.

The image shows a Microsoft Excel spreadsheet and a message dialog box. The spreadsheet has a table with columns A through J. Row 1 contains "Sr. No." and "Fruits". Row 2 contains "1 apples". Row 3 contains "2 bananas". Rows 4 and 5 are empty. The formula bar at the top shows "B3". The message dialog box, titled "Message", displays the word "bananas" and has an "OK" button.

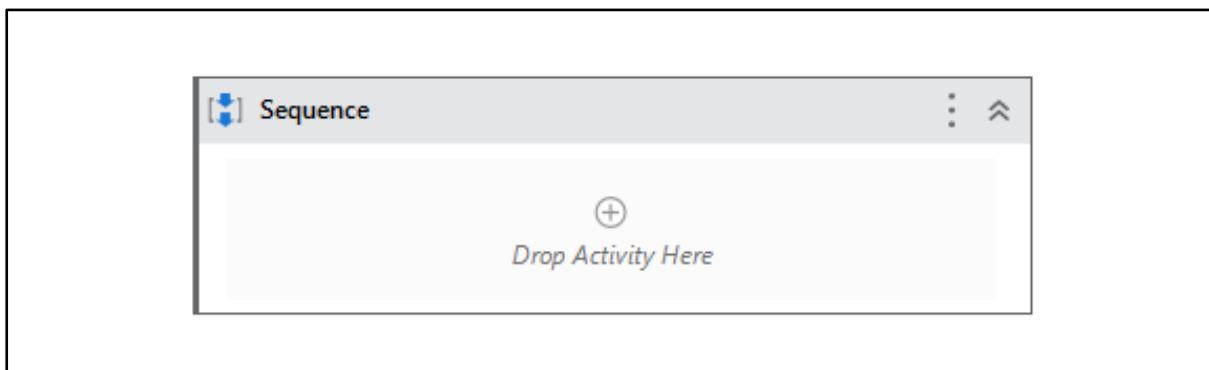
	A	B	C	D	E	F	G	H	I	J
1	Sr. No.	Fruits								
2		1 apples								
3		2 bananas								
4										
5										

b] Write Cell

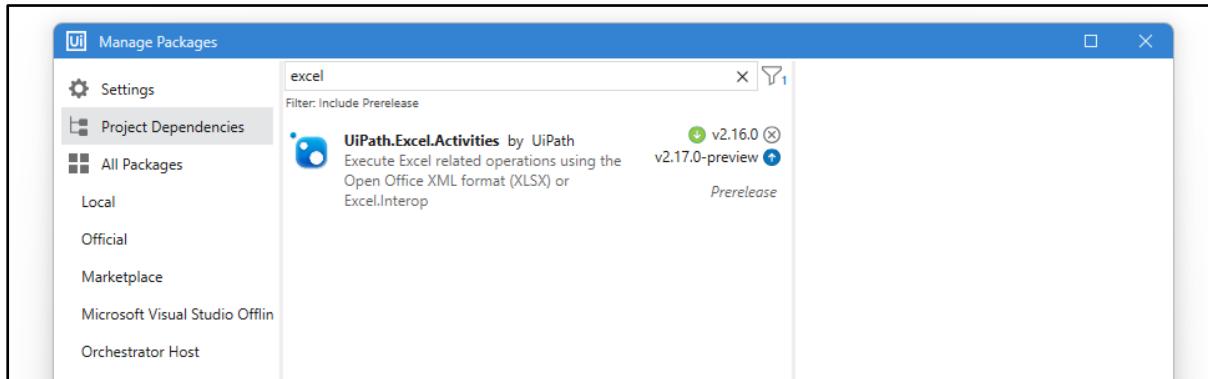
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



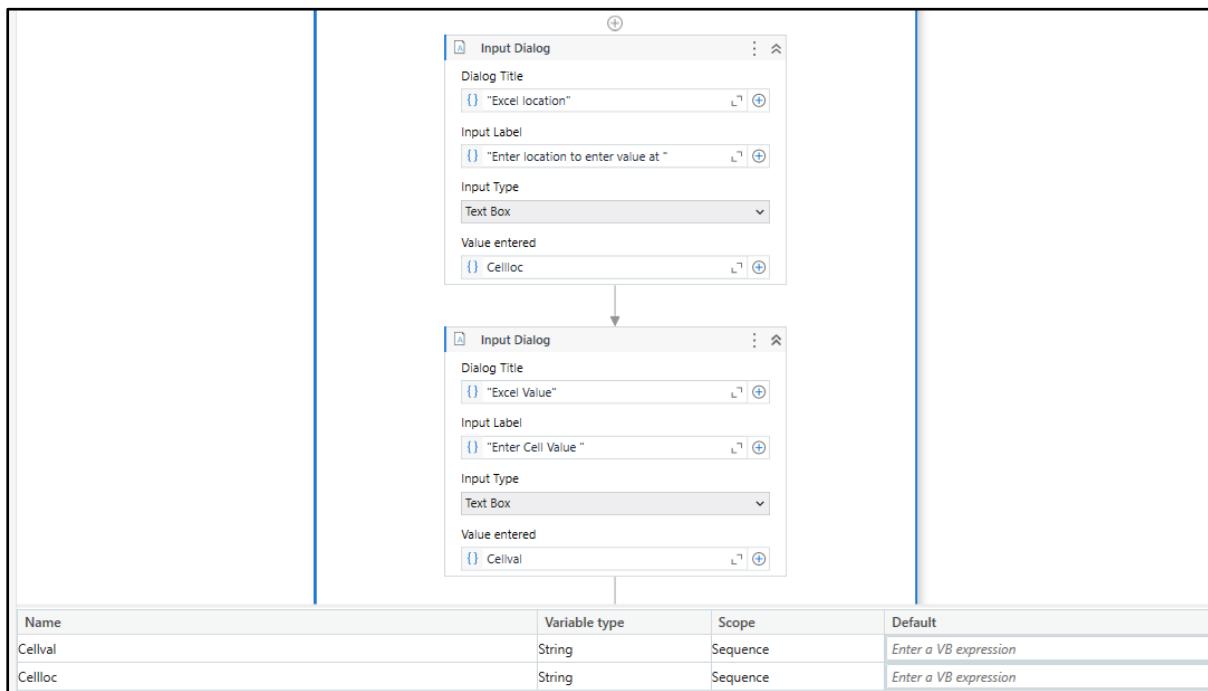
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



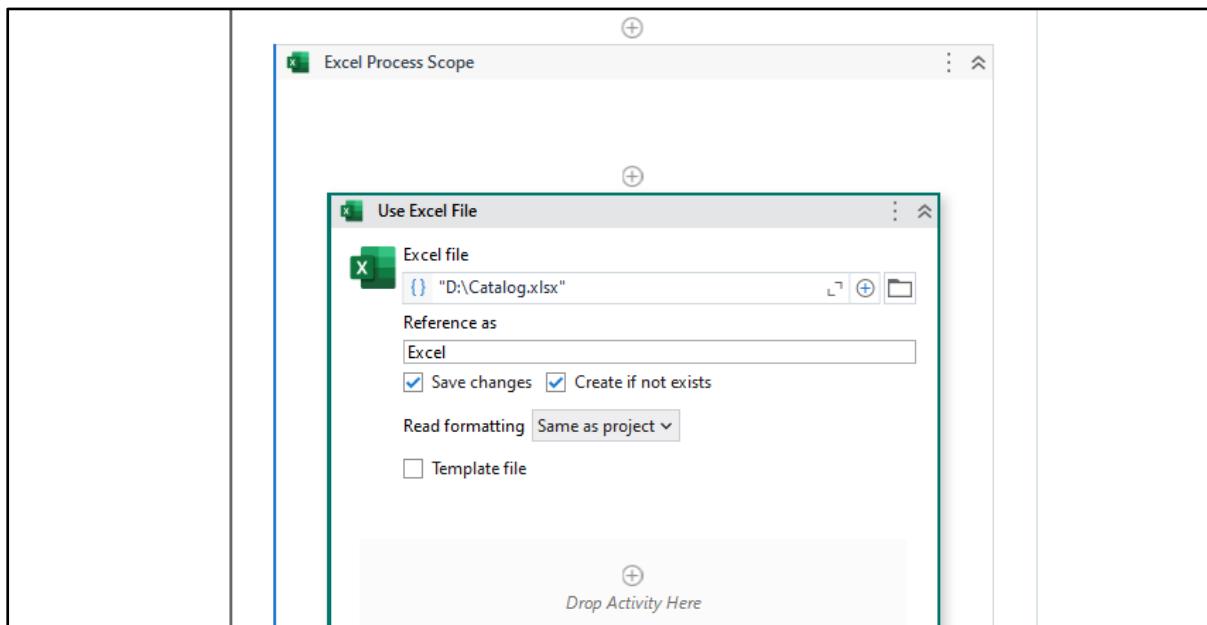
Step 3: Search for “Excel” in the Search panel of the Manage Packages Tab and install “UiPath.Excel.Activities”.



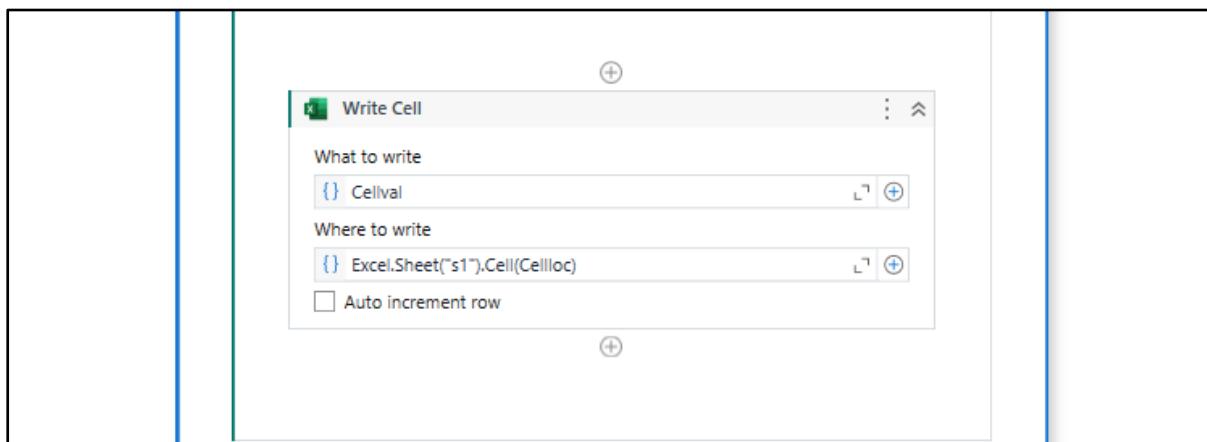
Step 4: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop two Input dialog activities inside the Sequence. Write the appropriate message on the Label of the Input dialogs. Create variables and specify the variables in the Result property of the Input dialog boxes.



Step 5: Search for “Excel Process Scope” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Search for “Use Excel File” in the Search panel of the Activities panel. Drag and drop the activity inside the Excel Process Scope. Enter the Target File location and provide a Reference name.

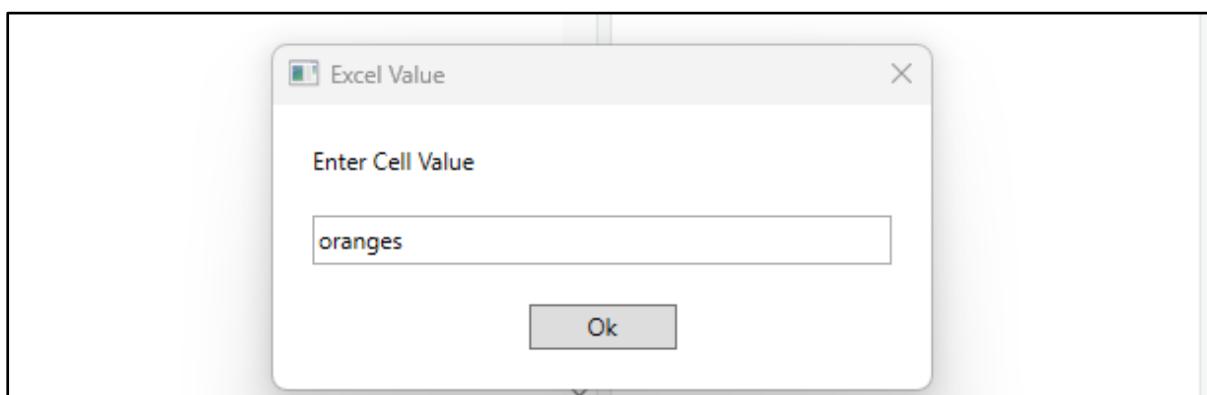
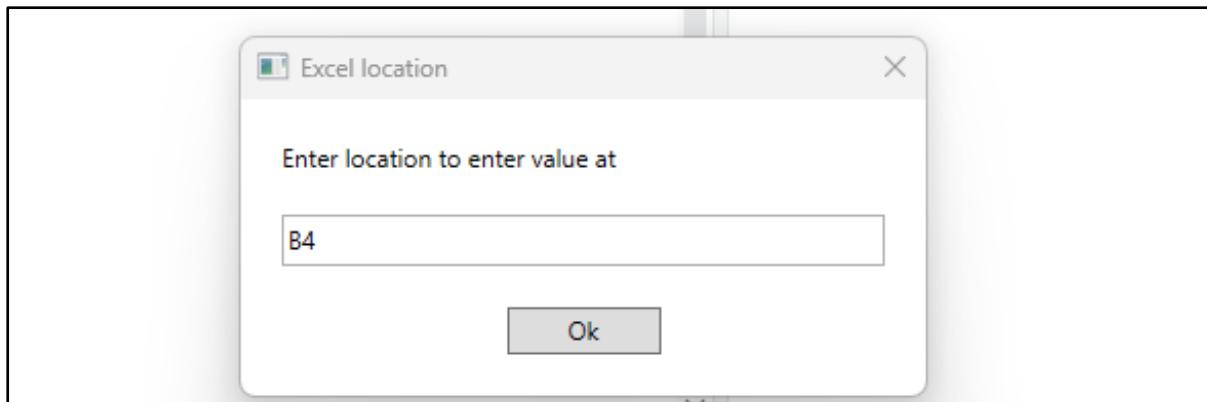


Step 6: Search for “Write Cell” in the Search panel of the Activities panel. Drag and drop the activity inside the Body. Enter the Sheet name and Cell Location to Write to. Enter the cell value variable.



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

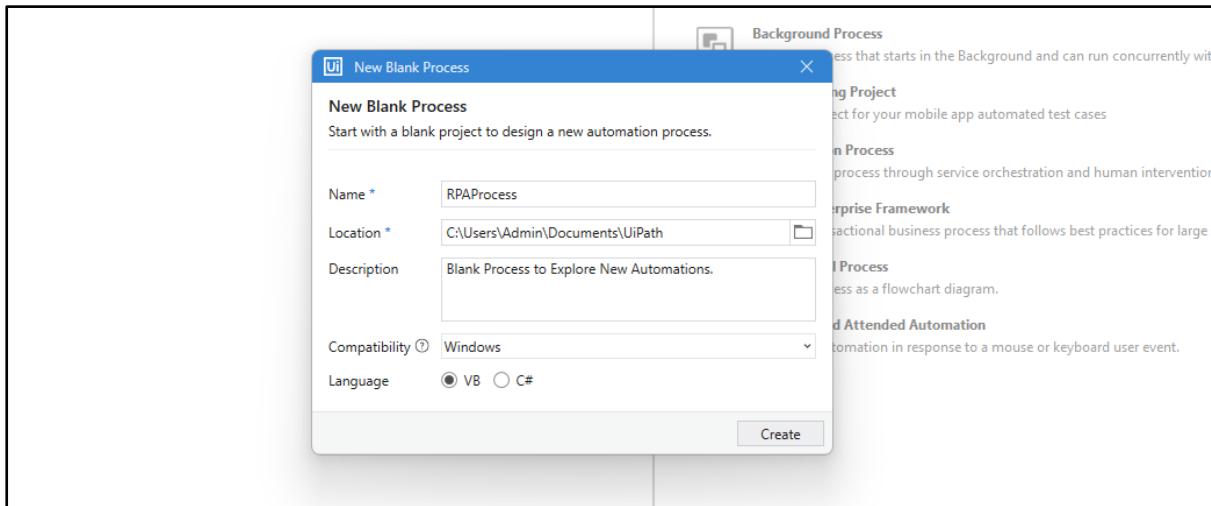
B3	A	B	C	D	E	F	G	H	I	J
1	Sr. No.	Fruits								
2		1 apples								
3		2 bananas								
4										
5										



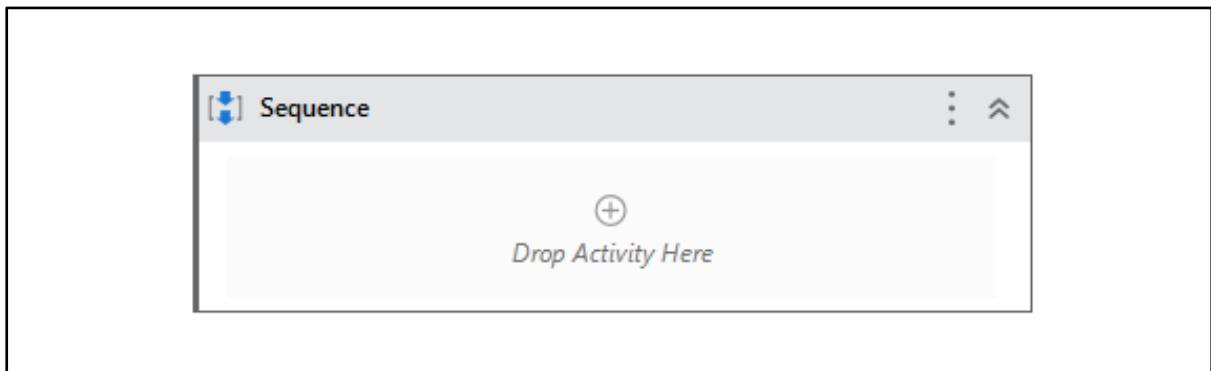
B4	A	B	C	D	E	F	G	H
1	Sr. No.	Fruits						
2		1 apples						
3		2 bananas						
4		oranges						
5								

c] Append Range

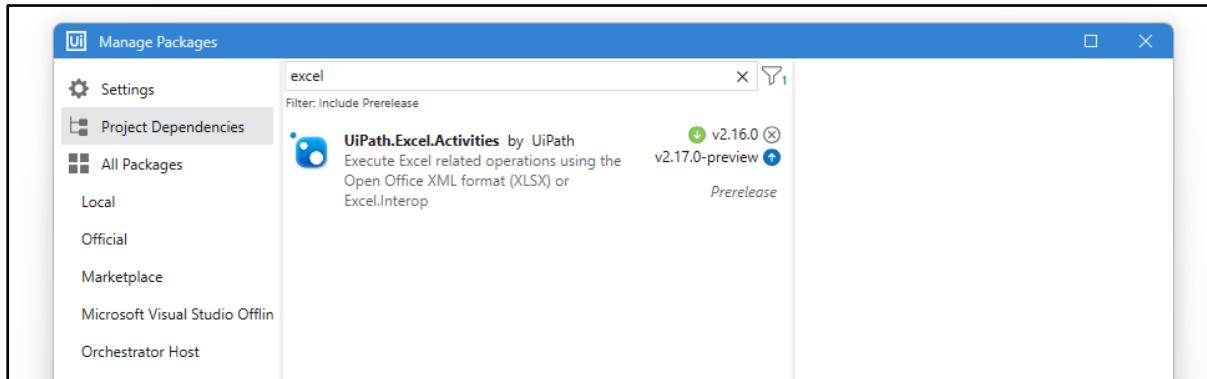
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



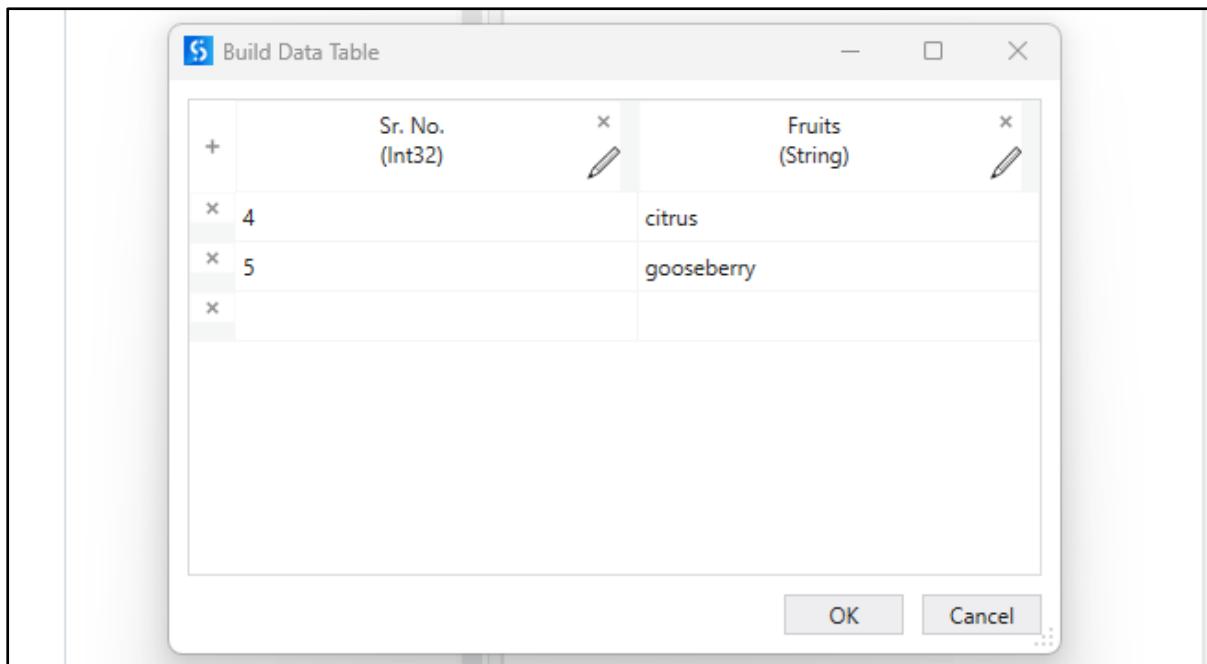
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



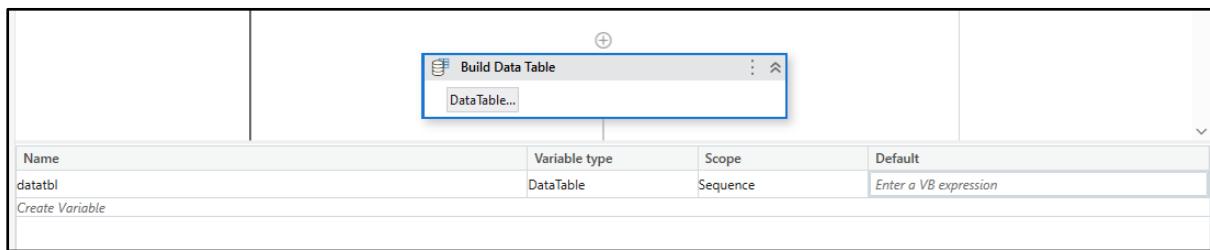
Step 3: Search for “Excel” in the Search panel of the Manage Packages Tab and install “UiPath.Excel.Acitivites”.



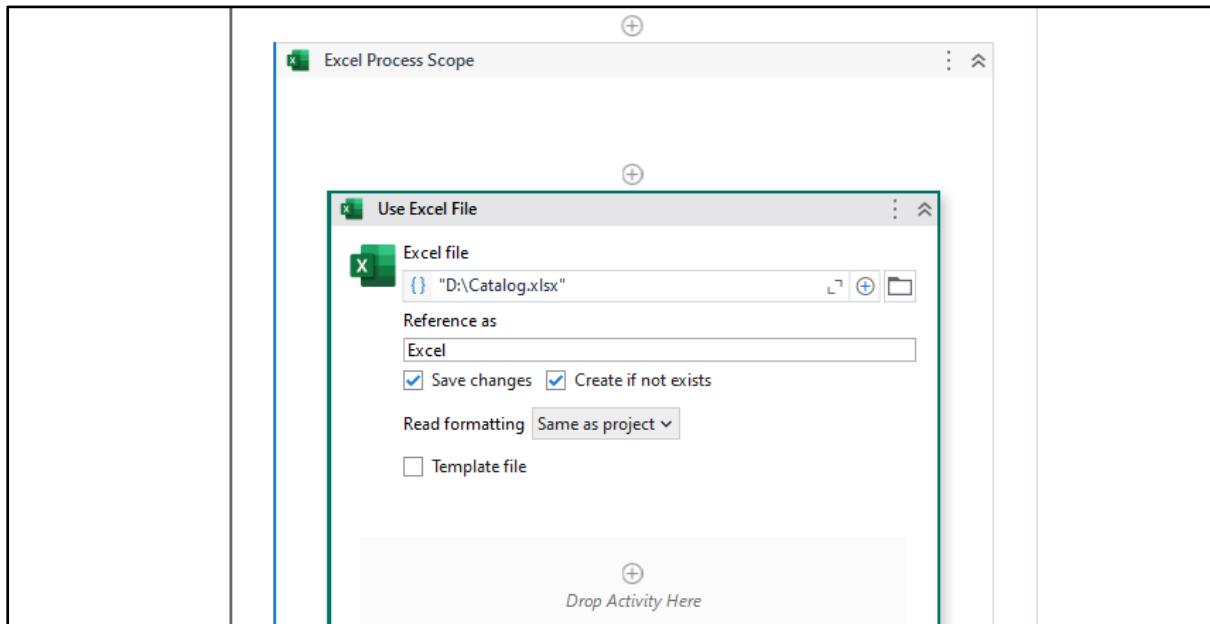
Step 4: Search for “Build Data Table” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Enter the values for the DataTable and click “OK”.



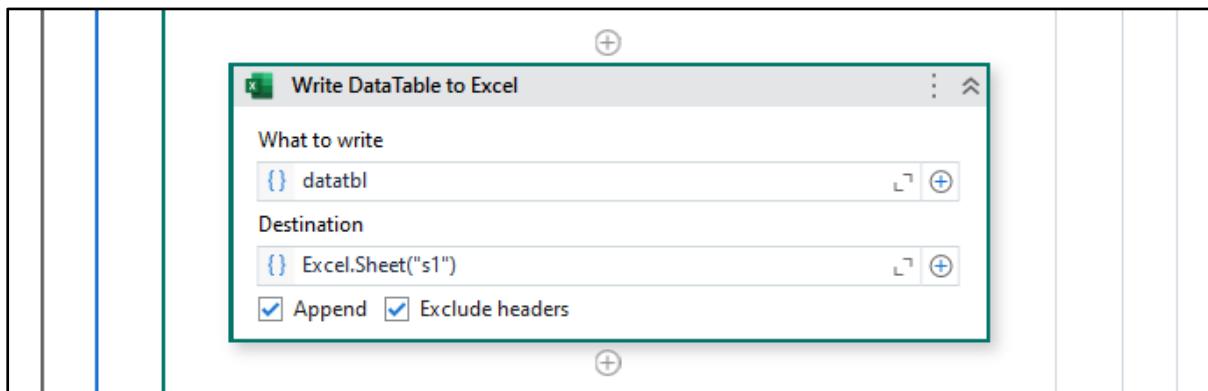
Step 5: Create a DataTable variable for Output.



Step 6: Search for “Excel Process Scope” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Search for “Use Excel File” in the Search panel of the Activities panel. Drag and drop the activity inside the Excel Process Scope. Enter the Target File location and provide a Reference name.



Step 7: Search for “Write DataTable to Excel” in the Search panel of the Activities panel. Drag and drop the activity inside the Body. Enter the Sheet name and Range to Write To. Enter the output variable of “DataTable” type to write the range. Check “Append” and “Exclude Headers”.



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

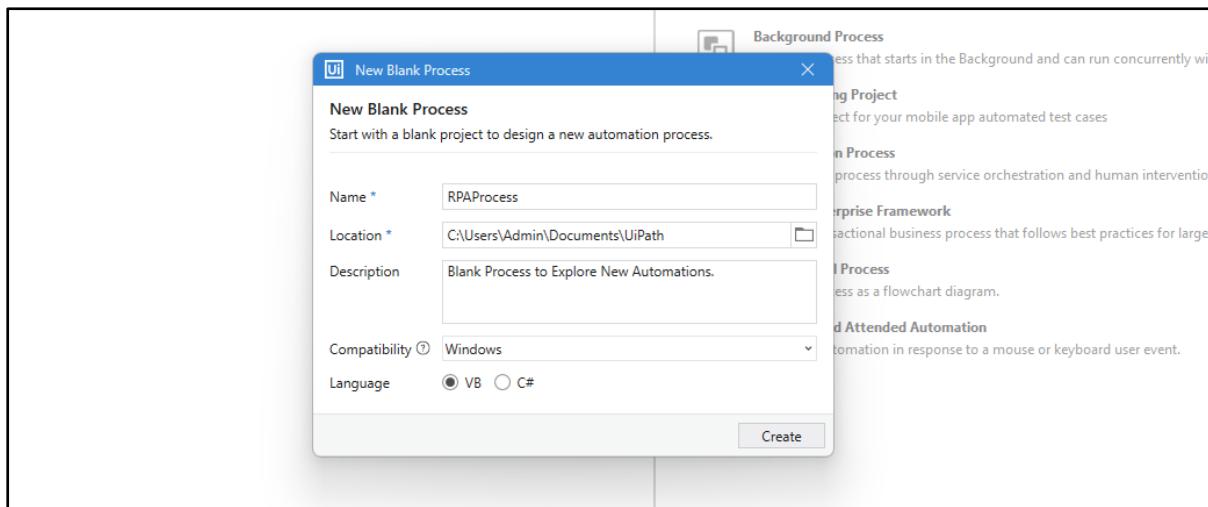
	A1	B	C	D	E	F	G
1	Sr. No.	Fruits					
2		1 apples					
3		2 bananas					
4		3 oranges					
5							

	A	B	C	D	E	F	G	H	I
1	Sr. No.	Fruits							
2		1 apples							
3		2 bananas							
4		3 oranges							
5		4 citrus							
6		5 gooseberry							
7									
8									

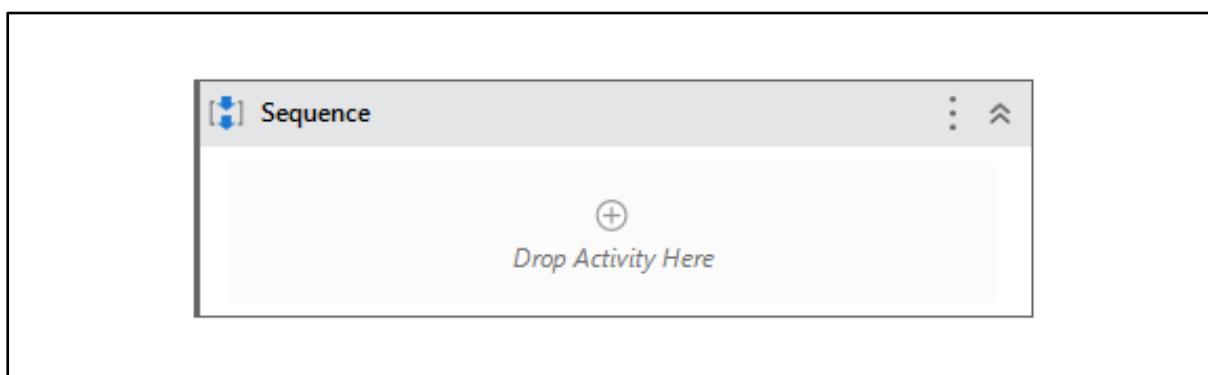
[VI] Word plugin

[a] Read

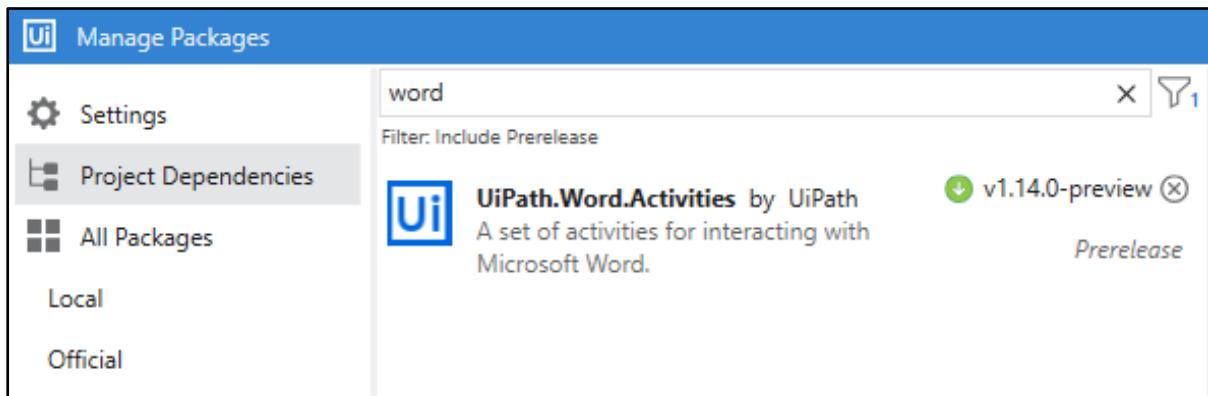
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Search for “Word” in the Search panel of the Manage Packages Tab and install “UiPath.Word.Acitivites”.



Step 4: 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.



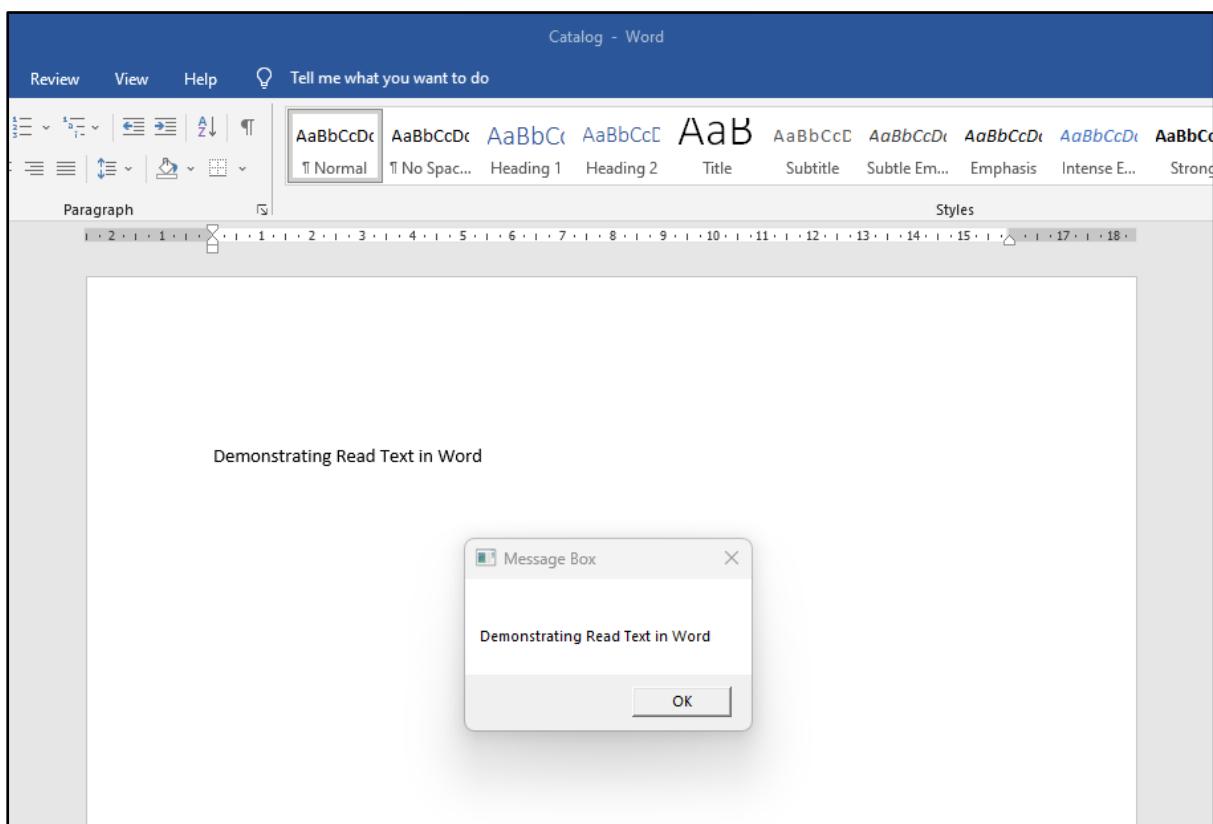
Step 5: Search for “Read Text” in the Search panel of the Activities panel. Drag and drop the activity inside the Word Application Scope. Create and save the value to a new output variable.



Step 6: Search for “Message Box” in the Search panel of the Activities panel. Drag and drop the activity inside the Word Application Scope and enter the output variable.

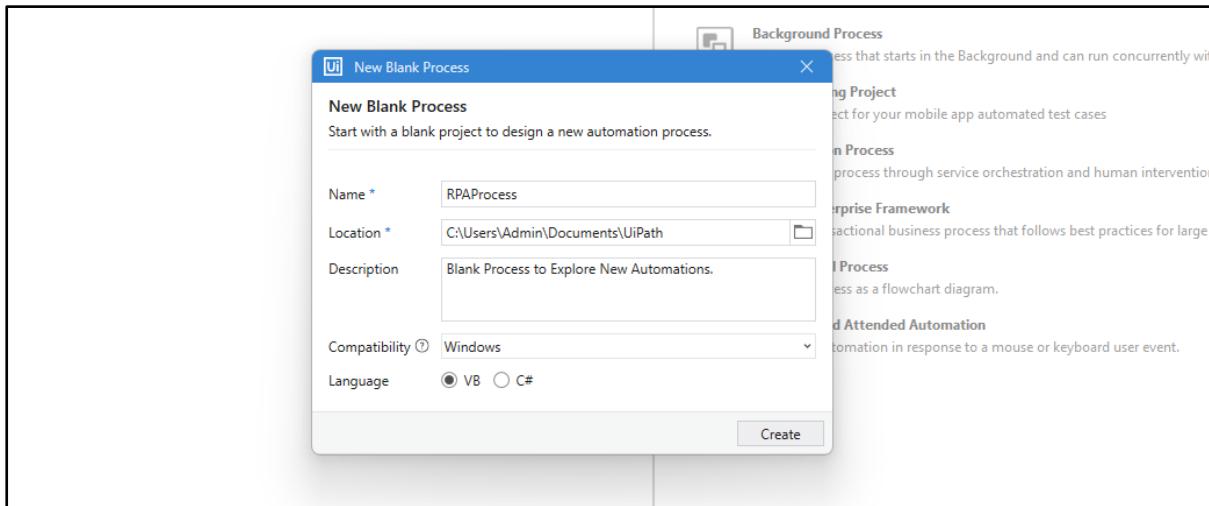


Step 7: Click the Run button and see the result.

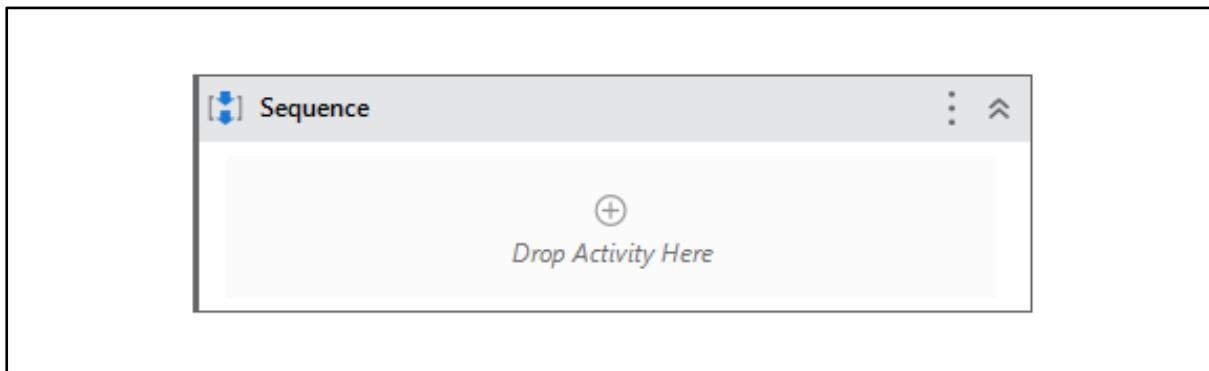


[b] Append Text

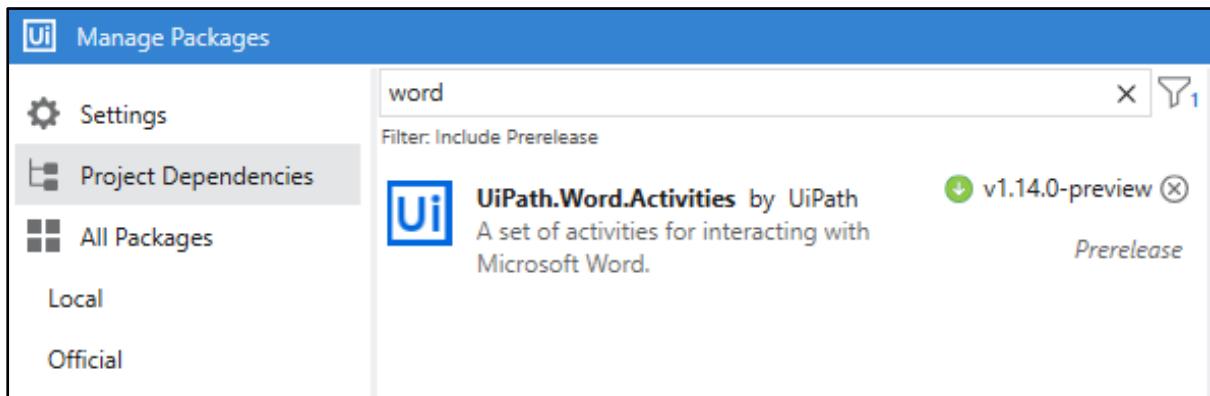
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



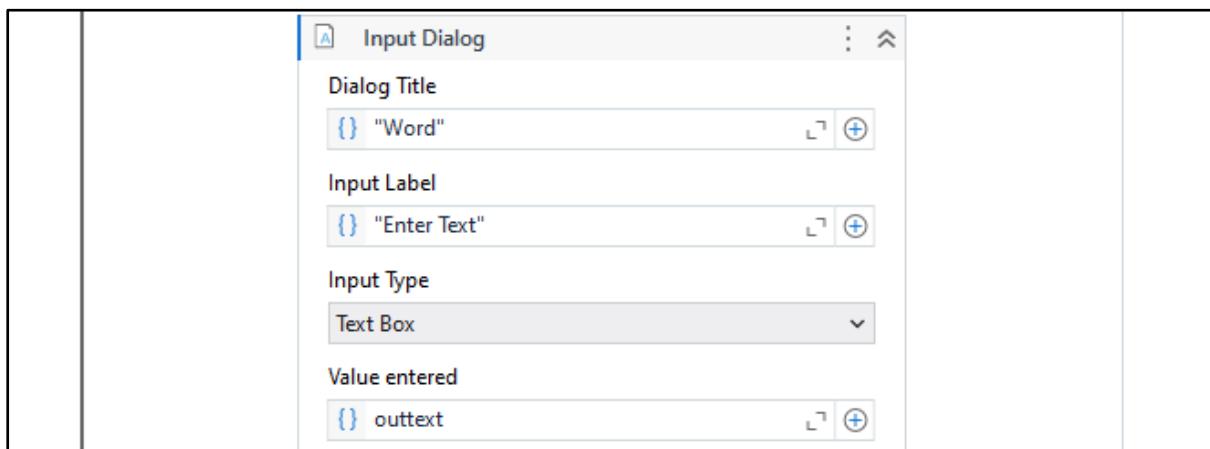
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Search for “Word” in the Search panel of the Manage Packages Tab and install “UiPath.Word.Acitivites”.



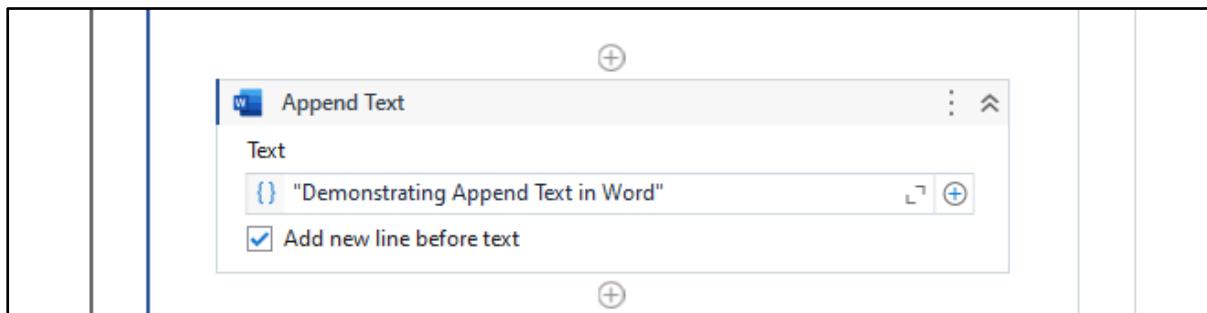
Step 4: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create variables and specify the variables in the Result property of the Input dialog box.



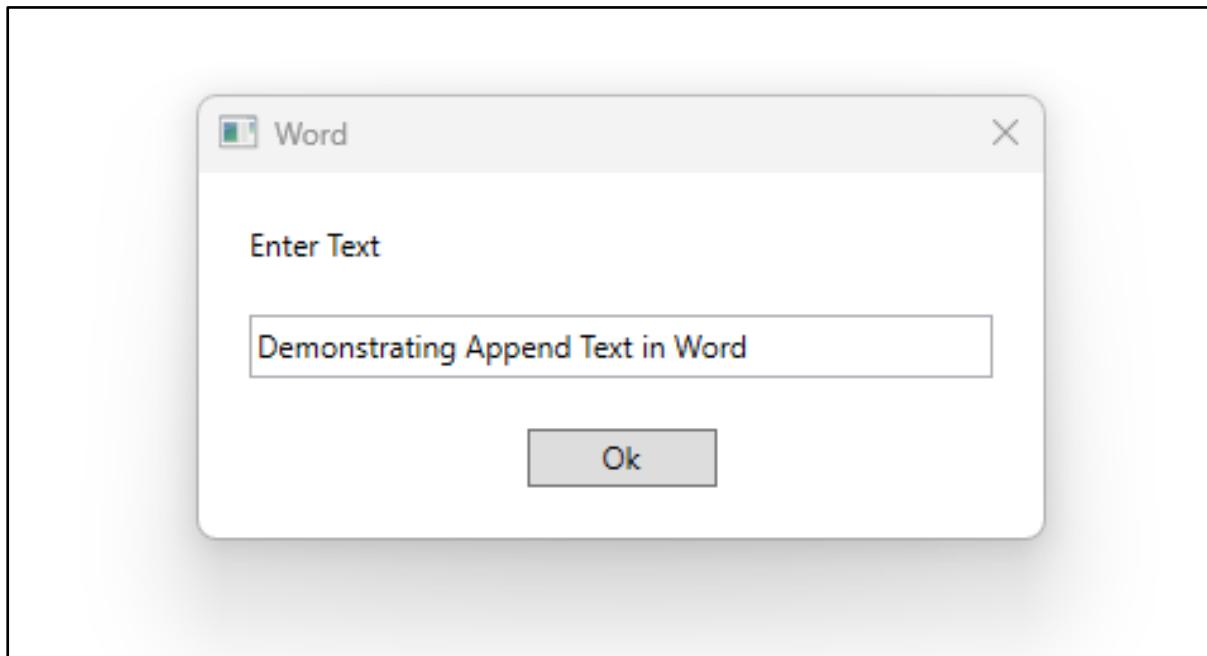
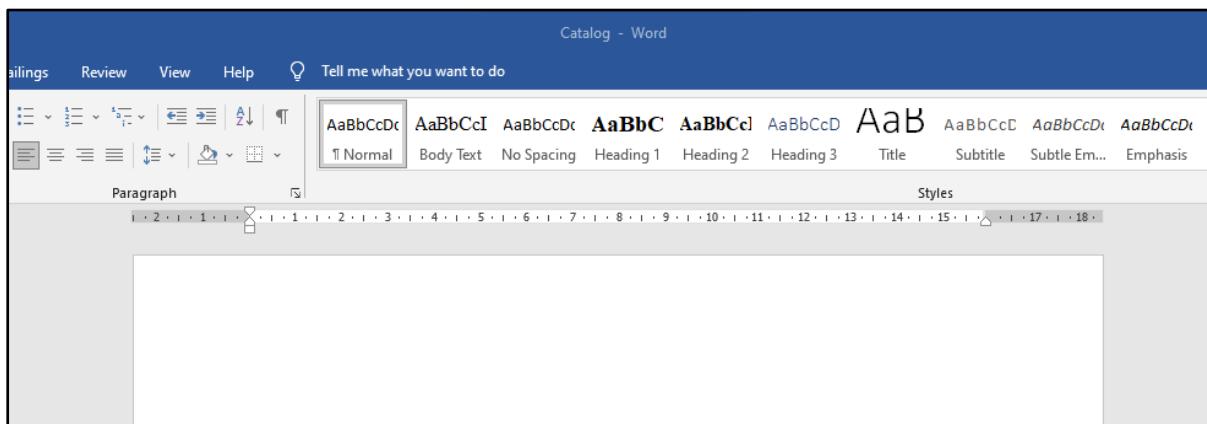
Step 5: Search for “Word Application Scope” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Enter the Target File location.

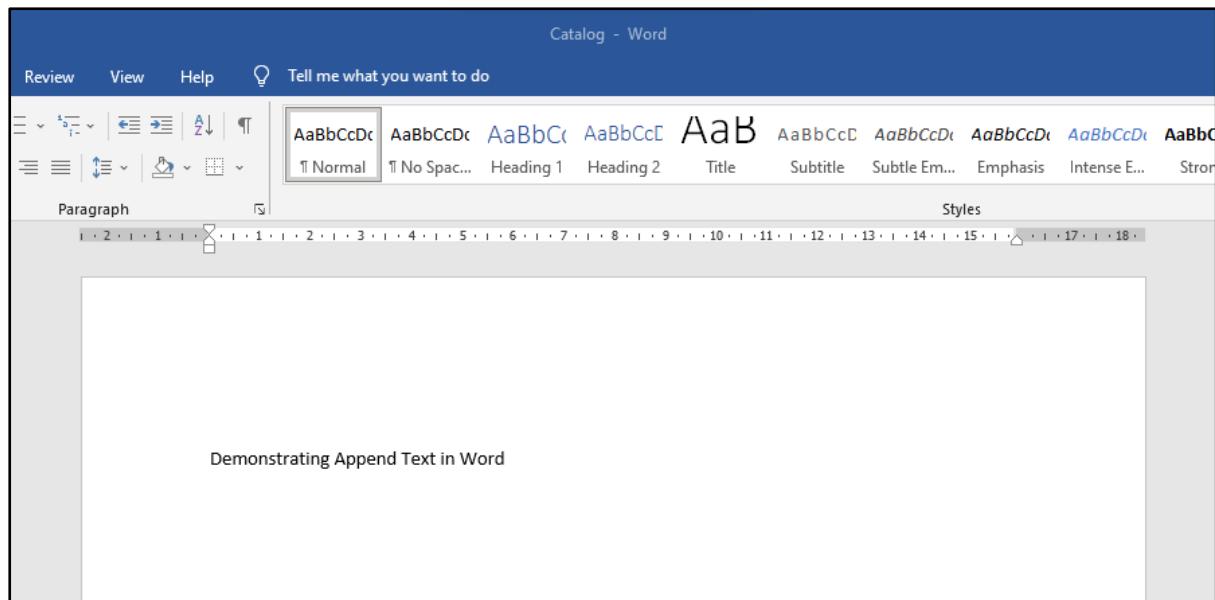


Step 6: Search for “Append Text” in the Search panel of the Activities panel. Drag and drop the activity inside the Word Application Scope and enter the output variable.



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

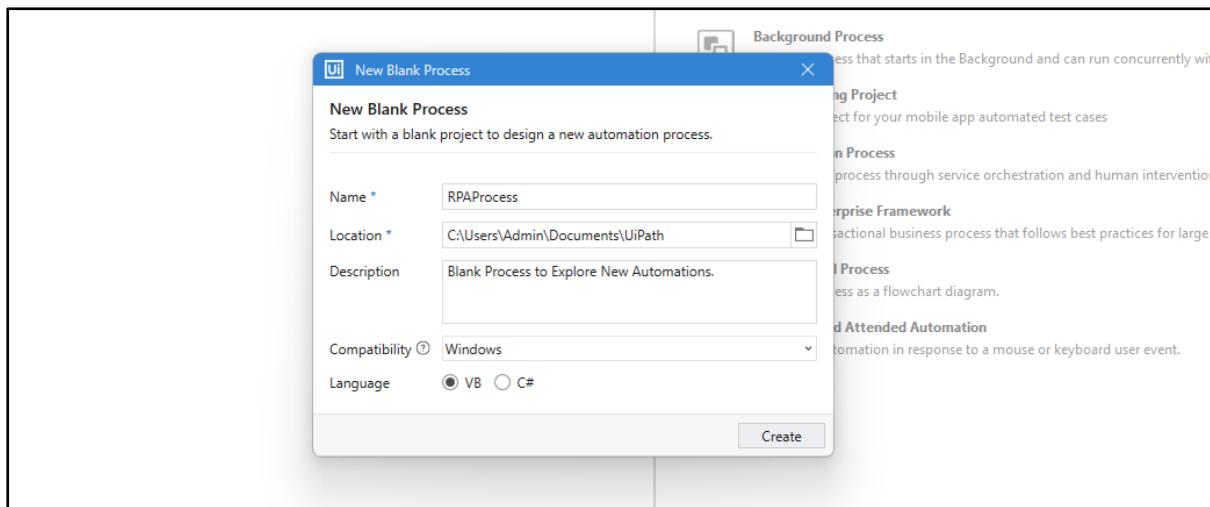




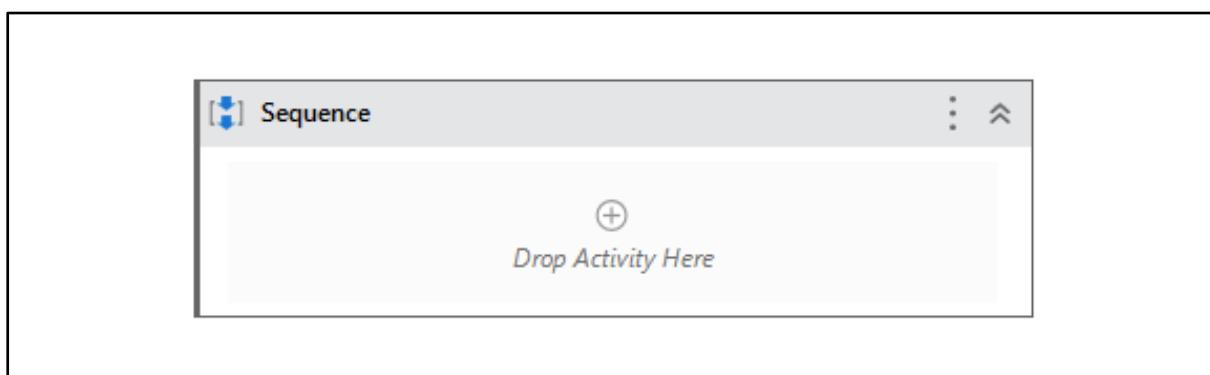
[VII] Credential Management

[a] Set Credential

Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Create a new Credential in Orchestrator.

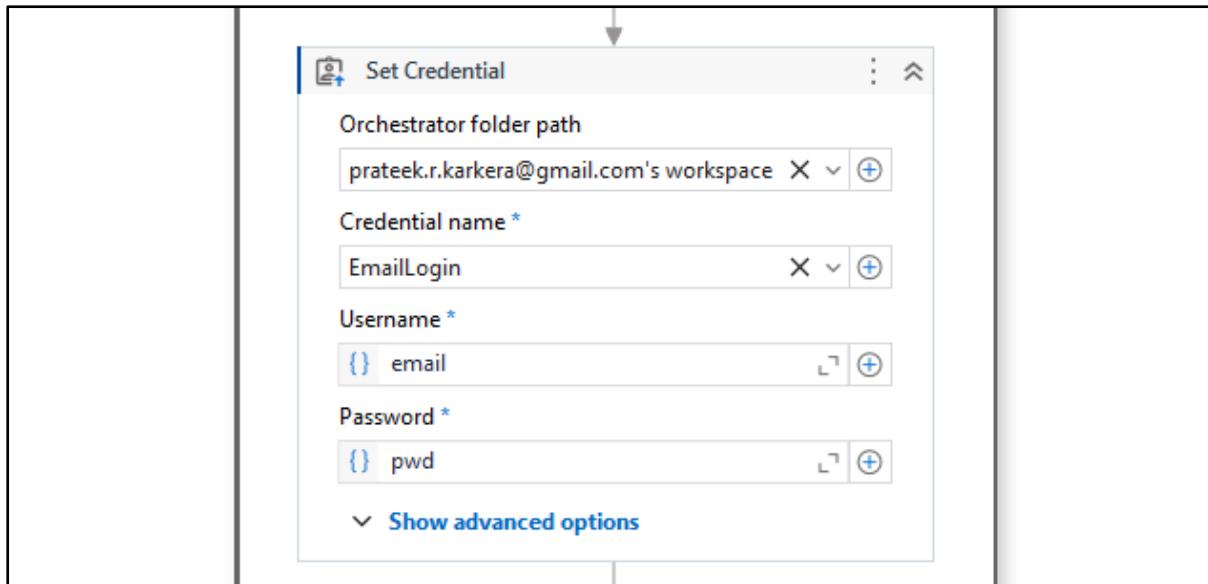
The screenshot shows the 'Assets' tab in the Microsoft Azure Logic Apps interface. At the top, there are navigation links: Home, Automations, Monitoring, Queues, Assets (which is highlighted in blue), and Storage Buckets. Below the navigation is a search bar labeled 'Search' and dropdown menus for 'Columns' and 'Labels: All' and 'Properties: All'. The main area displays a table with one row. The first column contains a checkbox and the name 'EmailLogin'. The second column contains the description 'Credential'. The third column contains a dropdown menu with the value 'Type'.

Step 4: Search for “Input Dialog Box” in the Search panel of the Activities panel. 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.

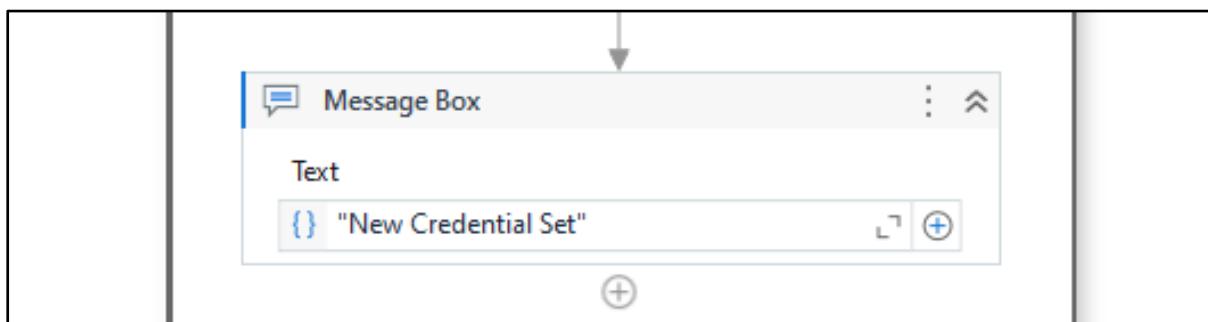
The screenshot shows the 'Activities' panel in the Microsoft Azure Logic Apps interface. On the left, there is a large empty workspace. In the center, there are two 'Input Dialog' activities stacked vertically. Each dialog has the following settings: Dialog Title set to "Credential Management", Input Label set to "Enter Username" or "Enter Password", Input Type set to "Text Box", and Value entered set to "email" or "pwd". A downward arrow points from the first dialog to the second. At the bottom, there is a table titled 'Variables' with the following data:

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

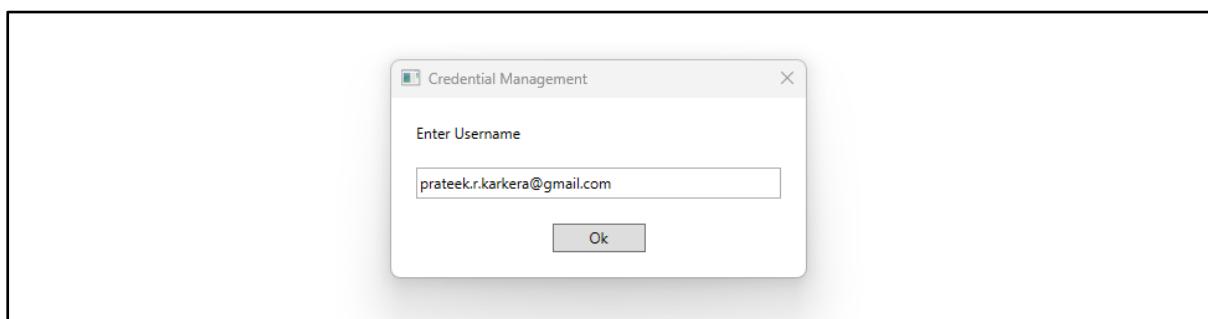
Step 5: Search for “Set Credential” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Select the Orchestrator Folder Path and the Credential name. Enter the Username and Password Variables.

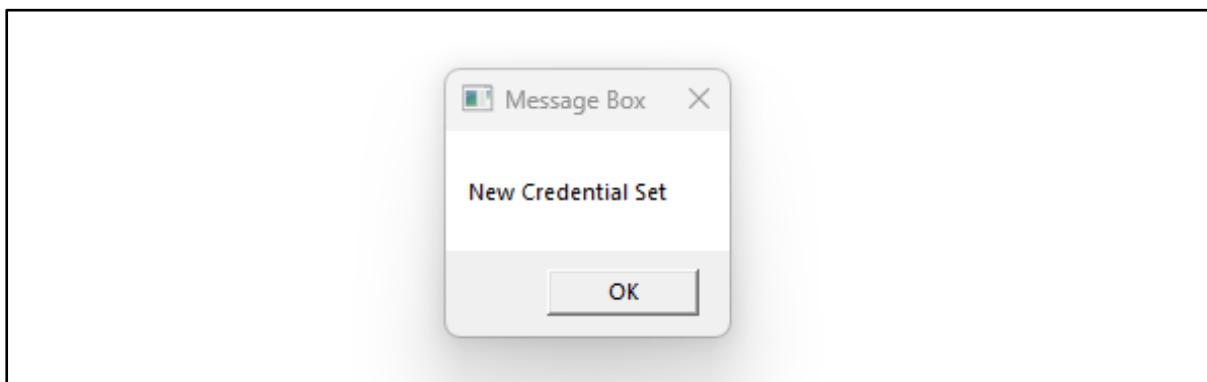
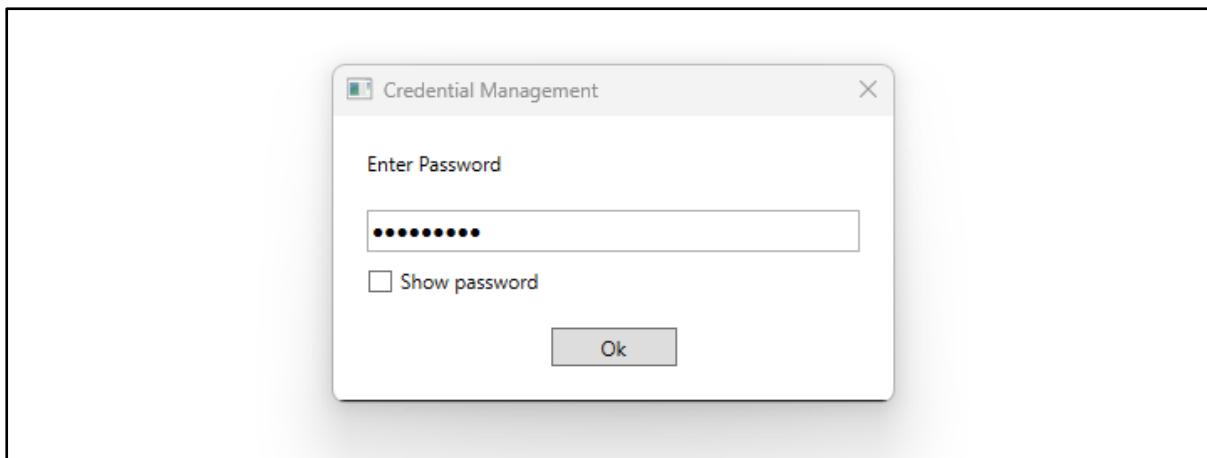


Step 6: Search for “Message Box” in the Search panel of the Activities panel. Drag and drop the activity inside the body and enter the output statement.



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

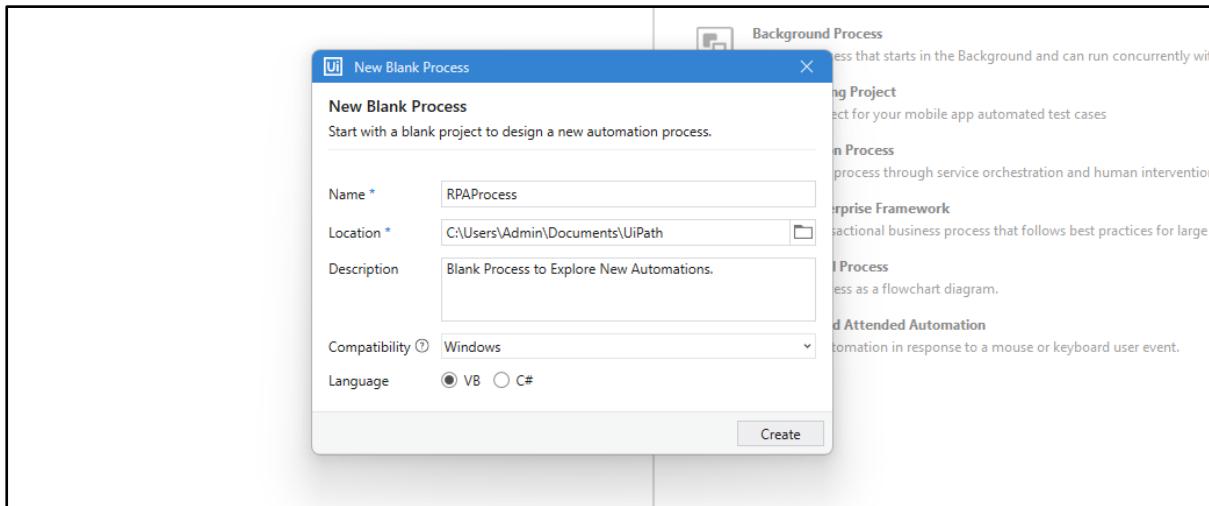




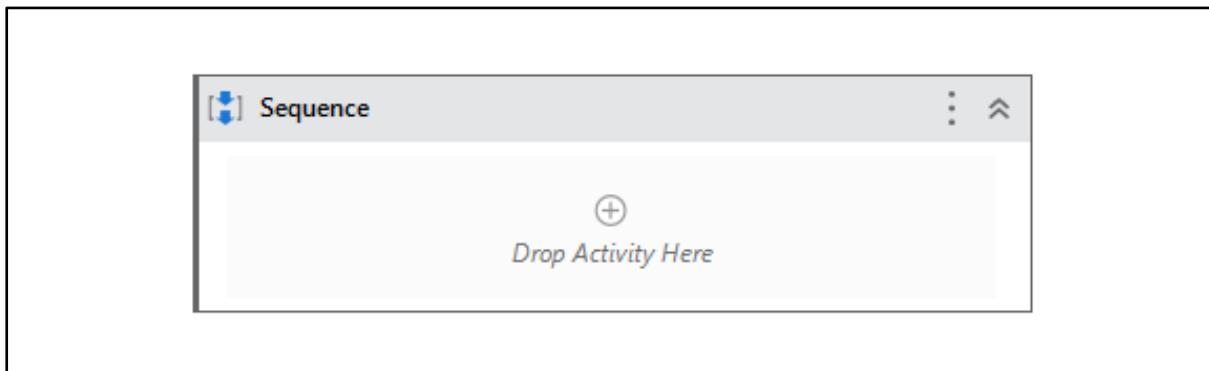
General details		Asset value	
Asset name *	EmailLogin	Type	Credential
Username *	prateek.r.karkera@gmail.com		
Password *	<input type="password"/>		

[b] Get Credential

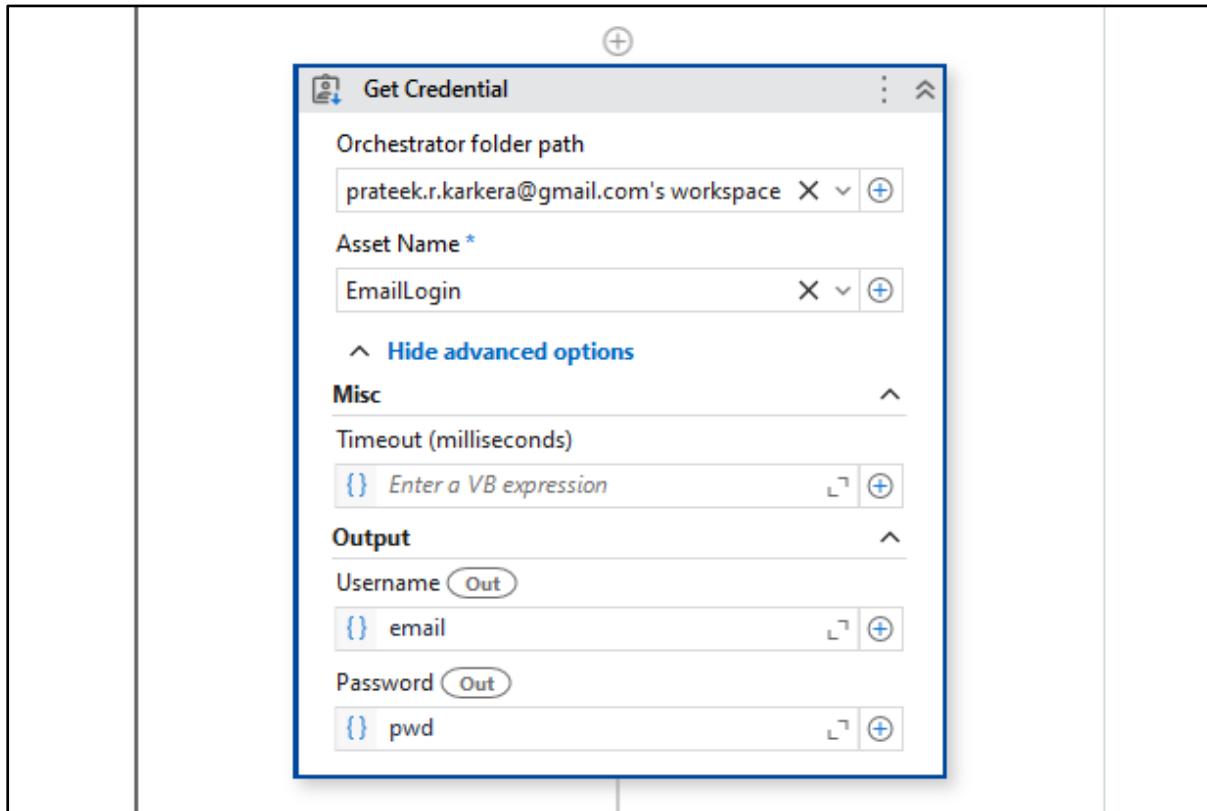
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



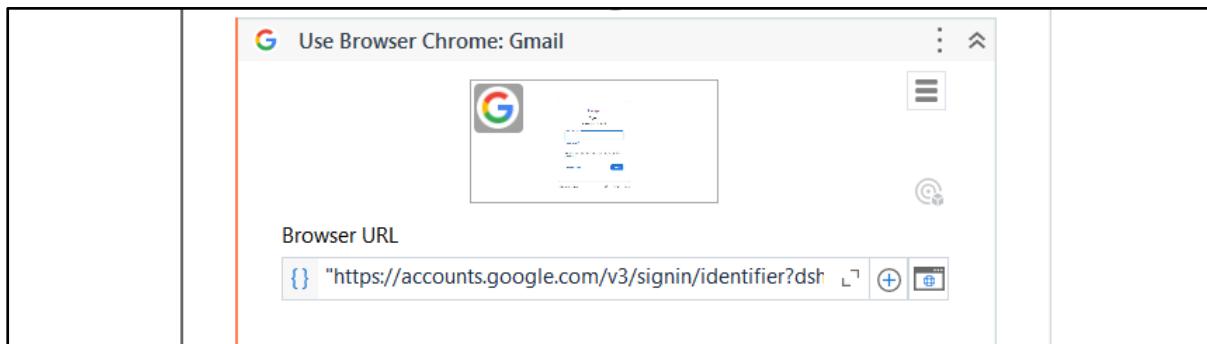
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



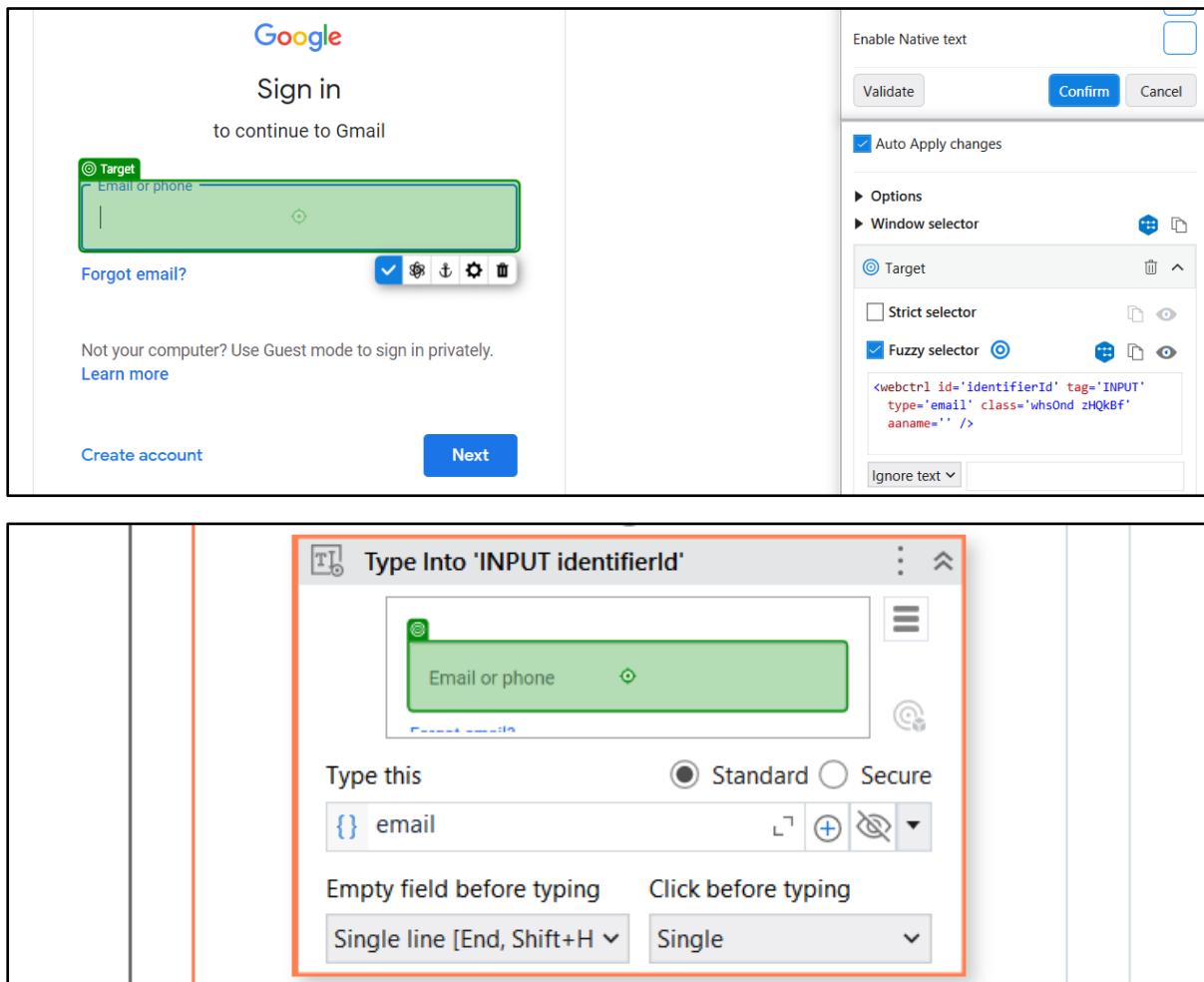
Step 3: Search for “Get Credential” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Select the Orchestrator Folder Path and the Credential name. Create new variables for username and password and map the Username and Password Outputs.



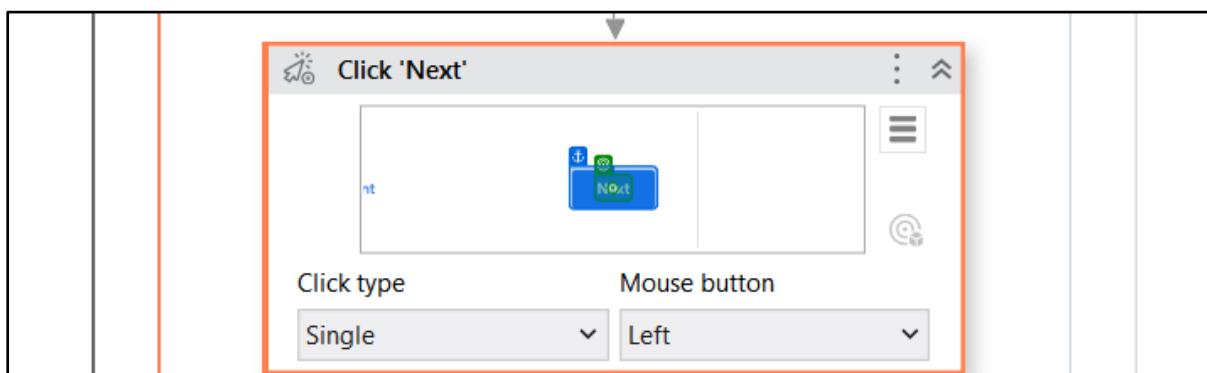
Step 4: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



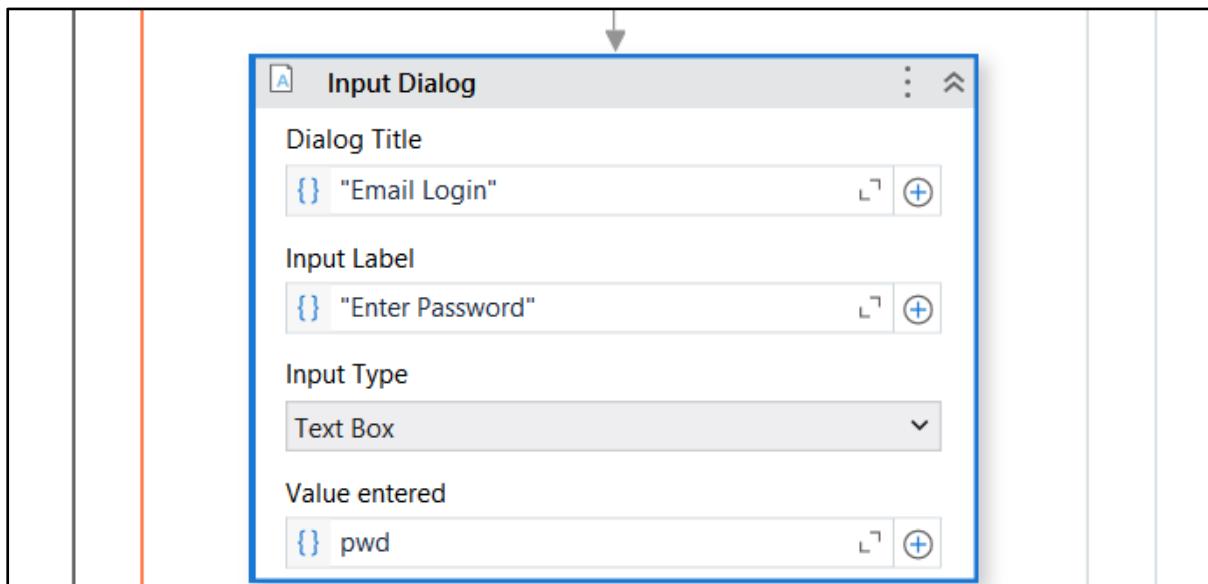
Step 5: Search for “Type Into” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to click on and Click on Save & Close.



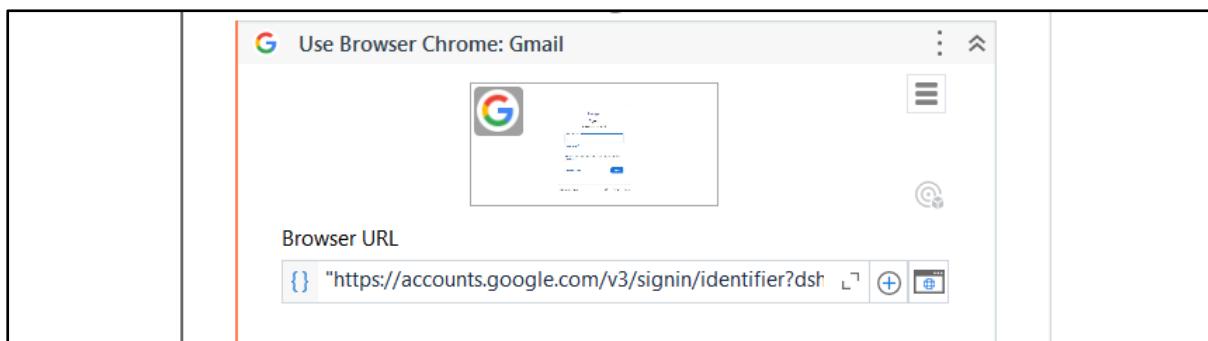
Step 6: Search for “Click” Activity in the Activities Panel and drag it inside the sequence. Indicate the “Next” button.



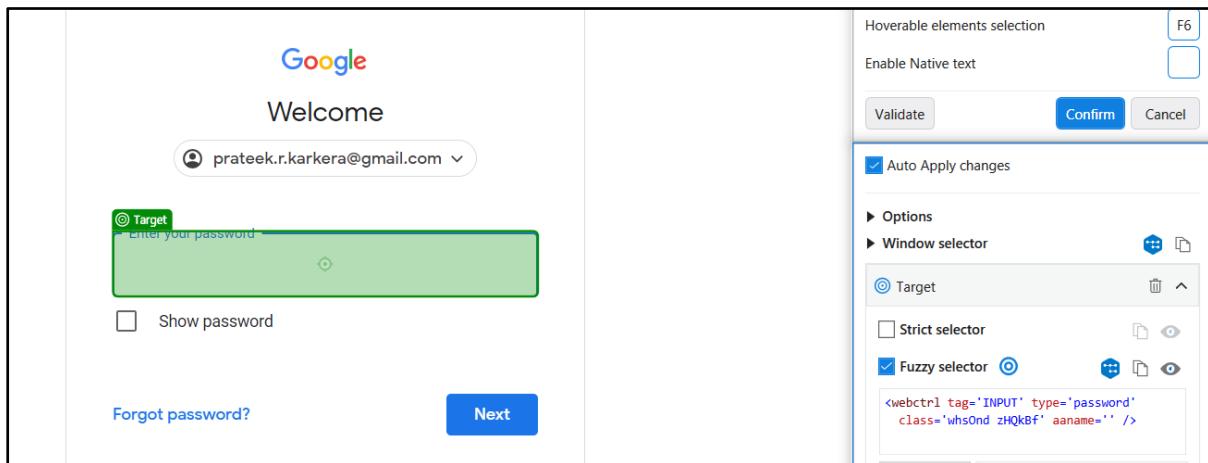
Step 7: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create a variable and specify the variable in the Result property of the Input dialog box. Check the IsPassword property.



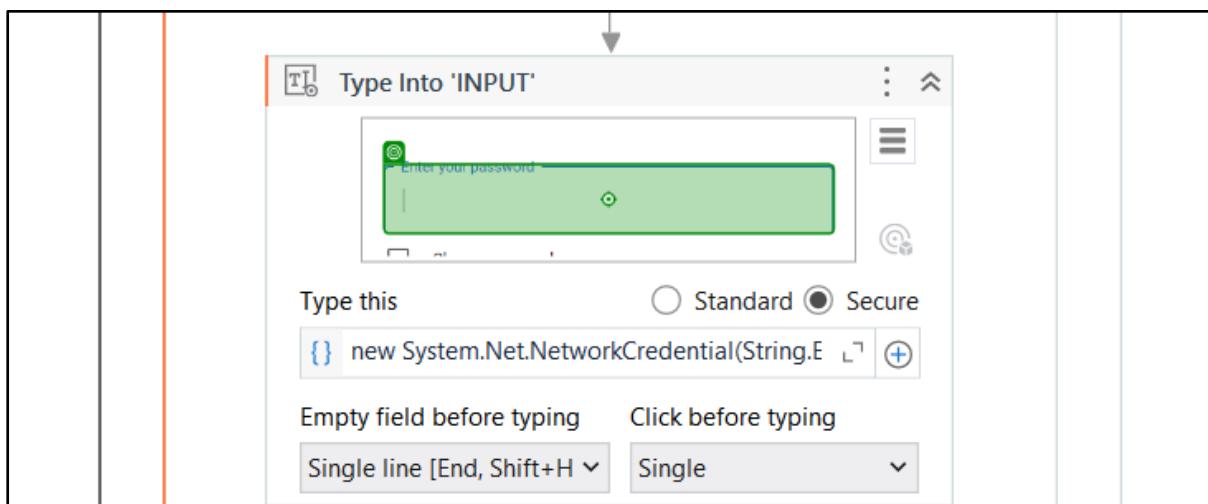
Step 8: Search for “Use Browser/ Application” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the screen you want to include in the workflow.



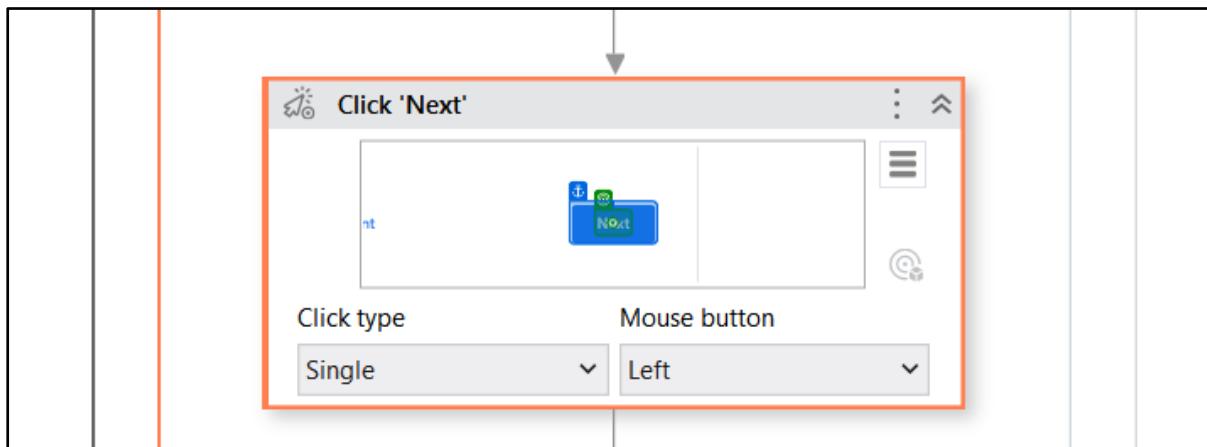
Step 9: Search for “Type Into” Activity in the Activities Panel and drag it inside the sequence workflow. Indicate the Element you want to click on and Click on Save & Close.



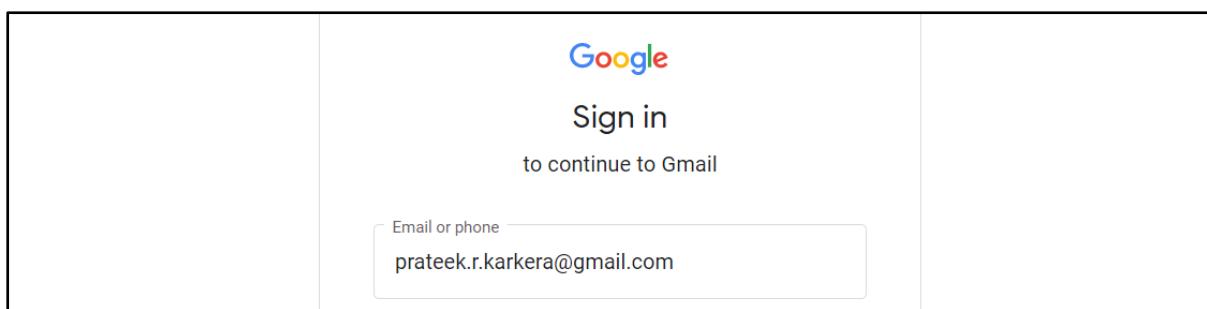
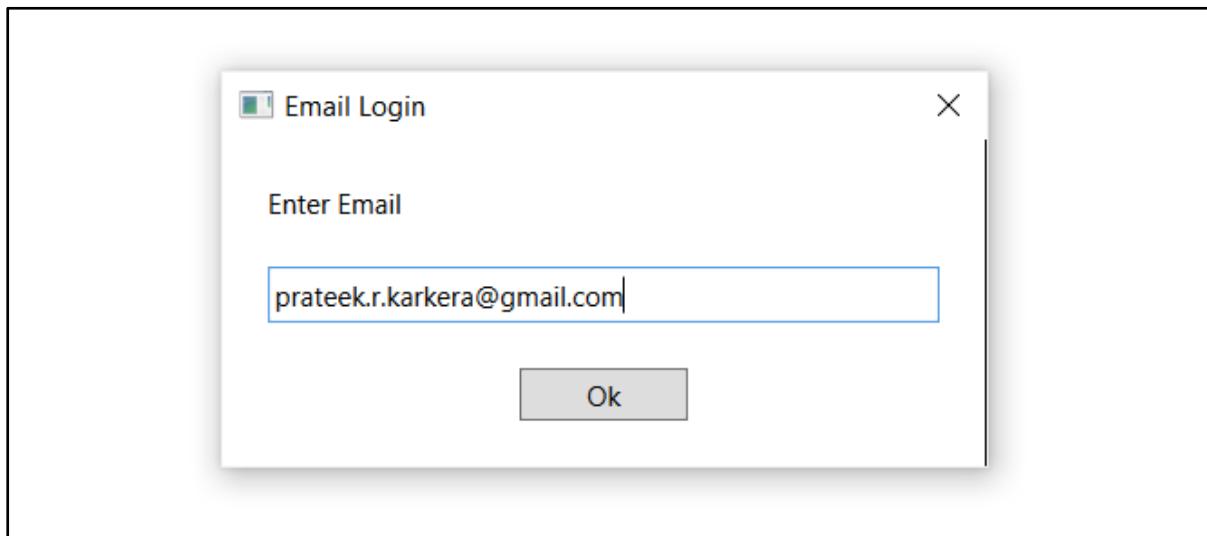
Step 10: Select the Secure Radio Button. Set the variable as Secure String using the code – “new System.Net.NetworkCredential(String.Empty, pwd).SecurePassword”.

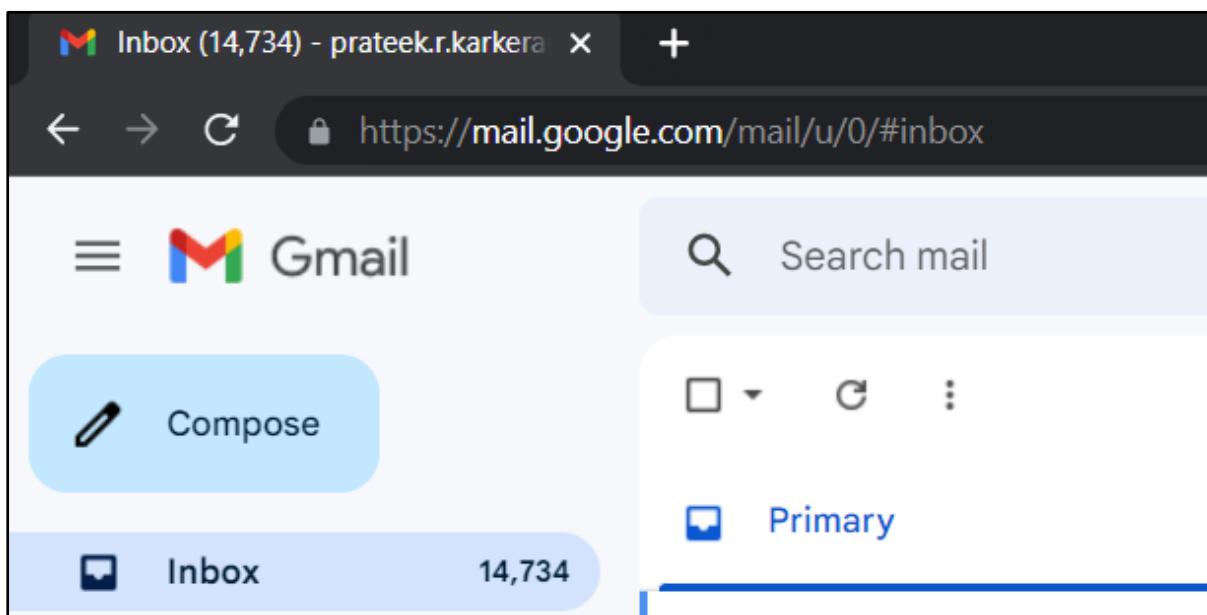
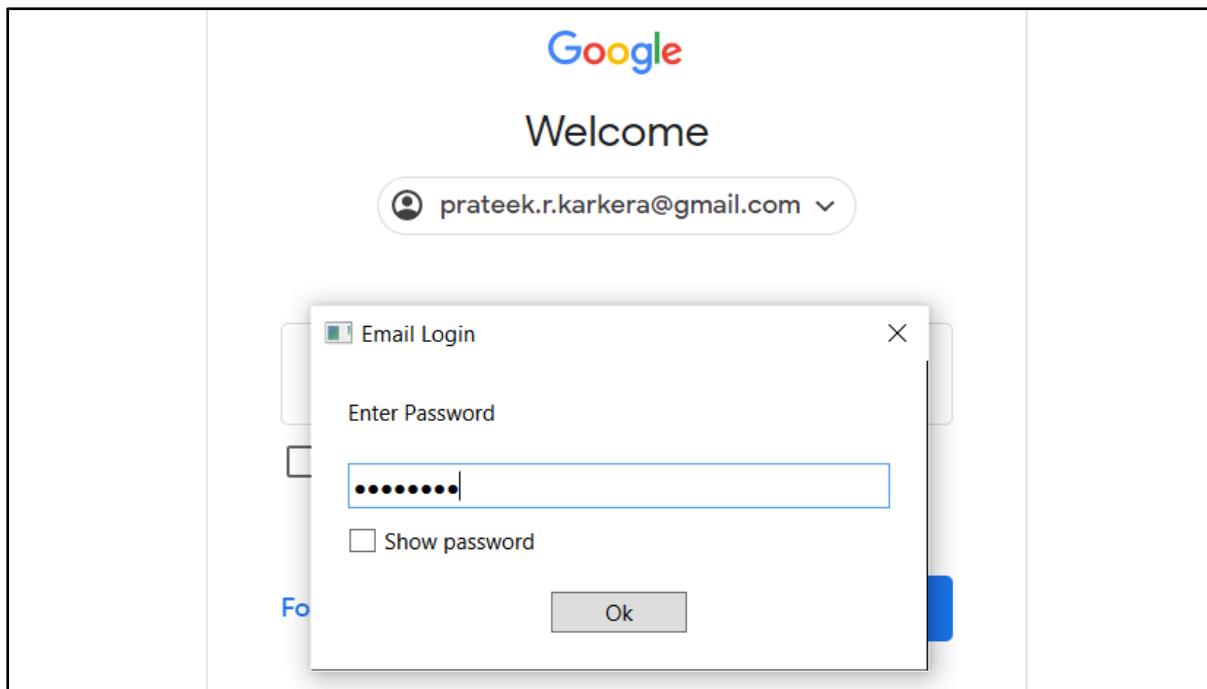


Step 11: Search for “Click” Activity in the Activities Panel and drag it inside the sequence. Indicate the “Next” button.



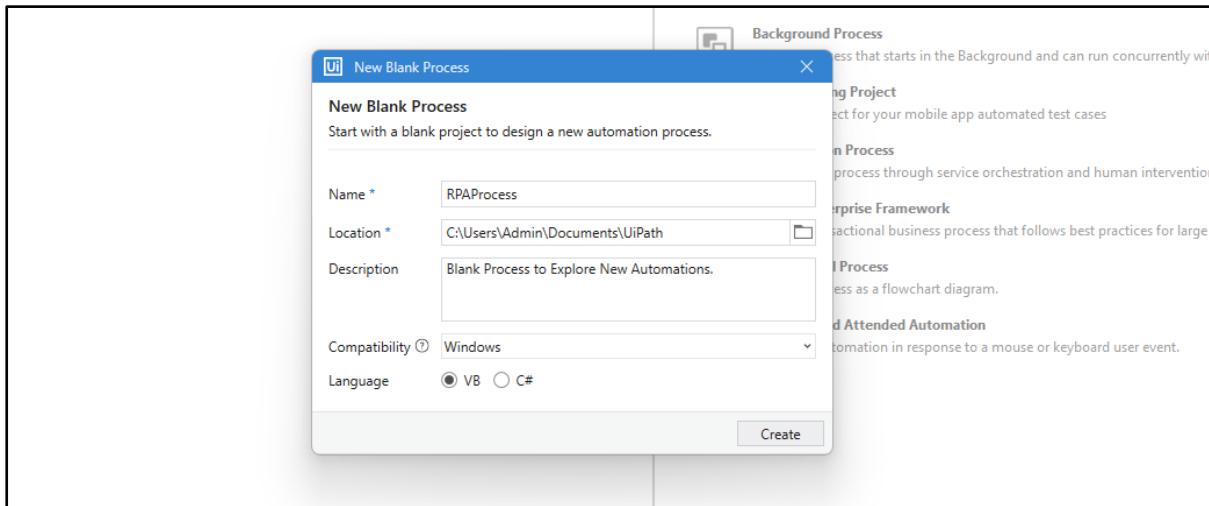
Step 12: Click the Run Button and see the results.



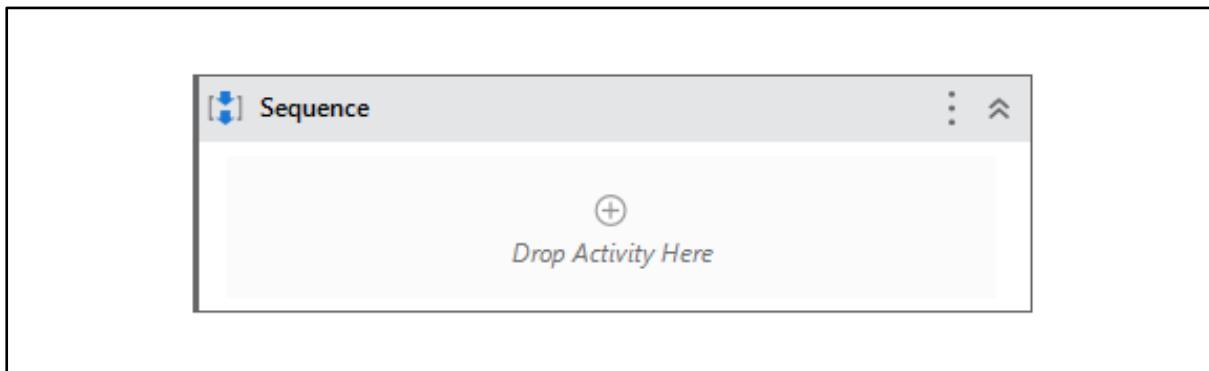


[c] Set Asset

Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



Step 3: Create a new Asset in Orchestrator.

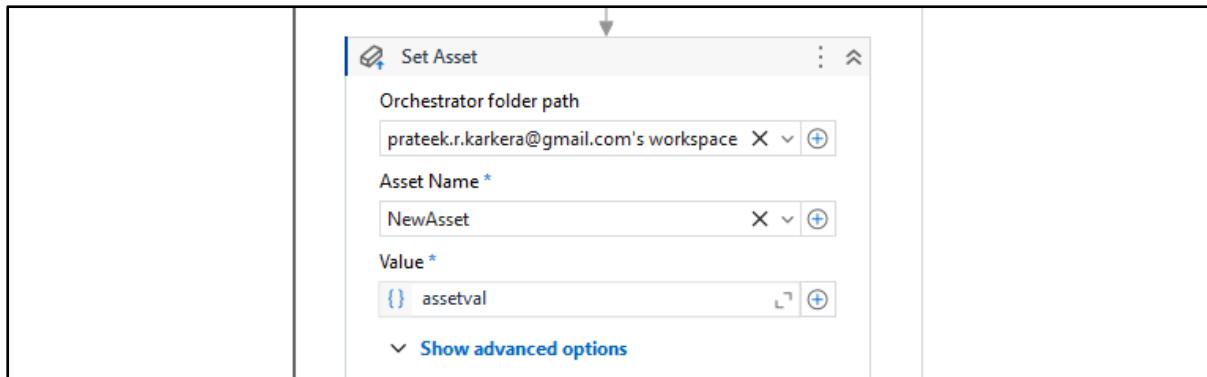
The screenshot shows the 'Assets' tab in the Microsoft Azure Orchestrator interface. At the top, there are navigation links: Home, Automations, Monitoring, Queues, Assets (which is highlighted in blue), and Storage Buckets. Below the navigation is a search bar labeled 'Search' and dropdown menus for 'Columns', 'Labels: All', and 'Properties: All'. A table lists assets with columns for Name, Description, and Type. One asset, 'NewAsset', is listed under the 'Name' column, and its 'Type' is 'Text'.

Step 4: Search for “Input Dialog Box” in the Search panel of the Activities panel. Drag and drop Input dialog box inside the Sequence. Give appropriate label to the Input Dialog box. Create a new variable to store Asset Value.

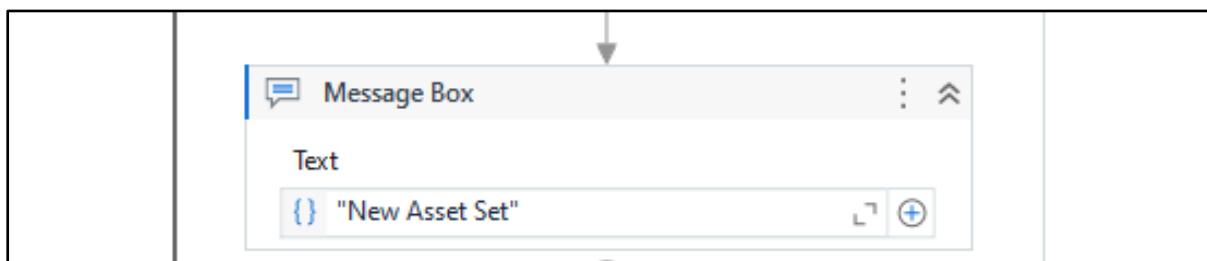
The screenshot shows the 'Sequence' editor in the Microsoft Azure Orchestrator interface. A sub-menu 'Input Dialog' is open, displaying settings for a dialog box: 'Dialog Title' set to 'Credential Management', 'Input Label' set to 'Enter Asset Value', 'Input Type' set to 'Text Box', and 'Value entered' set to 'assetval'. Below the sequence editor, a table lists variables: 'assetval' is defined as a 'String' type variable with a scope of 'Sequence' and no default value. There is also a link 'Create Variable'.

Name	Variable type	Scope	Default
assetval	String	Sequence	Enter a VB expression

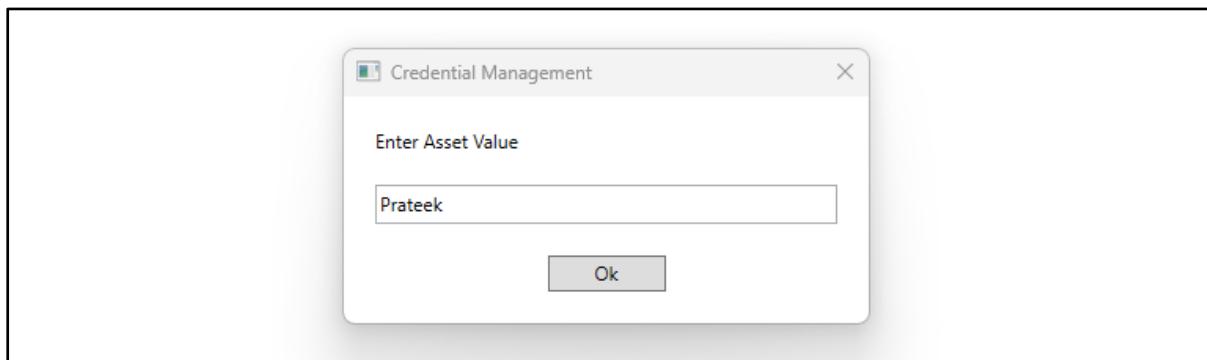
Step 5: Search for “Set Asset” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Select the Orchestrator Folder Path and the Asset name. Enter the Asset Value Variable.

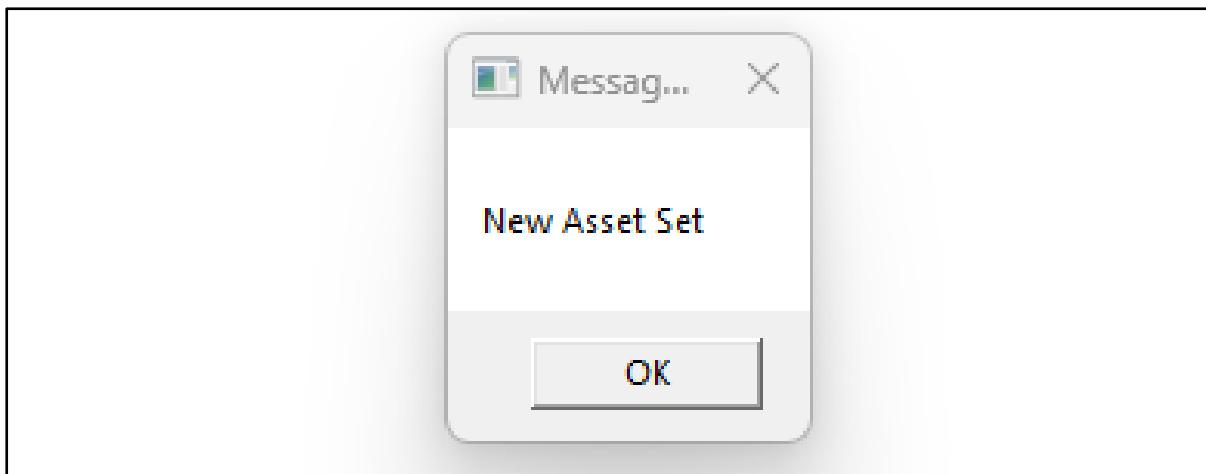


Step 6: Search for “Message Box” in the Search panel of the Activities panel. Drag and drop the activity inside the body and enter the output statement.



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

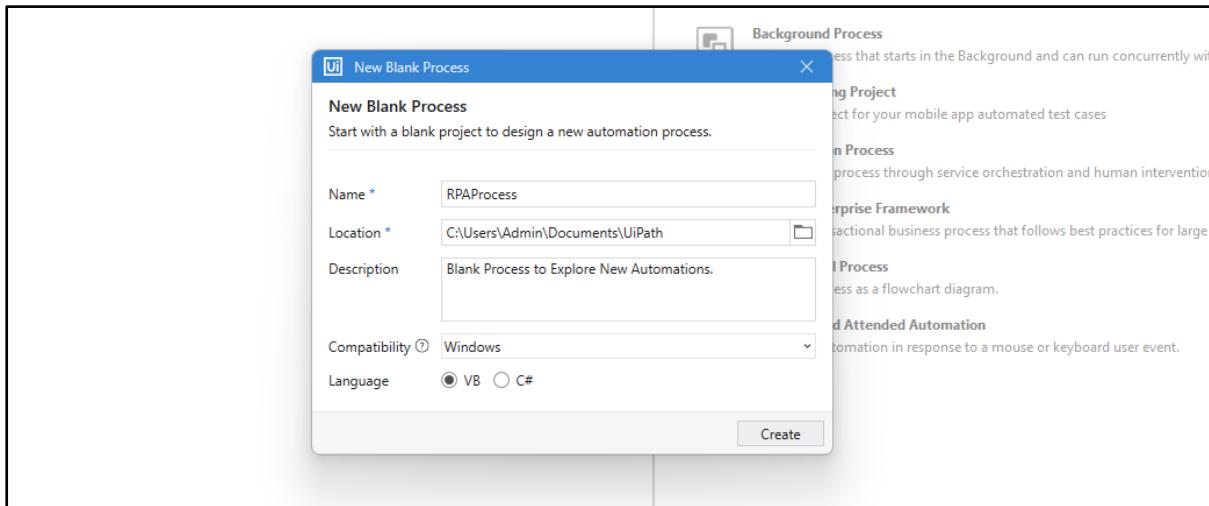




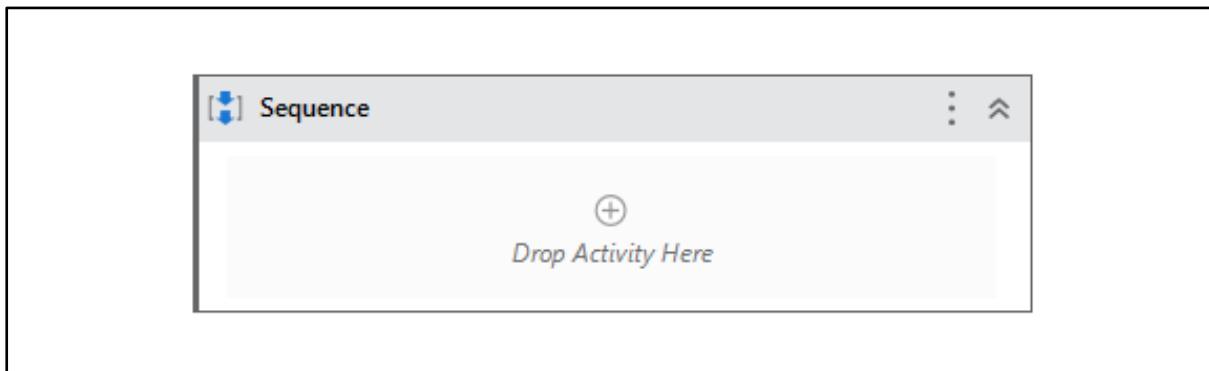
General details		Asset value
Asset name *	NewAsset	Type
		Text
		*
		Prateek

[d] Get Asset

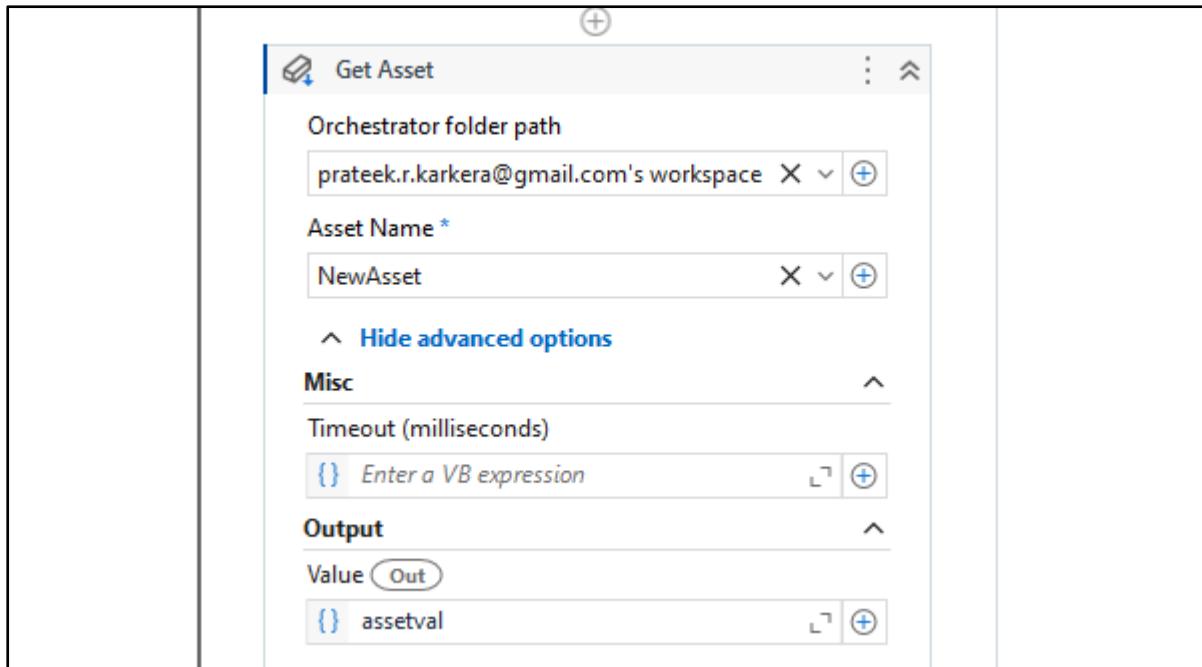
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



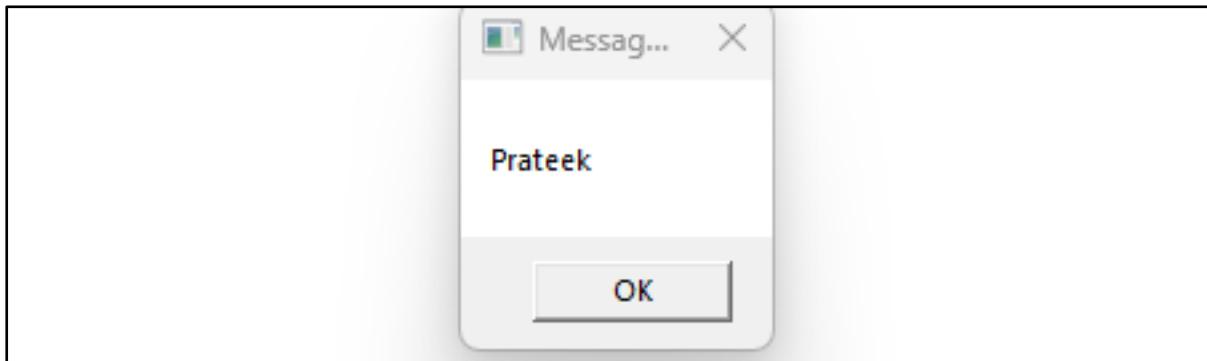
Step 3: Search for “Get Asset” in the Search panel of the Activities panel. Drag and drop the activity inside the Sequence. Select the Orchestrator Folder Path and the Asset name. Create new variables for Asset Value and map Get Asset Output.



Step 4: Search for “Message Box” in the Search panel of the Activities panel. Drag and drop the activity inside the body and enter the output variable.



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

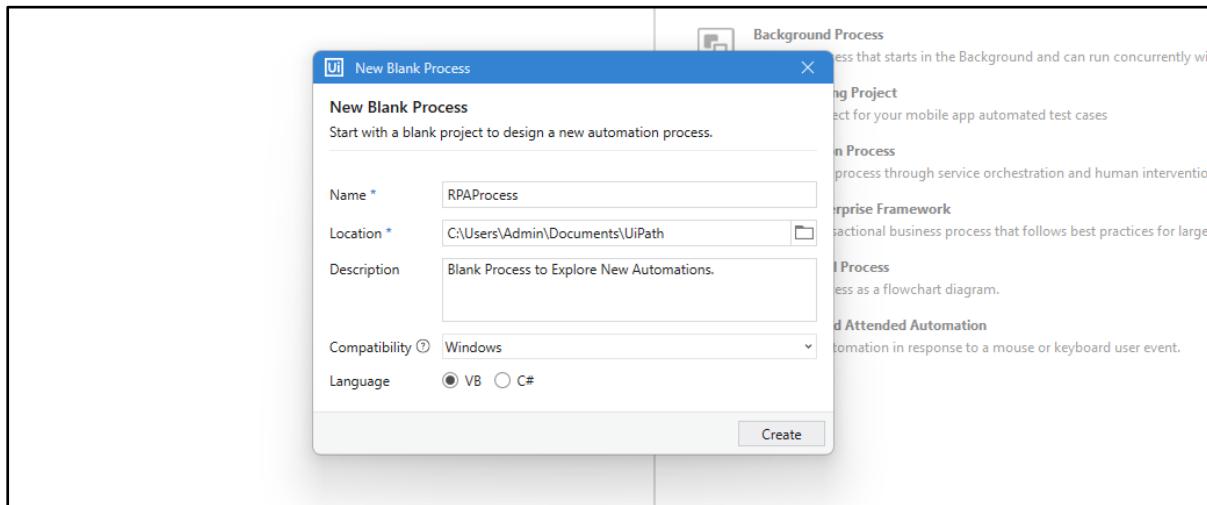


Conclusion: The practical to install and demonstrate the processes using plug-ins in UiPath is successfully completed.

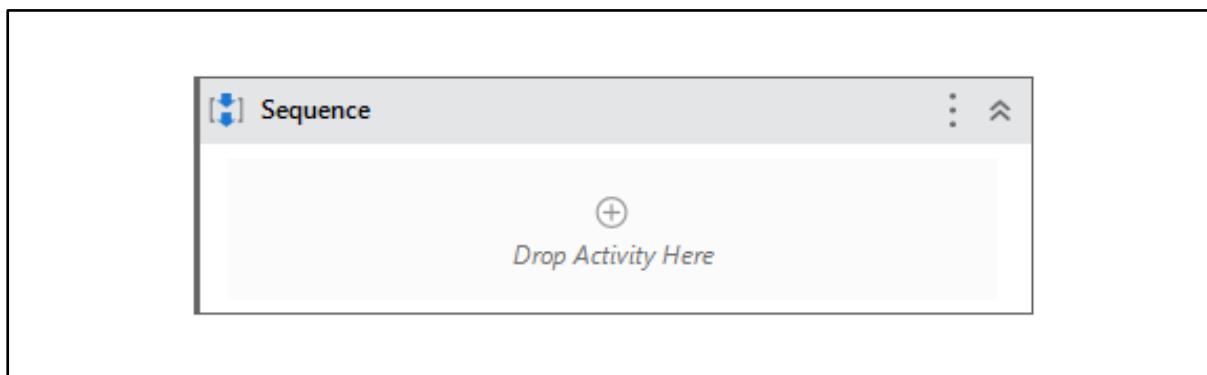
PRACTICAL 9

[A] AIM: Automate the process of launching an assistant bot on keyboard event.

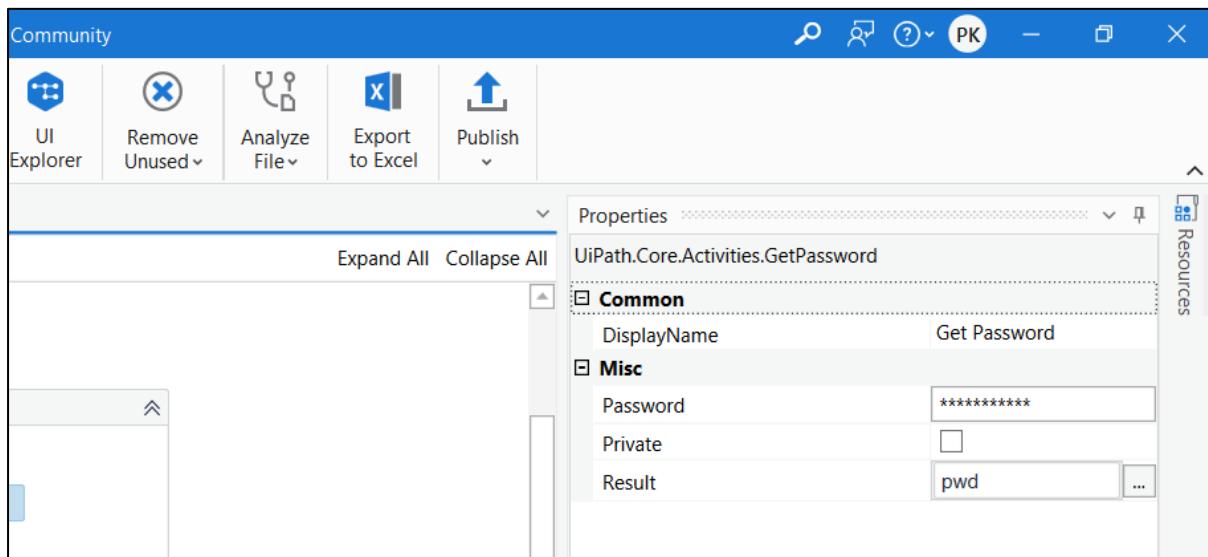
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



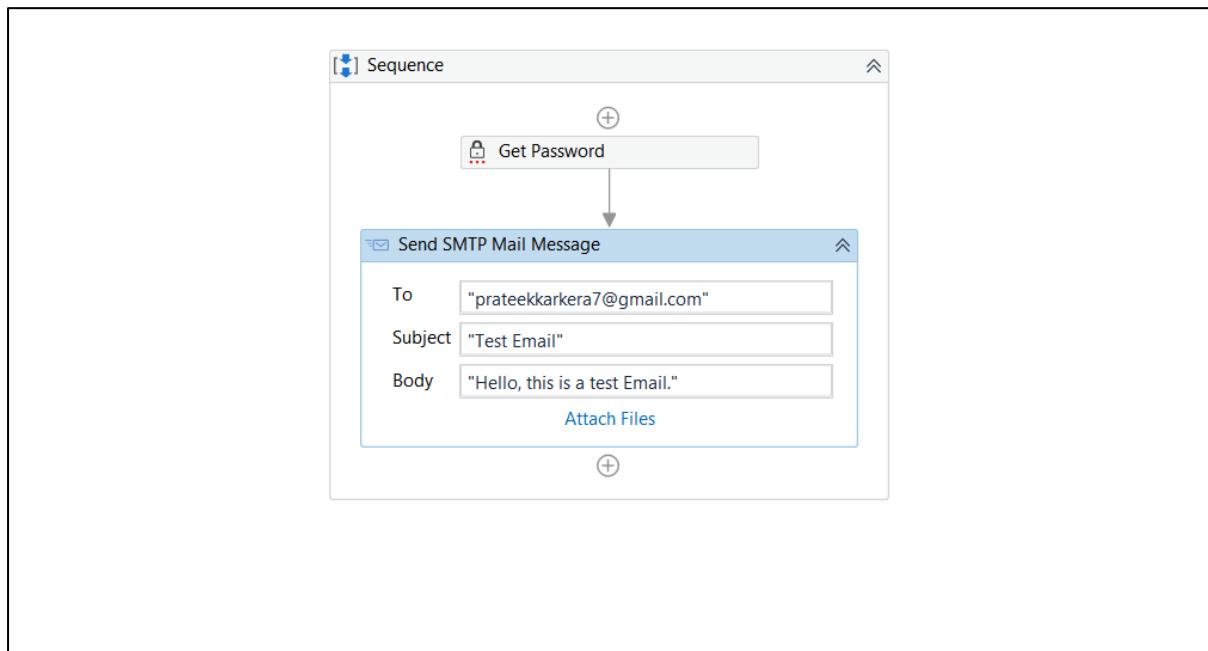
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



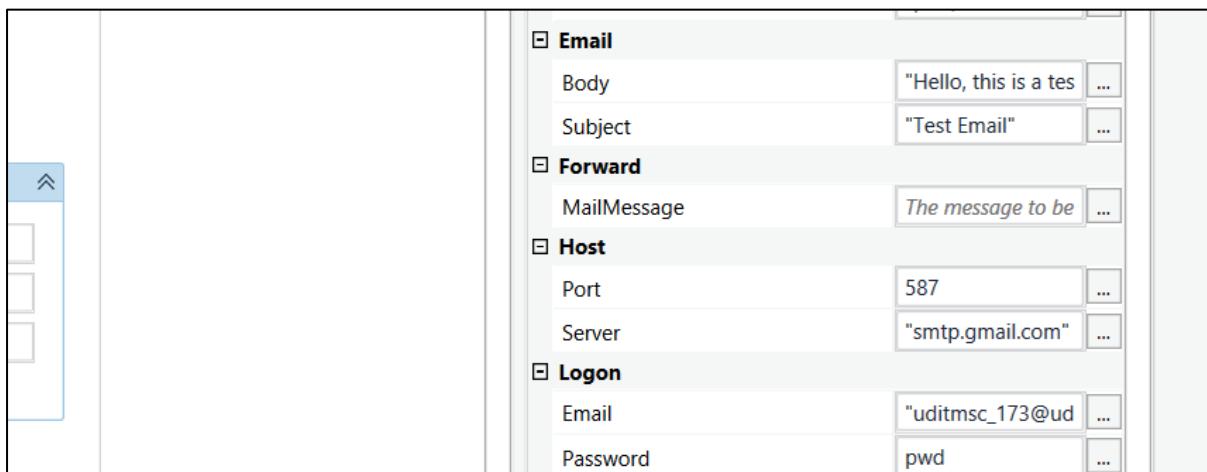
Step 3: Search for Get Password in Activities Panel and drag it inside the sequence workflow. Enter the password in the properties panel and assign it to variable pwd.



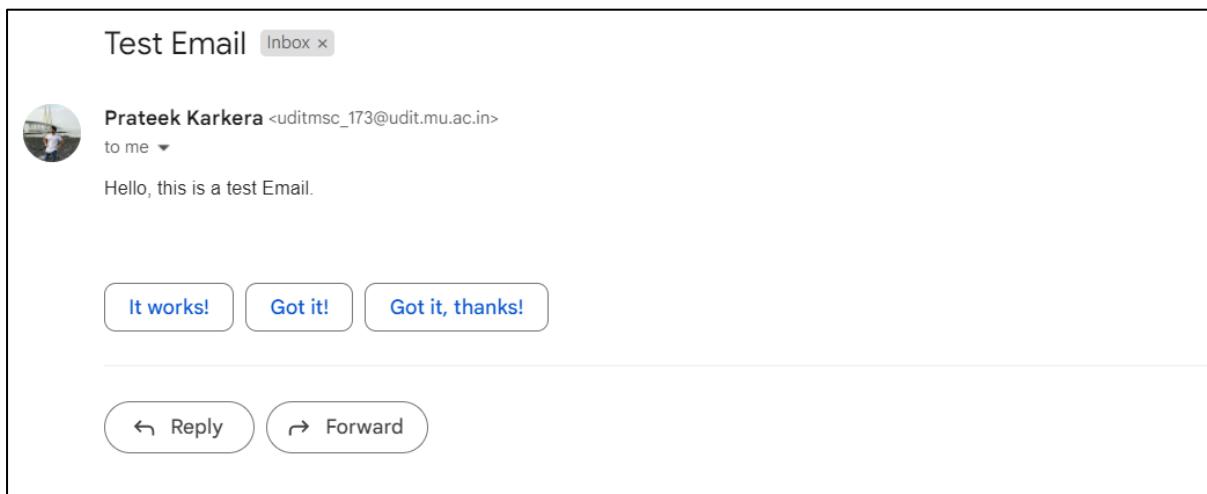
Step 4: Search for Send SMTP Mail Message in Activities Panel and drag it inside the sequence workflow. Enter the recipient's email address, subject line and message.



Step 5: Enter the password, port number, mail server name in the properties panel.



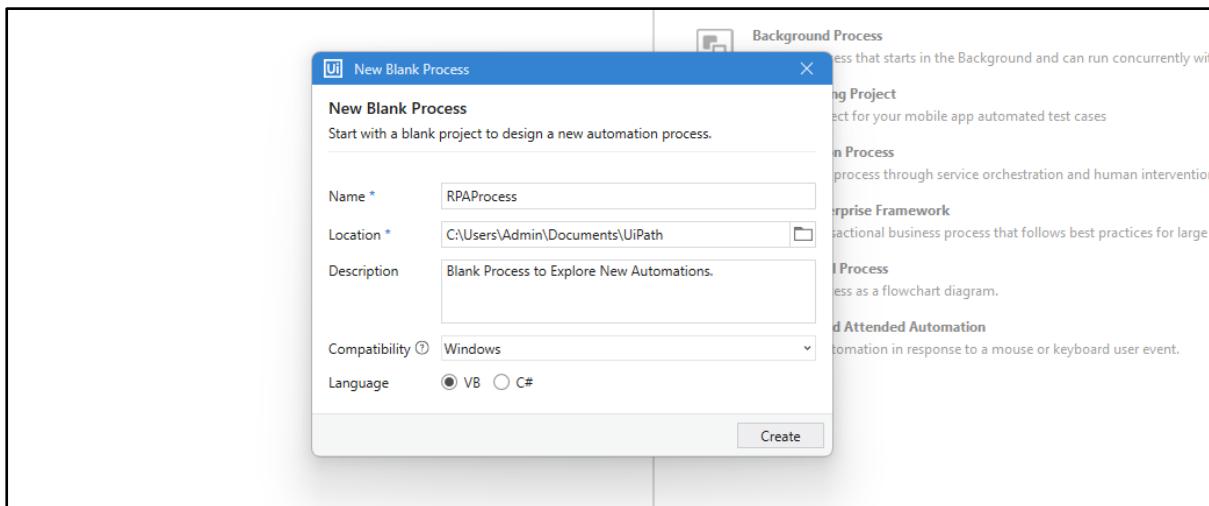
Step 6: Click on the Run button and check the output console. Done.



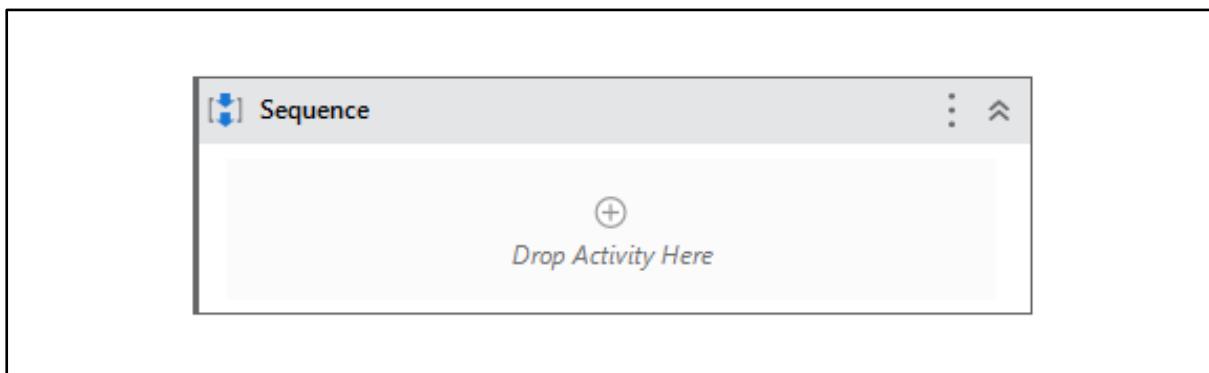
Conclusion: The practical to automate the process of send mail event (on any email) was performed successfully.

[B] AIM: Automate the process of launching an assistant bot on keyboard event.

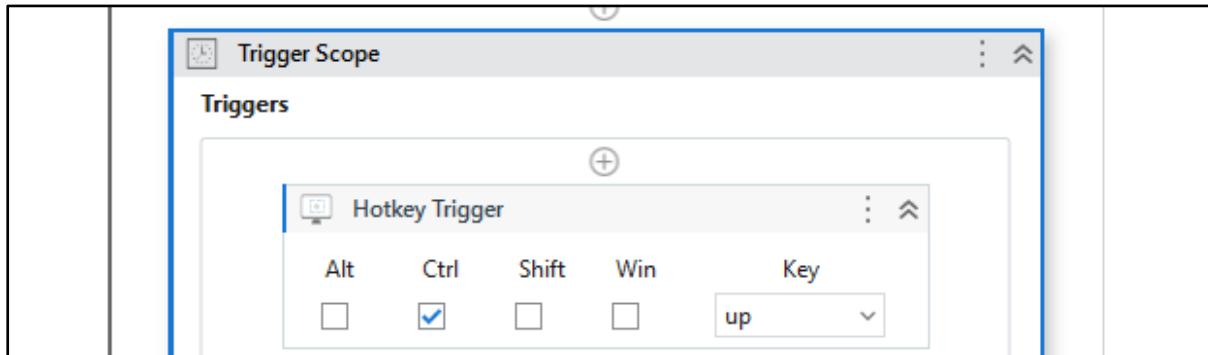
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



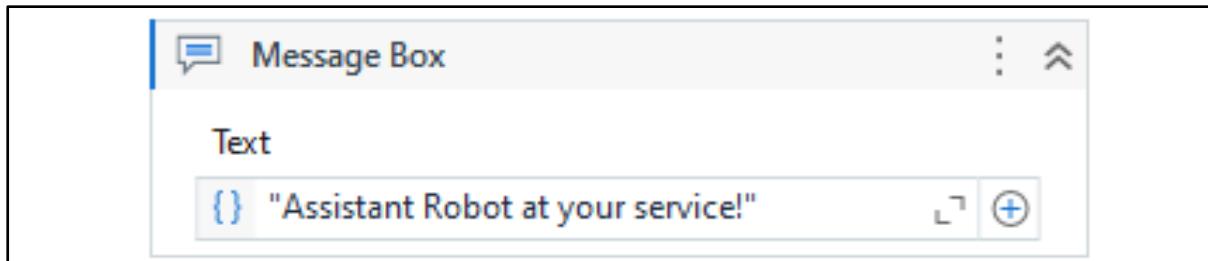
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



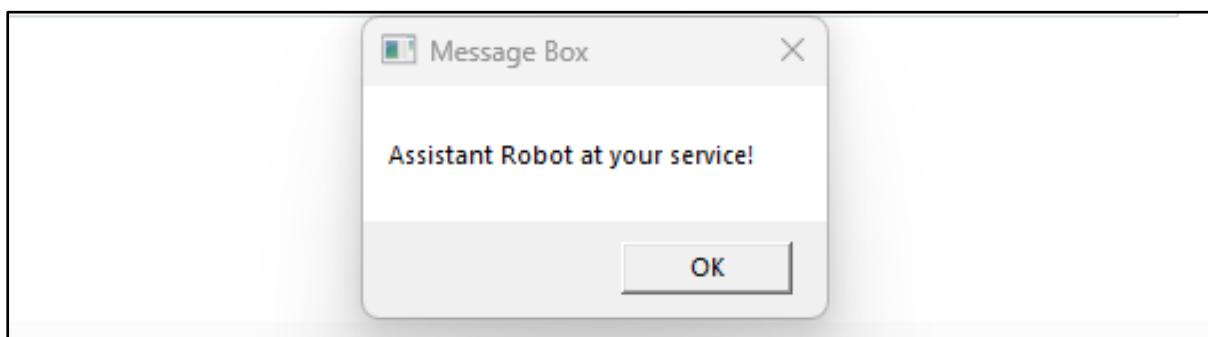
Step 3: Search for “Trigger Scope” in the Search panel of the Activities Panel and then drag and drop into the Sequence. Search for “Hotkey Trigger” in the activities panel and drag it inside the Trigger Scope Activity. Select the Hotkey combination “Ctrl + Up” in the Trigger Section.



Step 4: Search for “Message Box” in the Search panel of the Activities panel. Drag and drop Message Box activity inside the Action Section. Enter the output statement.



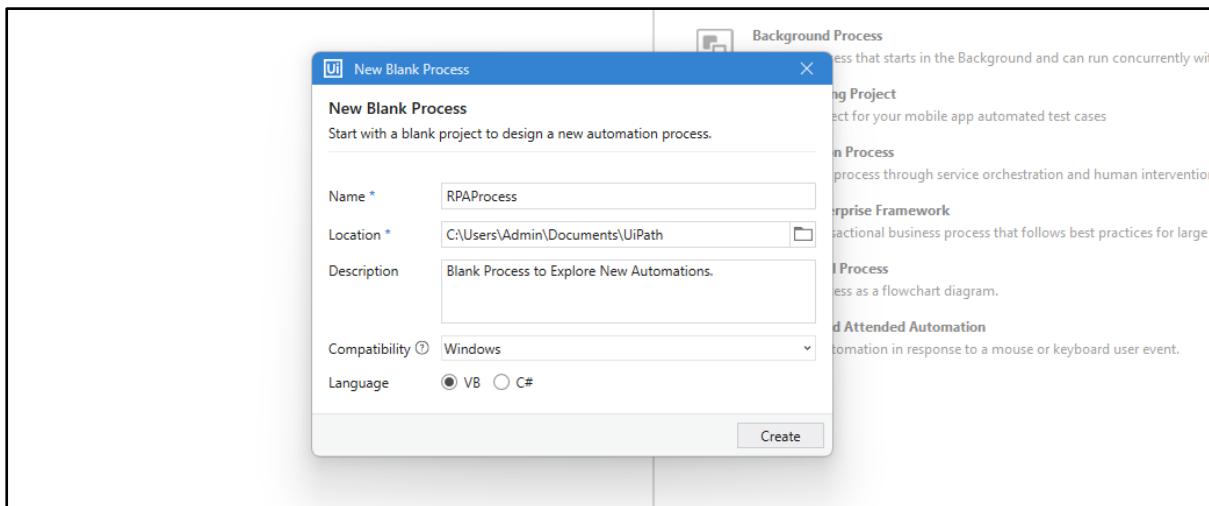
Step 5: Click the Run button and see the result.



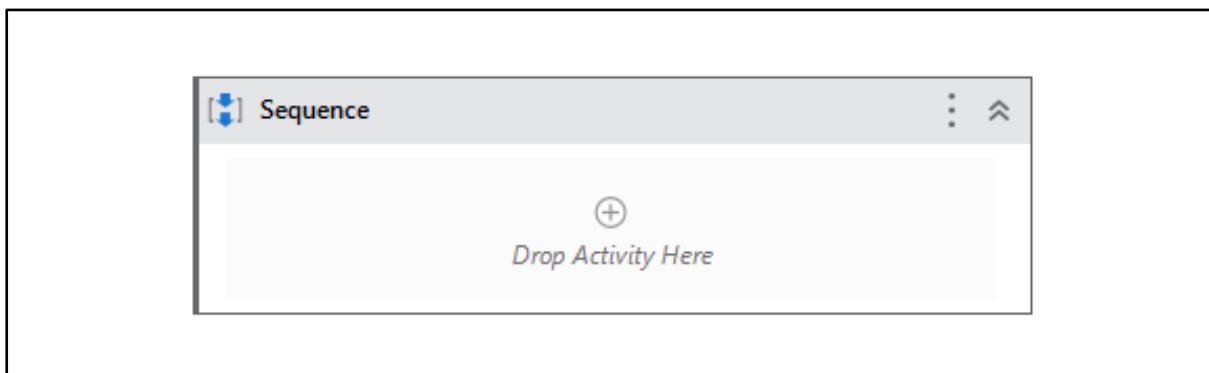
Conclusion: The practical to automate the process of launching an assistant bot on a keyboard event was performed successfully.

[C] AIM: Demonstrate the Exception handing in UiPath.

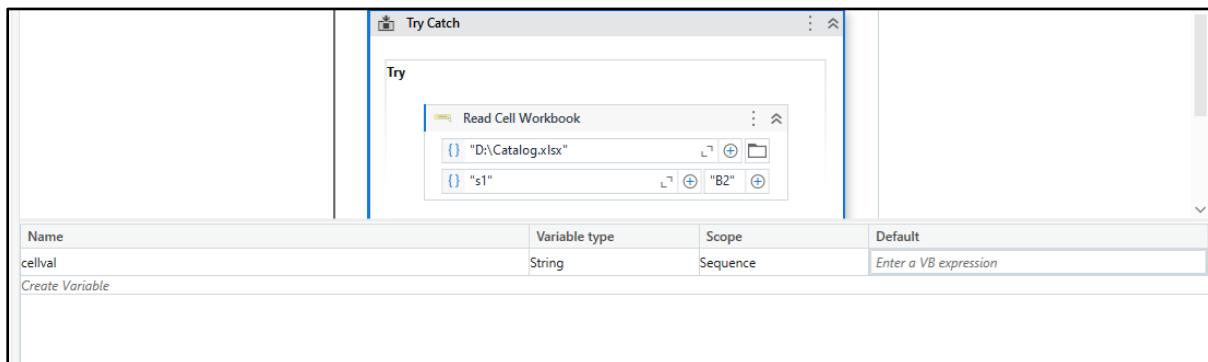
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



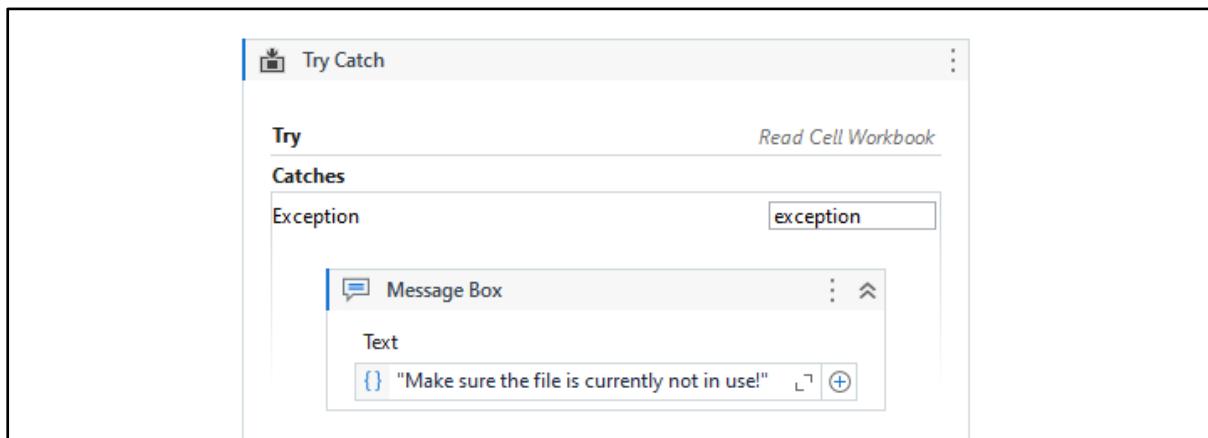
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



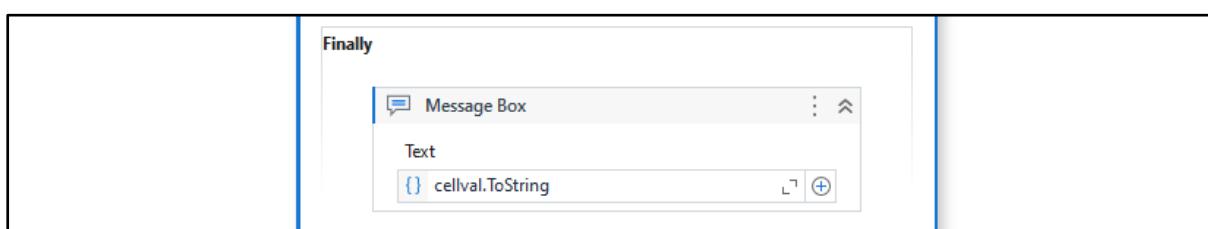
Step 3: Search for “Try Catch” in the Search panel of the Activities Panel and then drag and drop into the Sequence. Search for “Read Cell Workbook” in the activities panel and drag it inside the Try Section. Enter the sheet location, sheet name and cell location to read the value from. Create an Output variable to store the value.



Step 4: Expand the Catch section and select “System.Exception”. Search for “Message Box” in the Search panel of the Activities panel. Drag and drop Message Box activity inside the Catch Section. Enter the output statement in case the Exception occurs.



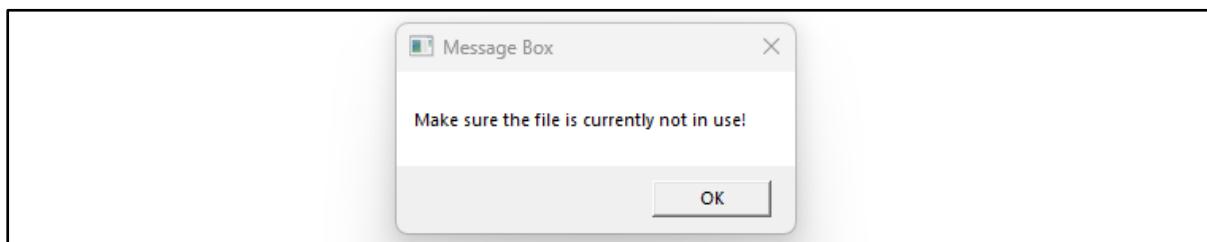
Step 5: Expand the Finally section and drag and drop another Message Box activity inside the Finally Section. Enter the output variable to read the value.



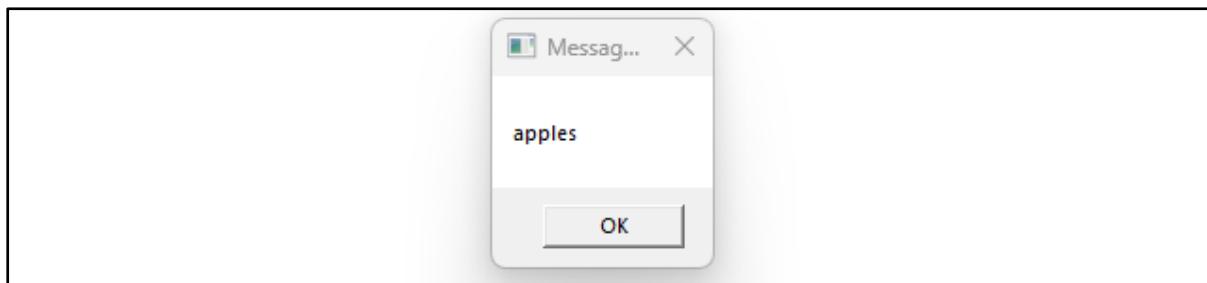
Step 5: Click the Run button and see the result.

The screenshot shows a Microsoft Excel spreadsheet with the following data:

Sr. No.	Fruits
1	apples
2	bananas
3	oranges
4	citrus
5	gooseberry
6	
7	



After closing the app.

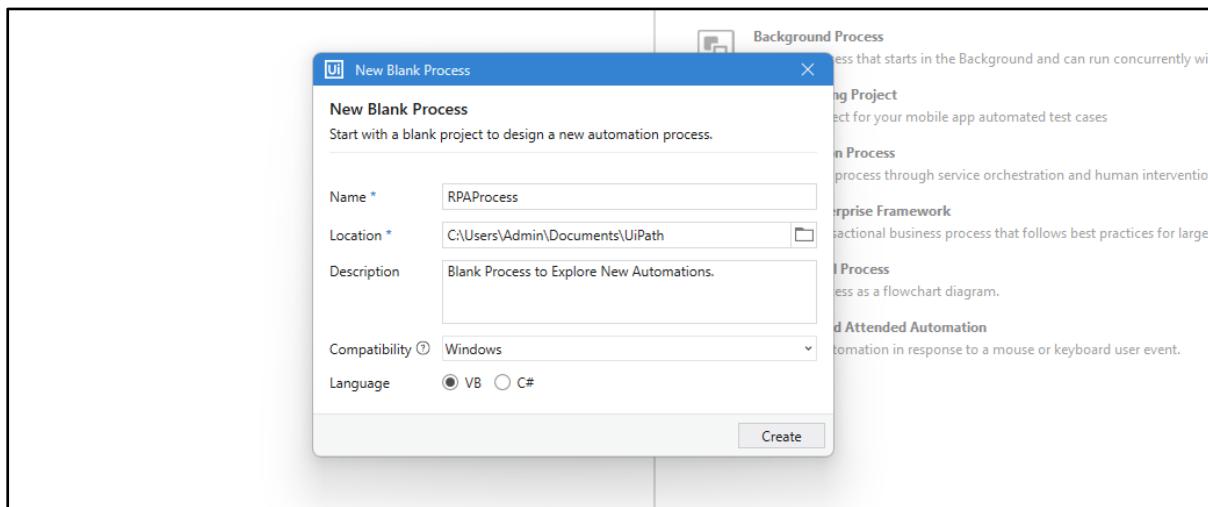


Conclusion: The practical to demonstrate the Exception handing in UiPath was performed successfully.

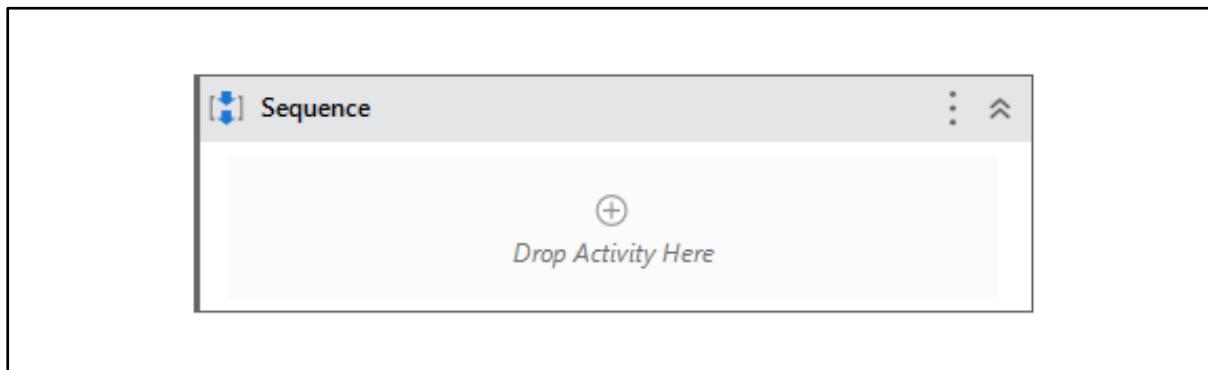
PRACTICAL 10

[A] AIM: Automate the process of logging and taking screenshots in UiPath.

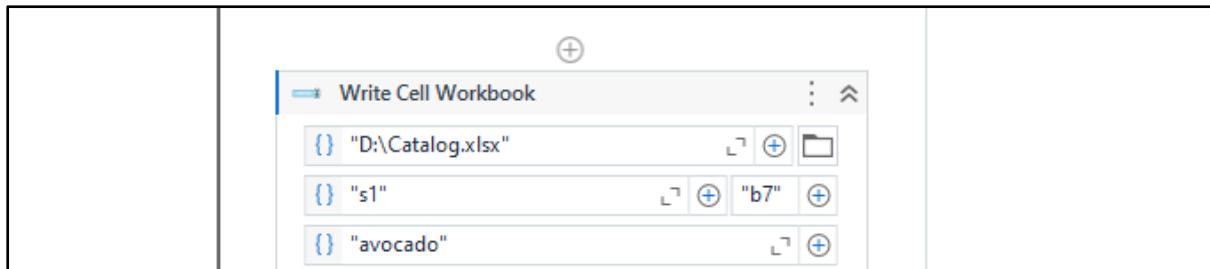
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



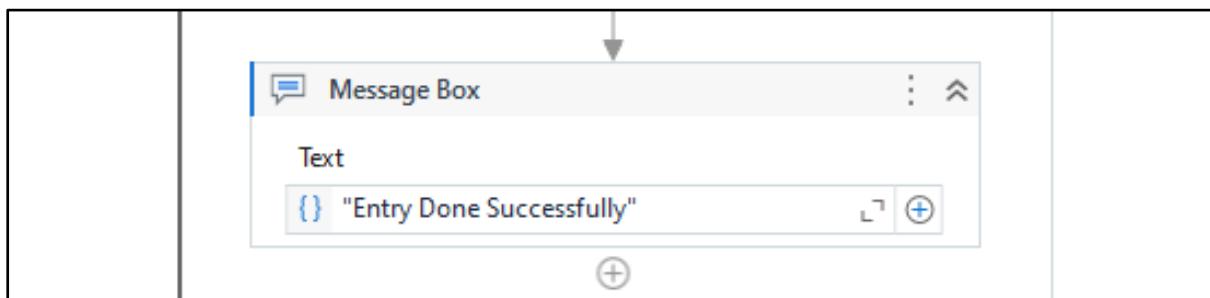
Step 3: Search for “Read Cell Workbook” in the activities panel and drag it inside the Sequence. Enter the sheet location, sheet name and cell location to write the value to and the cell value.



Step 4: Search for “Log Message” in the activities panel and drag it inside the Sequence. Set Log type as “Info” and enter the Log Message.

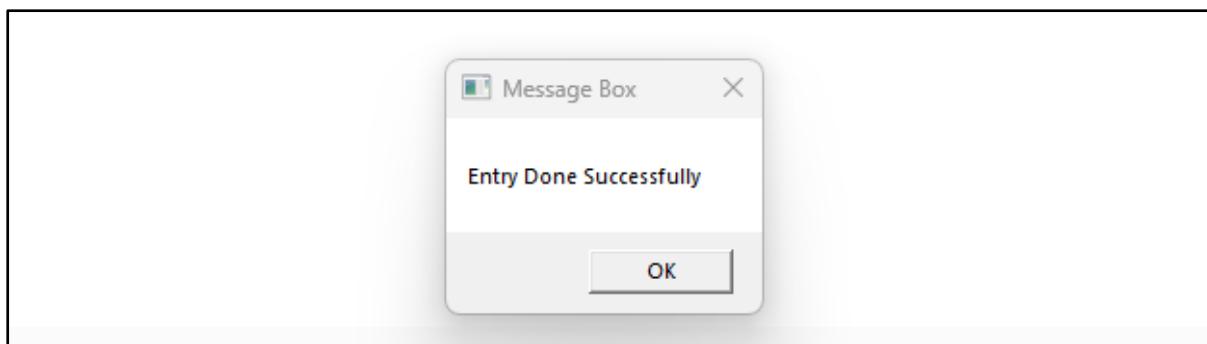


Step 5: Search for “Message Box” in the activities panel. Drag it inside the Sequence and enter the output message.



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

Sr. No.	Fruits
1	1 apples
2	2 bananas
3	3 oranges
4	4 citrus
5	5 gooseberry
7	
8	

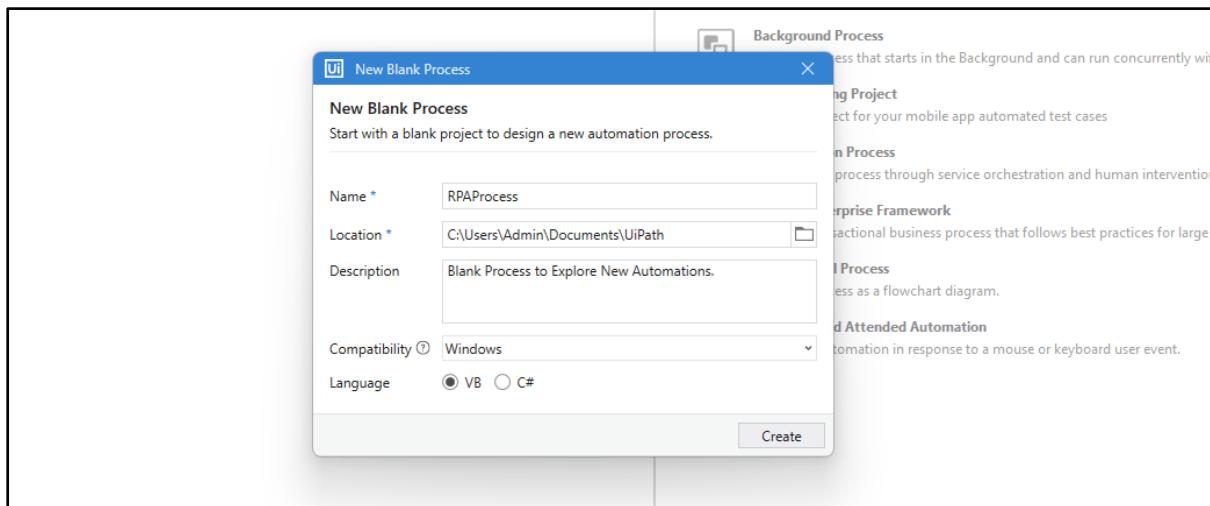


Sr. No.	Fruits
1	1 apples
2	2 bananas
3	3 oranges
4	4 citrus
5	5 gooseberry
7	avocado
8	

Conclusion: The practical to automate the process of logging and taking screenshots in UiPath was performed successfully.

[B] AIM: Automate any process using State Machine in UiPath.

Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



Step 2: Search for “State Machine” in the Activities panel and then drag and drop it onto the Designer Panel.

Step 3: Create 3 variables for your State Machine Current_Temp set to default value of 24, Desired_Temp, and a Boolean Variable named IDLE with default value as True.

Name	Variable type	Scope	Default
IDLE	Boolean	State Machine	True
Current_Temp	Int32	State Machine	24
Desired_Temp	Int32	State Machine	Enter a VB
Create Variable			

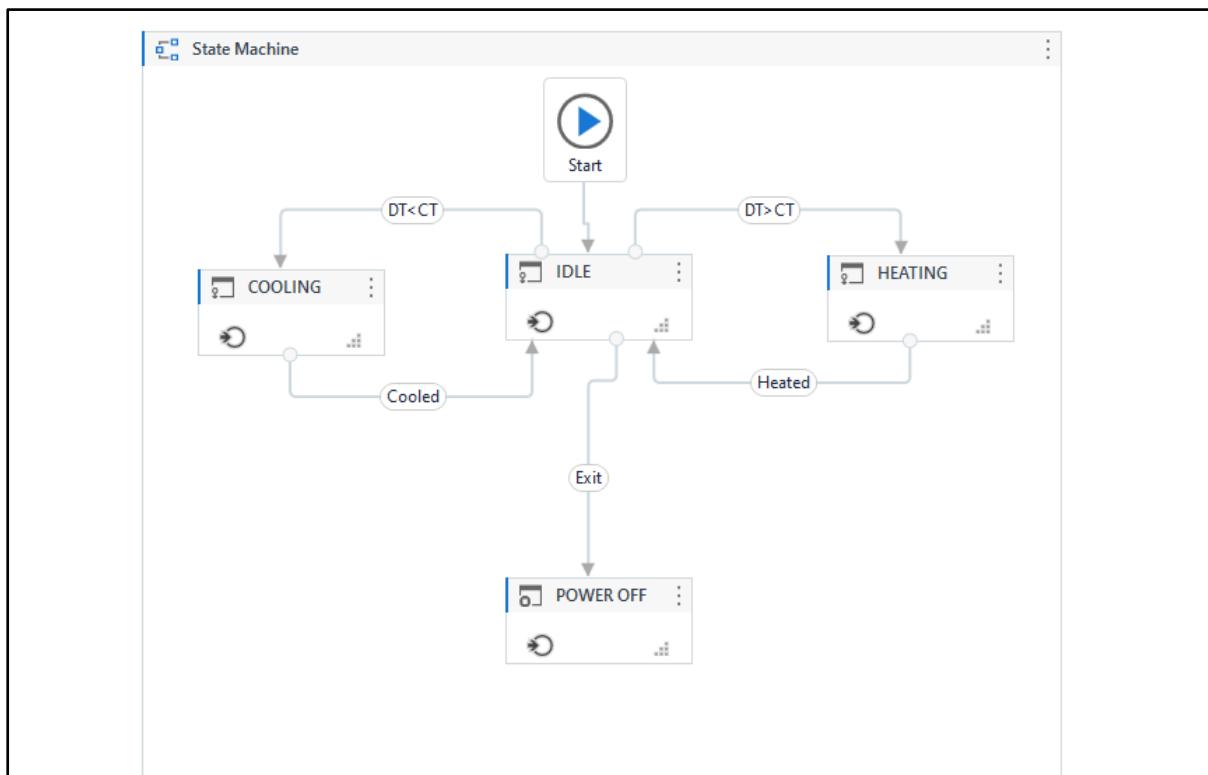
Step 4: Create the State Machine Frame.

Search for “State” and “Final State” in the activities panel and drag it inside the Sequence.

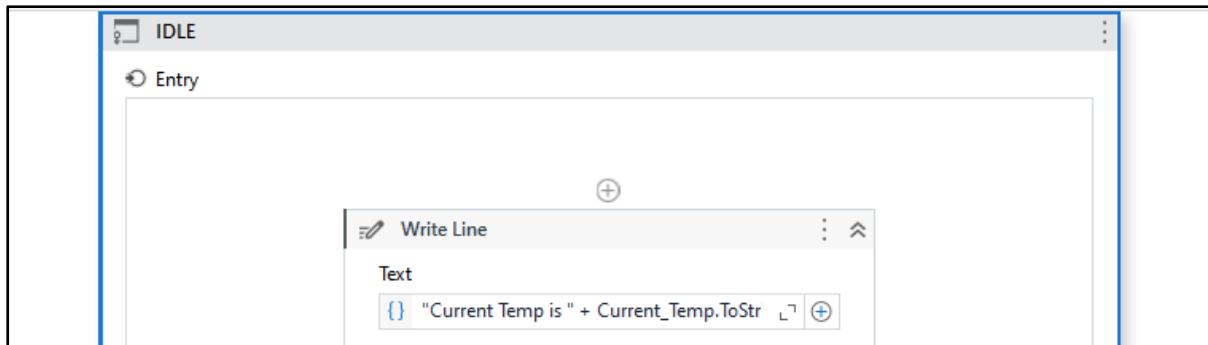
Add 1 State connected to the flow and label it as IDLE, 2 more state named COOLING and HEATING connected to and from the IDLE State and the Final State labelled “POWER OFF” connected to the main IDLE State.

Name the Condition from IDLE state to COOLING state as DT<CT, name the Condition from IDLE state to HEATING state as DT>CT, name the Condition from IDLE state to POWER OFF state as Exit.

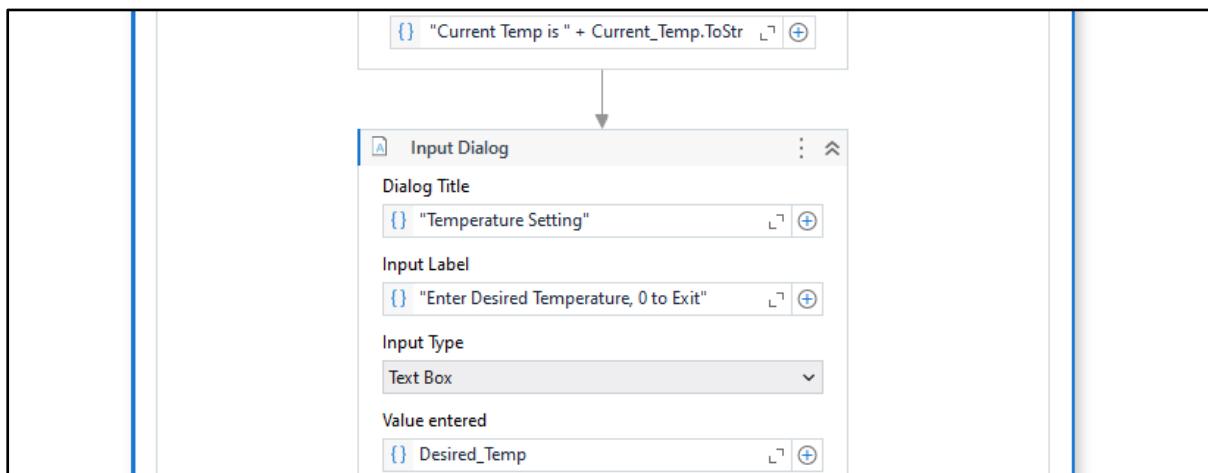
Now, name the Condition from COOLING state to IDLE state as Cooled and name the Condition from HEATED state to IDLE state as Heated.



Step 5: In the Entry Section of IDLE State. Add a WriteLine Activity from the Activities Panel describing the current temperature with the output as "Current Temp is " + Current_Temp.ToString + " Degree Celsius".



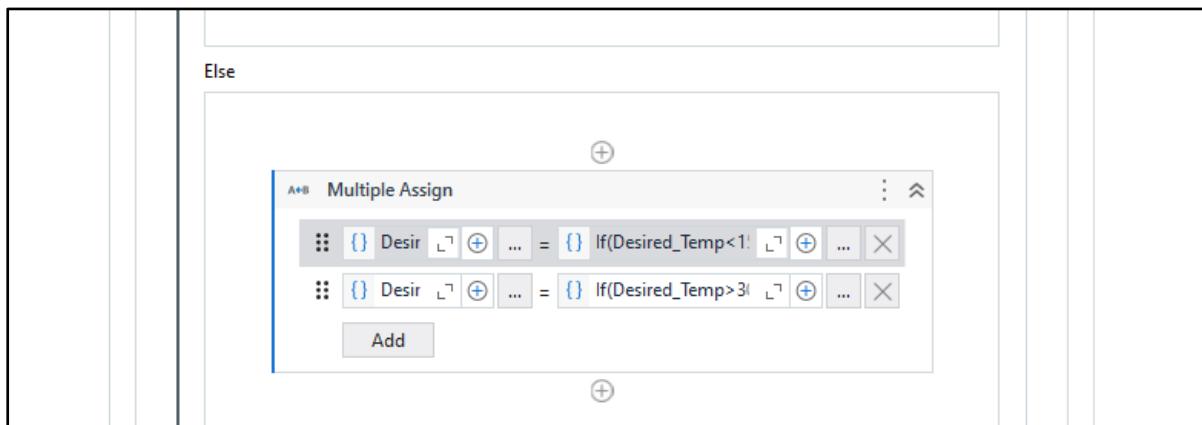
Step 5: Below the WriteLine Activity add an Input Dialog Box to take the user input for temperature and store it in the Desired_Temp variable.



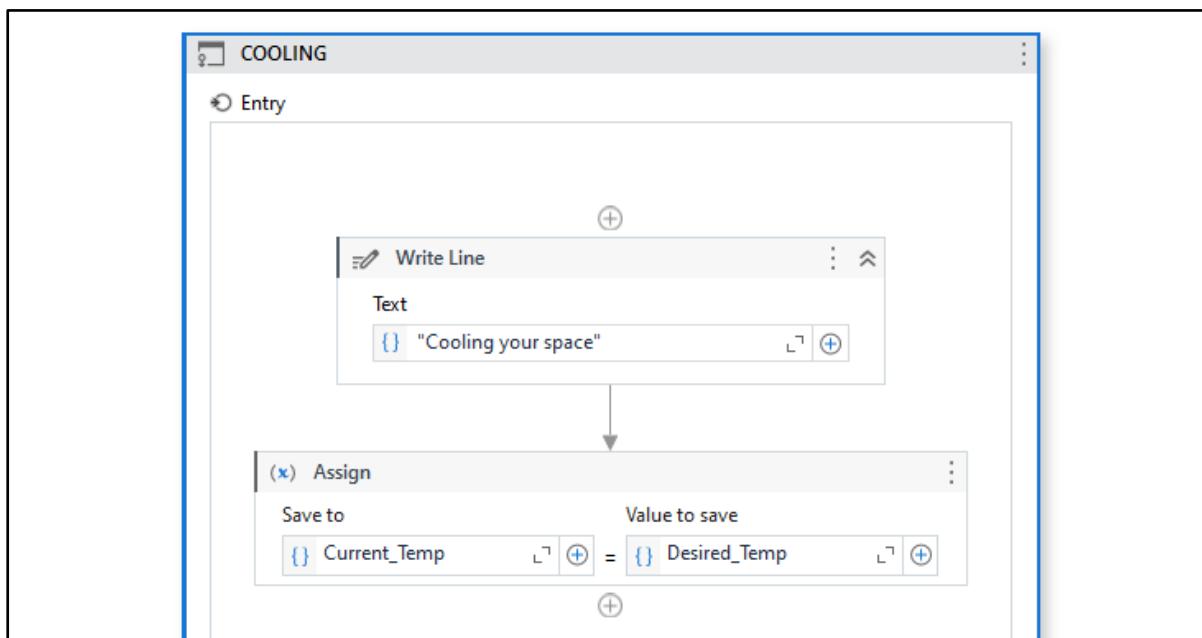
Step 6: Now, use the If Activity and enter the condition as “Desired_Temp<1”. In the Then Section, Use the Assign Activity to set the IDLE state to False.



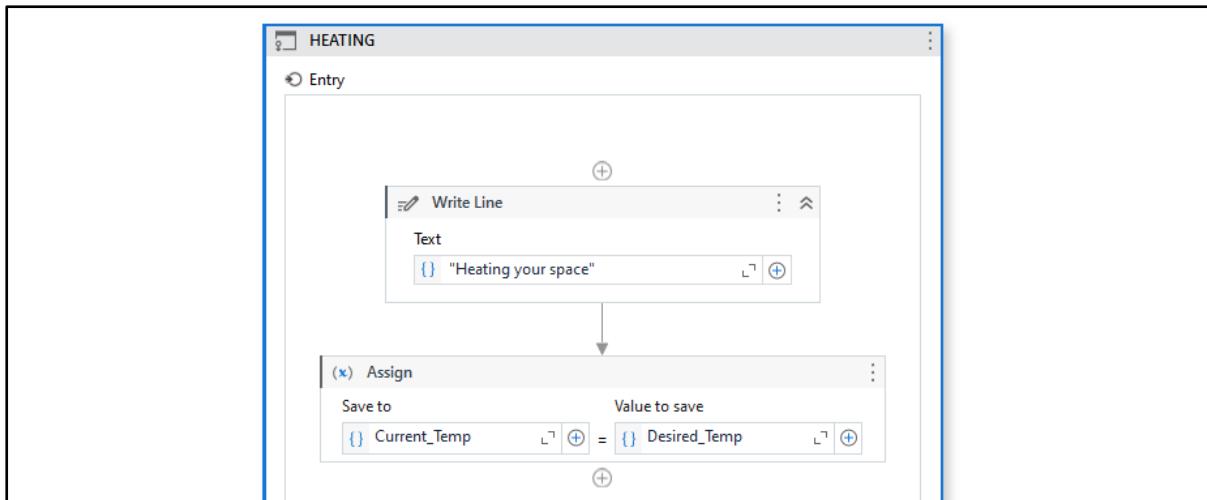
Step 7: In the Else Section, Use the Multiple Assign Activity to set the Out of scope Conditions for Cooling and Heating. Set Desired_Temp = If(Desired_Temp<15, 15, Desired_Temp) and Desired_Temp = If(Desired_Temp>30, 30, Desired_Temp) for cooling and heating respectively.



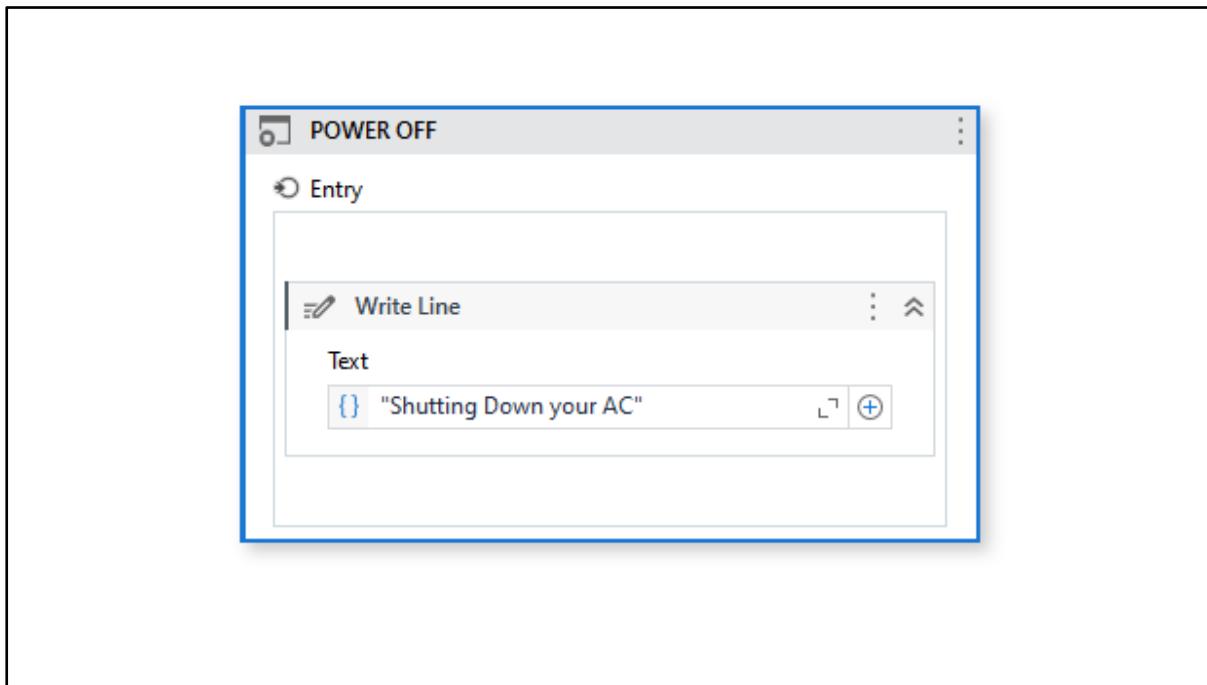
Step 8: In the Entry section of COOLING State. Add a WriteLine Activity notifying about the Cooling Process and use the Assign Activity to Set the Current Temperature as the Desired Temperature.



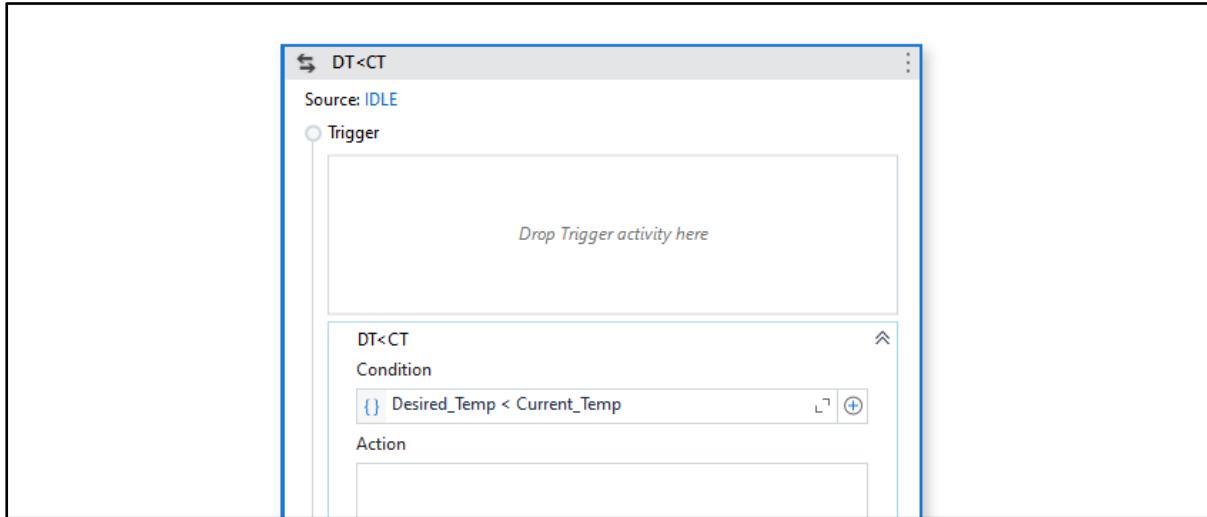
Step 9: In the Entry section of HEATING State. Add a WriteLine Activity notifying about the Heating Process and use the Assign Activity to Set the Current Temperature as the Desired Temperature.



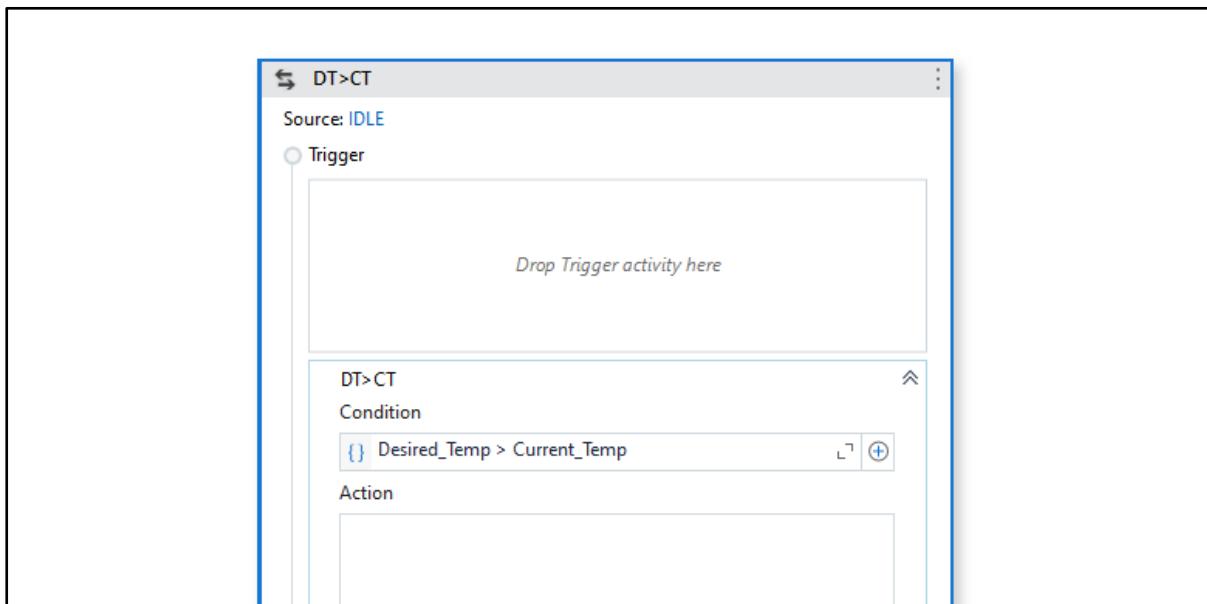
Step 10: In the Entry section of HEATING State. Add a WriteLine Activity notifying about the AC Shutting Down.



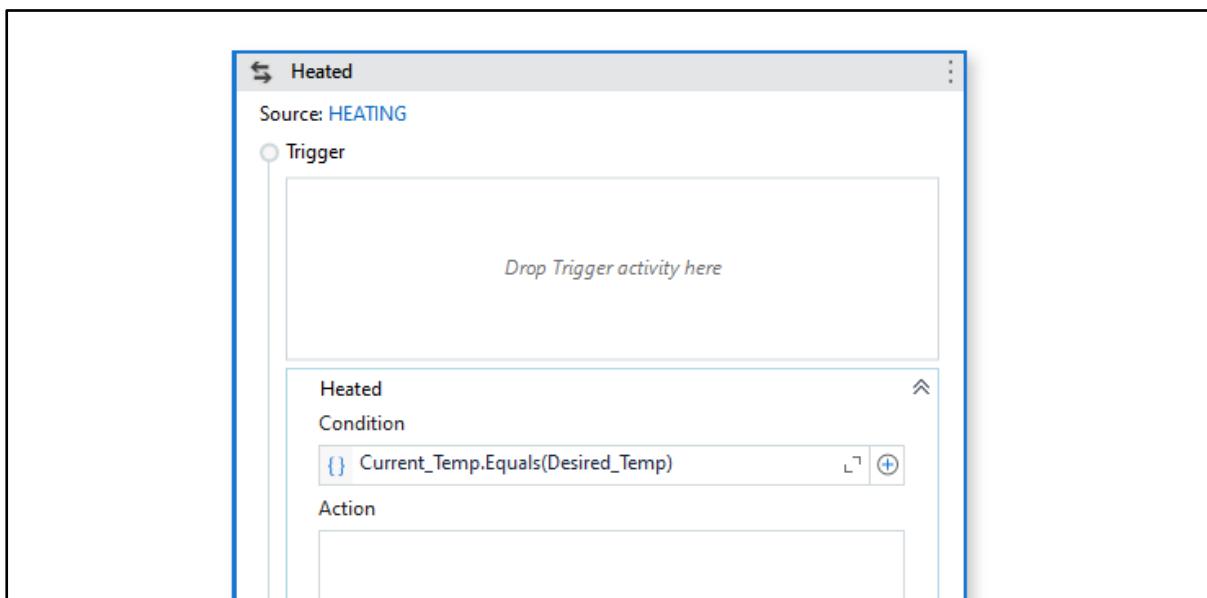
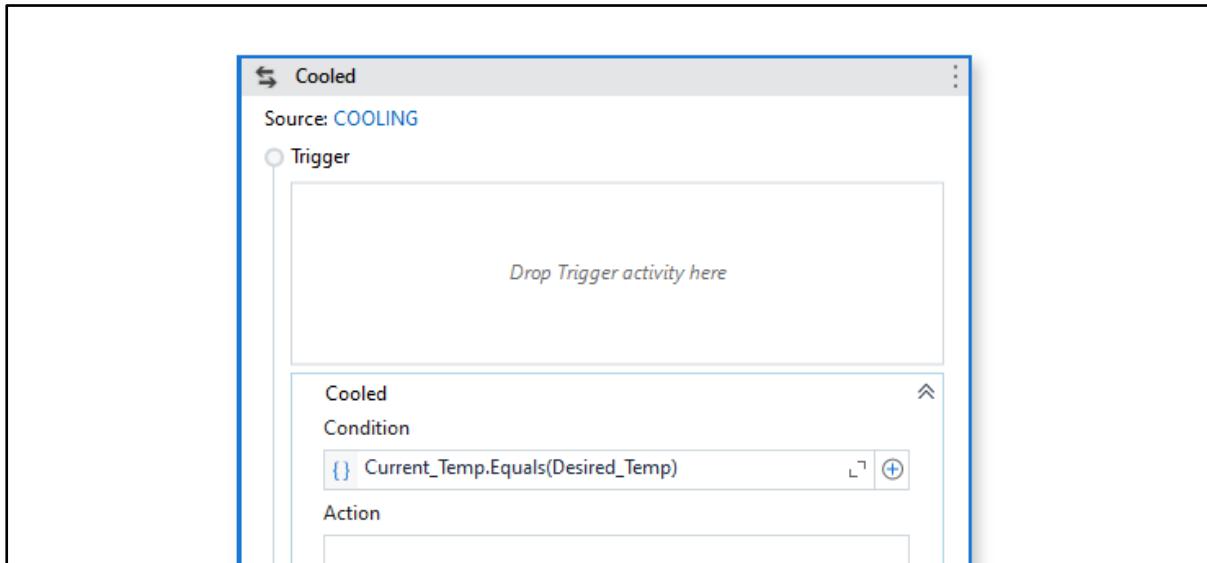
Step 10: For the Cooling Transition DT<CT. Set the Triggering Condition as Desired_Temp < Current_Temp.



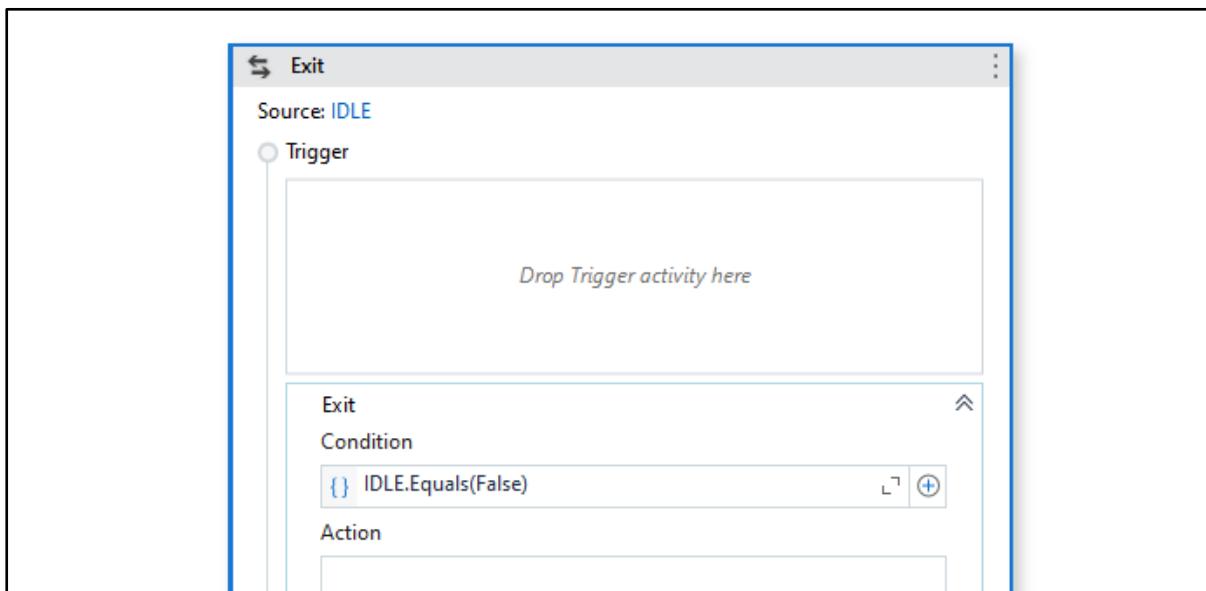
Step 11: For the Heating Transition DT>CT. Set the Triggering Condition as Desired_Temp > Current_Temp.



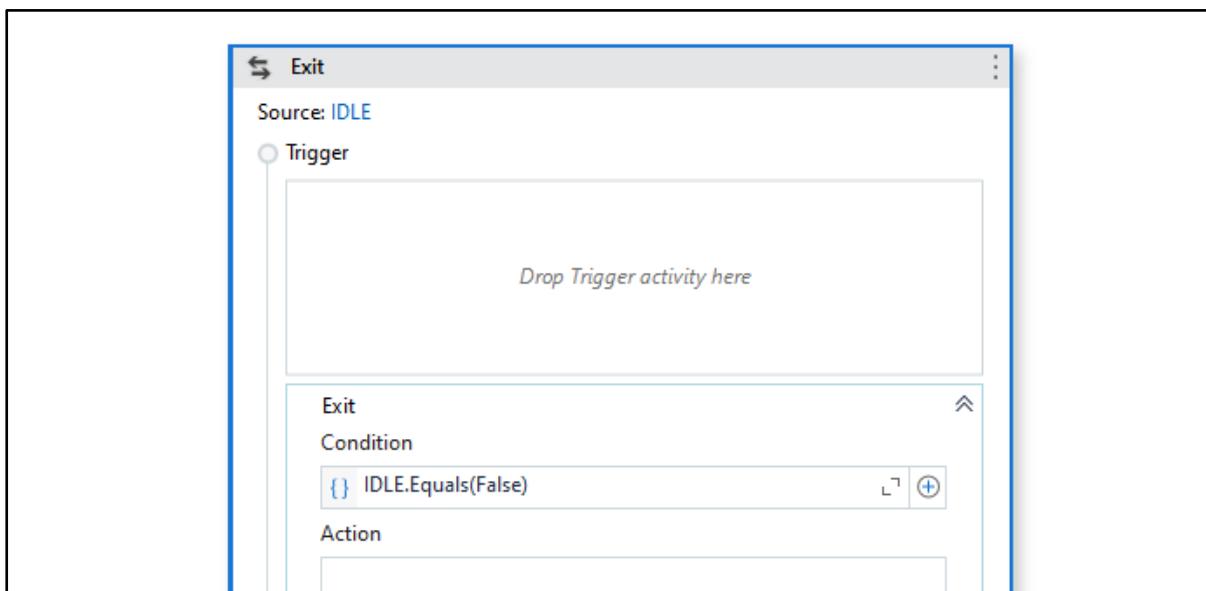
Step 12: For the Cooled and Heated Transition DT>CT. Set the Triggering Condition as Current_Temp.Equals(Desired_Temp).



Step 13: For the Exit Transition. Set the Triggering Condition as IDLE.Equals(False).

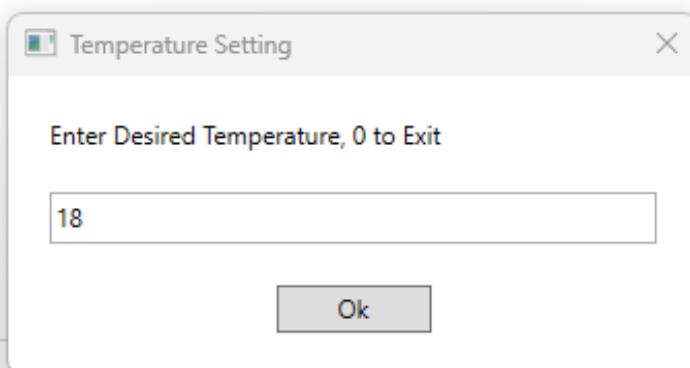


Step 14: For the Exit Transition. Set the Triggering Condition as IDLE.Equals(False).

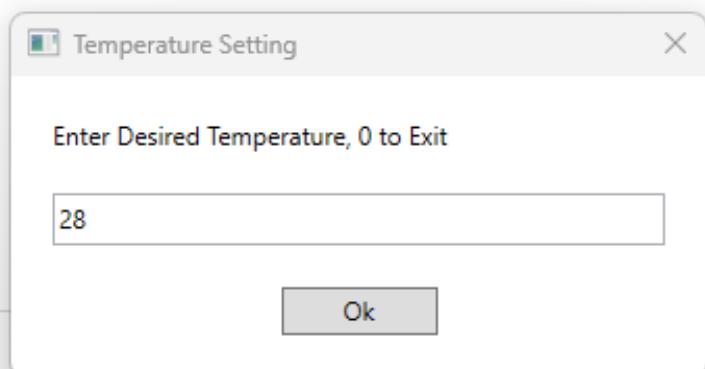


Step 14: Click the Run button and see the result.

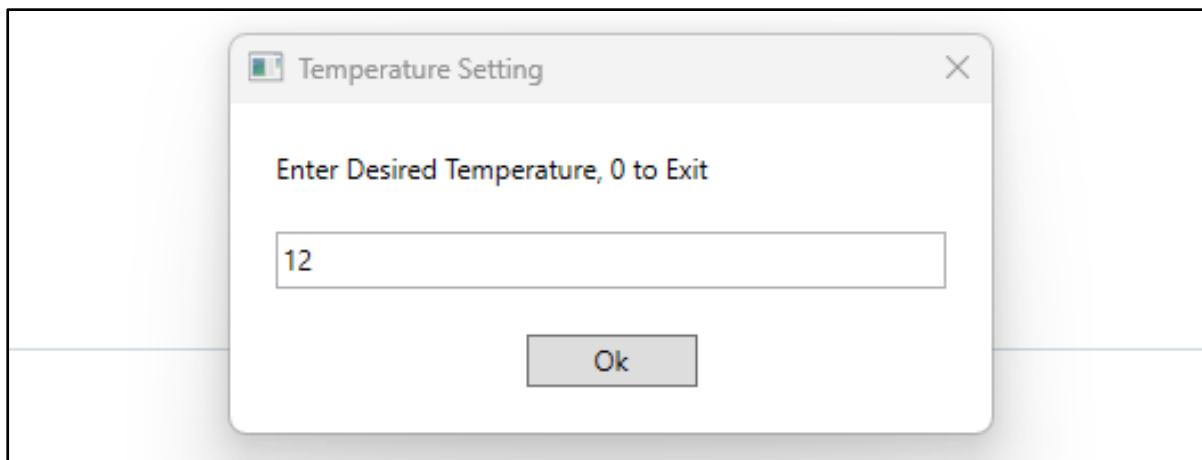
- ① RPAProcess execution started
- ② Current Temp is 24 Degree Celsius



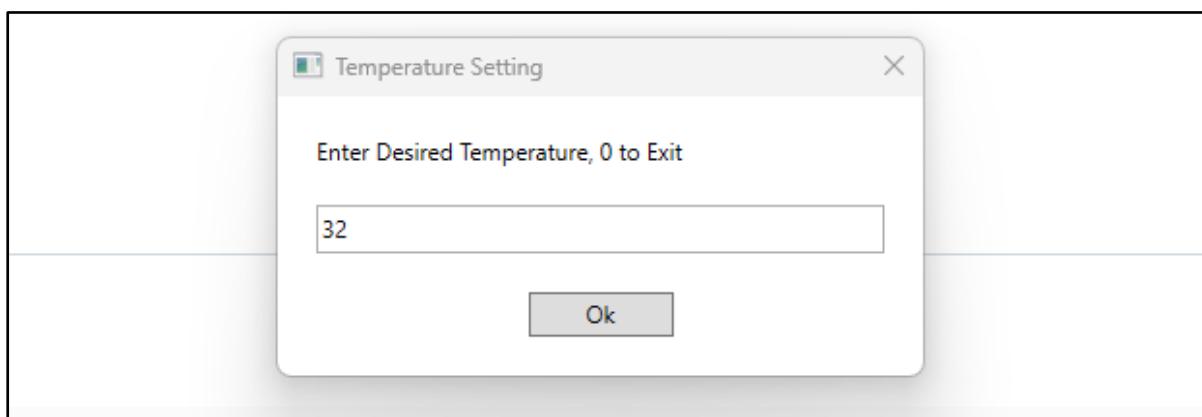
- ① RPAProcess execution started
- ② Current Temp is 24 Degree Celsius
- ③ Cooling your space
- ④ Current Temp is 18 Degree Celsius



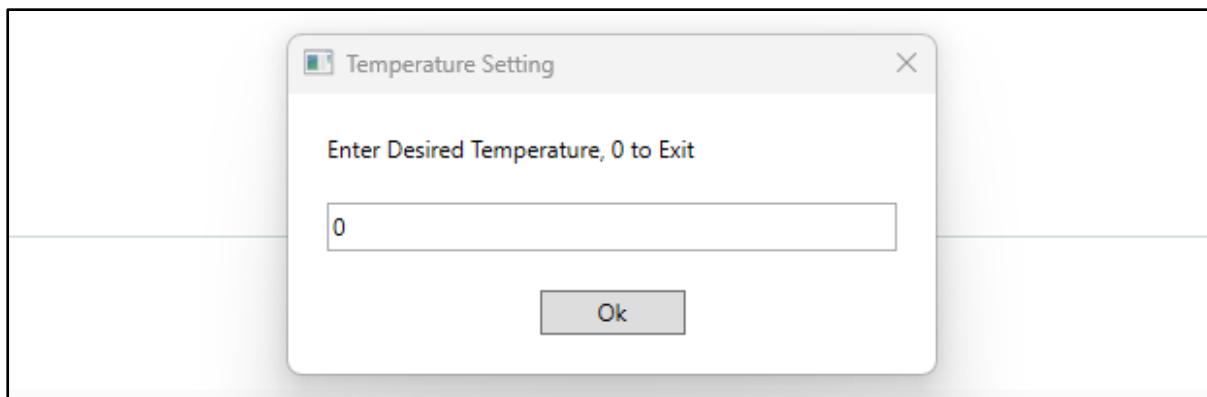
- ① RPAProcess execution started
- ② Current Temp is 24 Degree Celsius
- ③ Cooling your space
- ④ Current Temp is 18 Degree Celsius
- ⑤ Heating your space
- ⑥ Current Temp is 28 Degree Celsius



- ① RPAProcess execution started
- ② Current Temp is 24 Degree Celsius
- ③ Cooling your space
- ④ Current Temp is 18 Degree Celsius
- ⑤ Heating your space
- ⑥ Current Temp is 28 Degree Celsius
- ⑦ Cooling your space
- ⑧ Current Temp is 15 Degree Celsius



- ① RPAProcess execution started
- ② Current Temp is 24 Degree Celsius
- ③ Cooling your space
- ④ Current Temp is 18 Degree Celsius
- ⑤ Heating your space
- ⑥ Current Temp is 28 Degree Celsius
- ⑦ Cooling your space
- ⑧ Current Temp is 15 Degree Celsius
- ⑨ Heating your space
- ⑩ Current Temp is 30 Degree Celsius

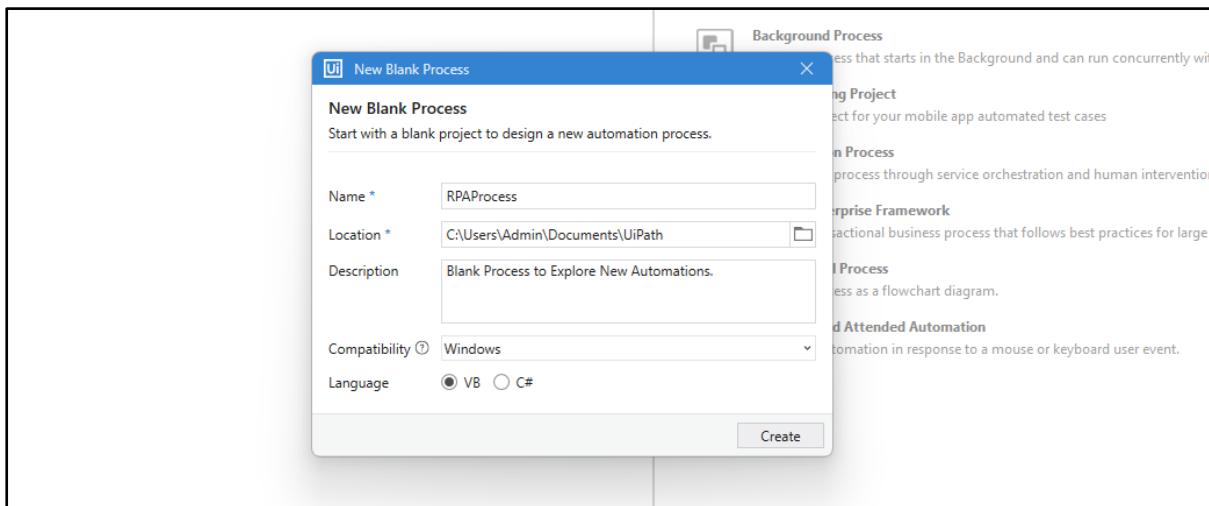


- ① RPAProcess execution started
- ② Current Temp is 24 Degree Celsius
- ③ Cooling your space
- ④ Current Temp is 18 Degree Celsius
- ⑤ Heating your space
- ⑥ Current Temp is 28 Degree Celsius
- ⑦ Cooling your space
- ⑧ Current Temp is 15 Degree Celsius
- ⑨ Heating your space
- ⑩ Current Temp is 30 Degree Celsius
- ⑪ Shutting Down your AC

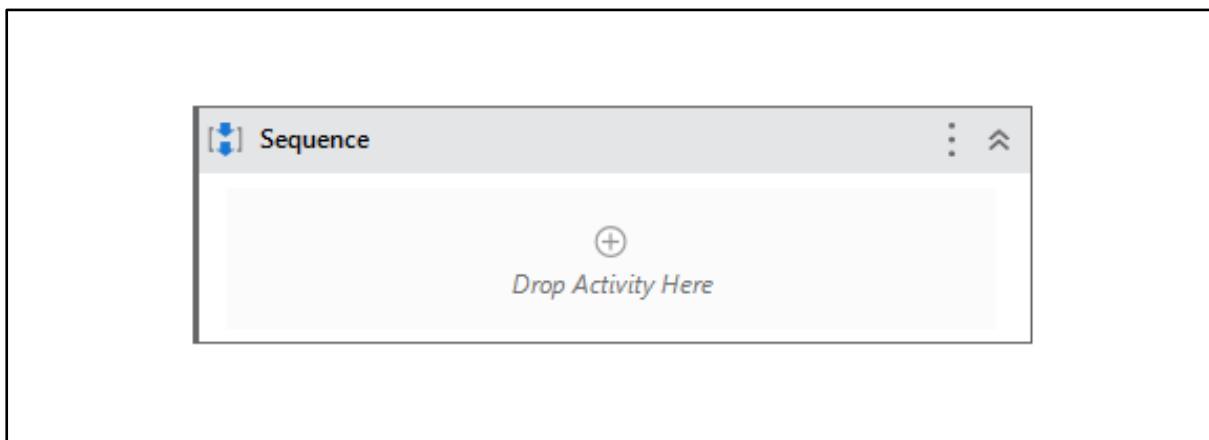
Conclusion: The practical to automate any process using State Machine in UiPath was performed successfully.

[C] AIM: Demonstrate the use of publish utility.

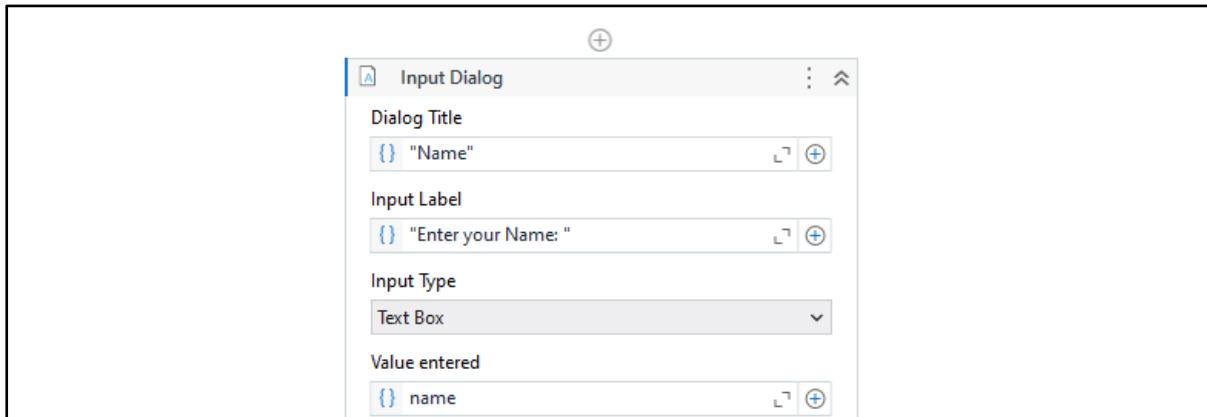
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



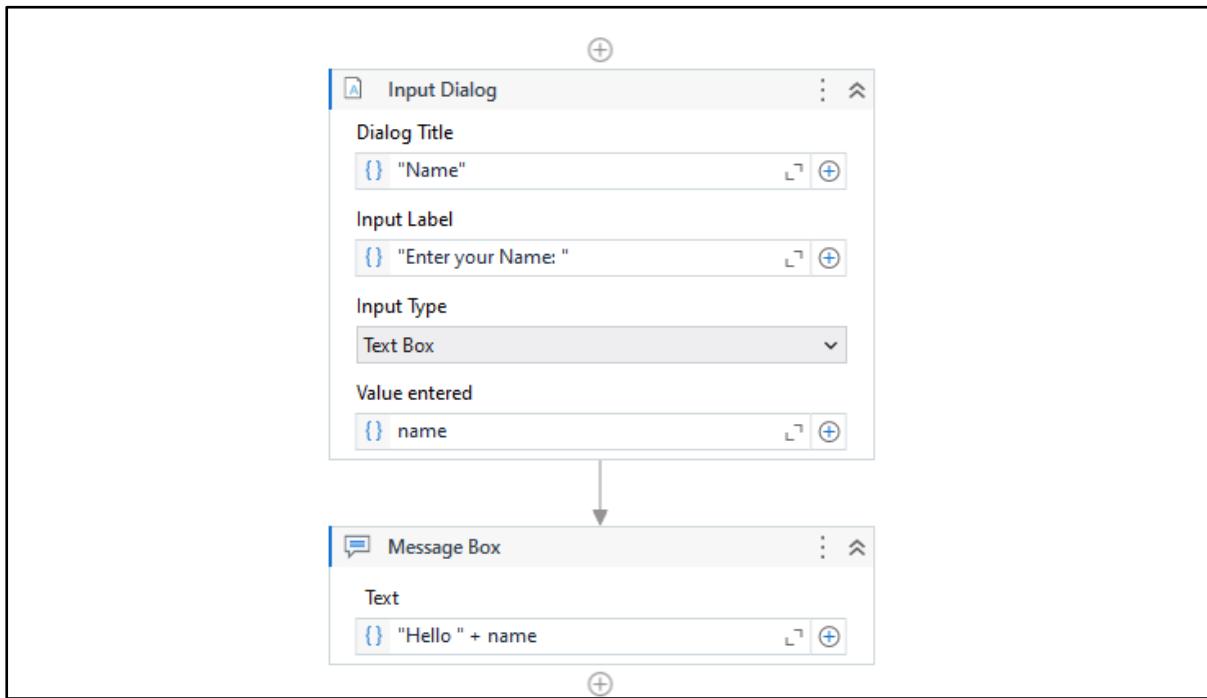
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



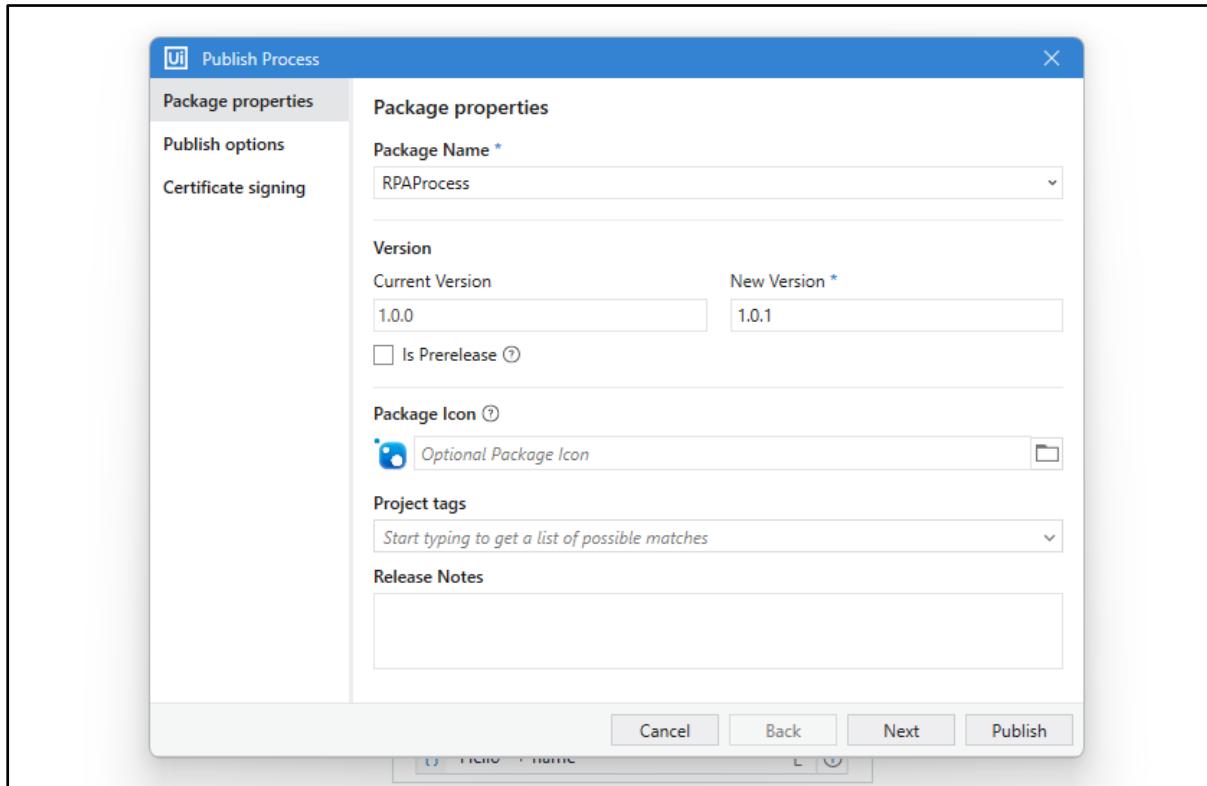
Step 3: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create a variable and specify the variable in the Result property of the Input dialog box.



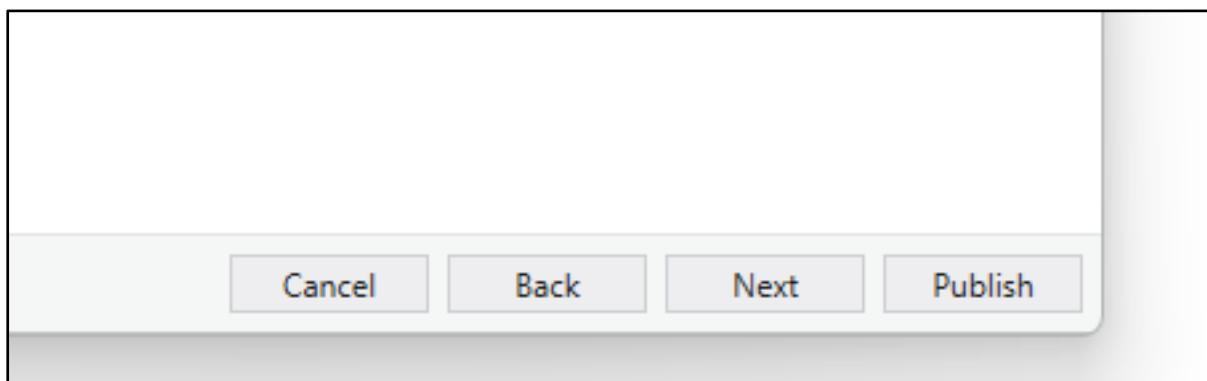
Step 4: Search for “Message Box” in the activities panel. Drag it inside the Sequence and enter the output message.



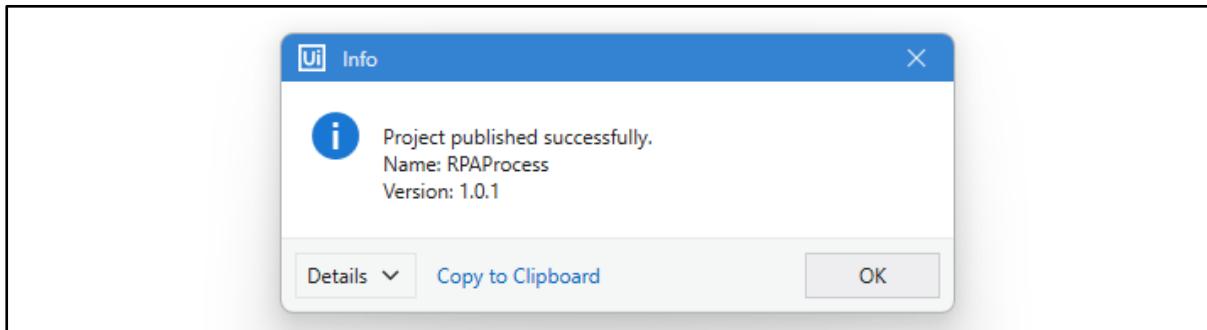
Step 5: To Publish this automation, Click on the Publish Button in the Design tab of the Ribbon and give a suitable name to the package.



Step 6: Make appropriate Changes to the package as per your requirements before Clicking Publish button to publish the utility.



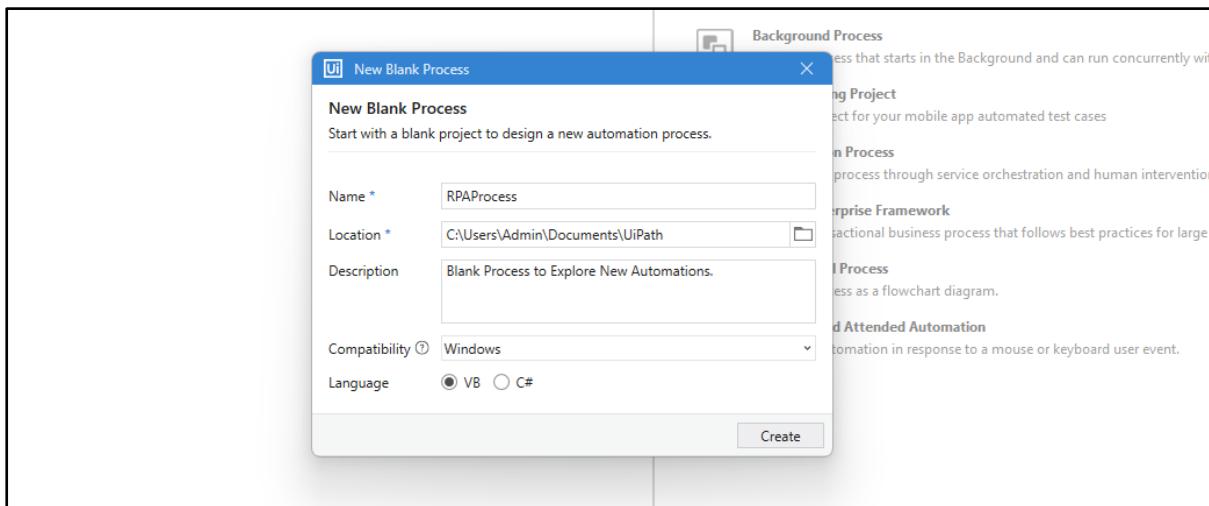
Step 7: The Project has been published successfully.



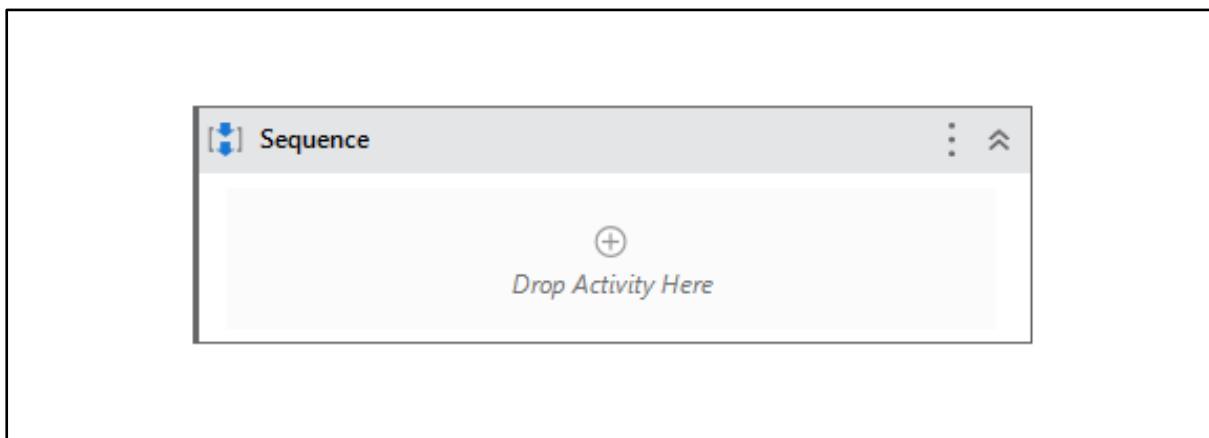
Conclusion: The practical to demonstrate the use of publish utility was performed successfully.

[D] AIM: Create and provision Robot using Orchestrator.

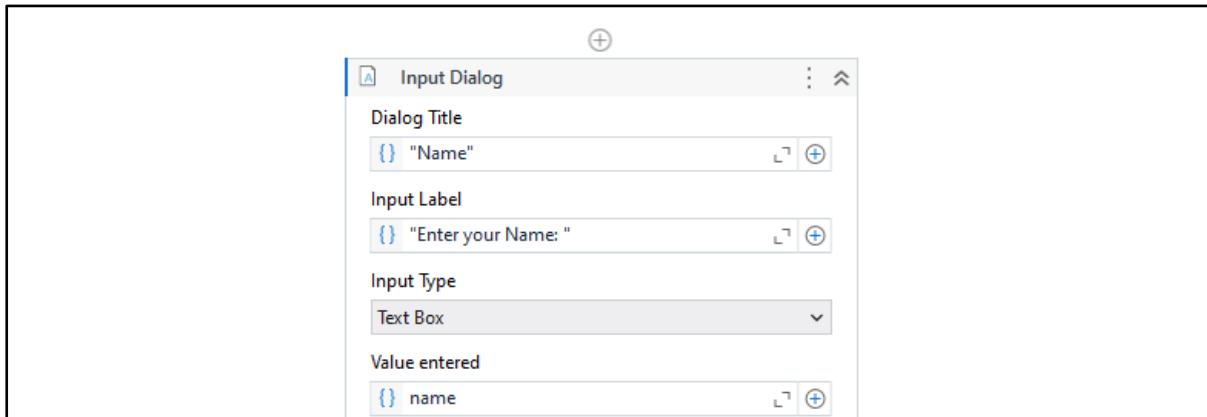
Step 1: Open UiPath Studio and click on Blank to start a fresh project. Give it a meaningful name.



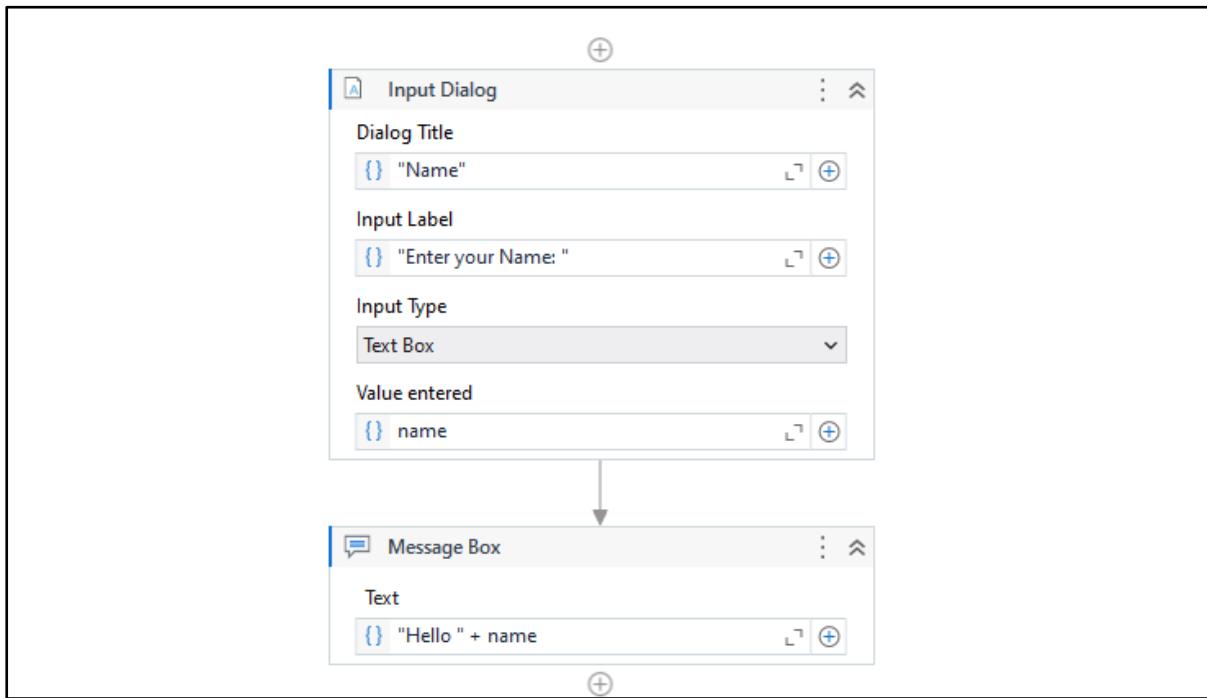
Step 2: Search for “Sequence” in the Activities panel and then drag and drop it onto the Designer Panel



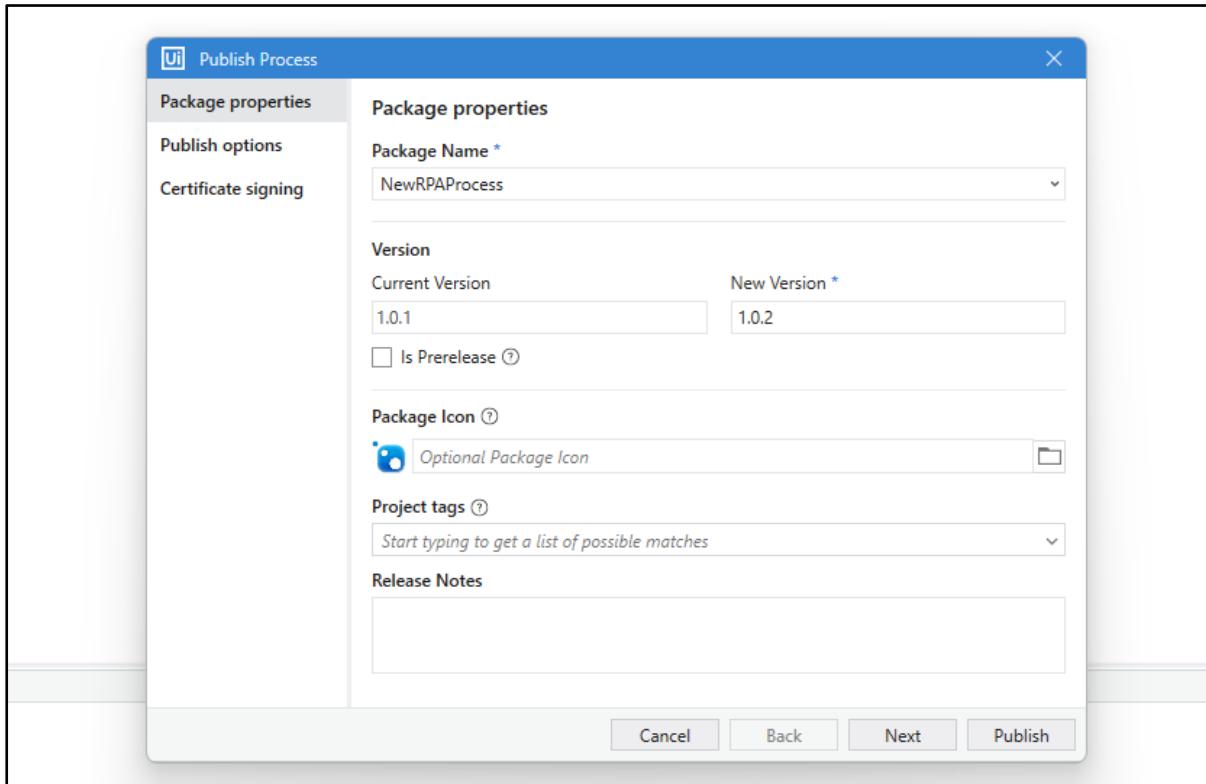
Step 3: Search for “Input dialog” in the Search panel of the Activities panel. Drag and drop Input dialog activity inside the Sequence. Write the appropriate message on the Label of the Input dialog. Create a variable and specify the variable in the Result property of the Input dialog box.



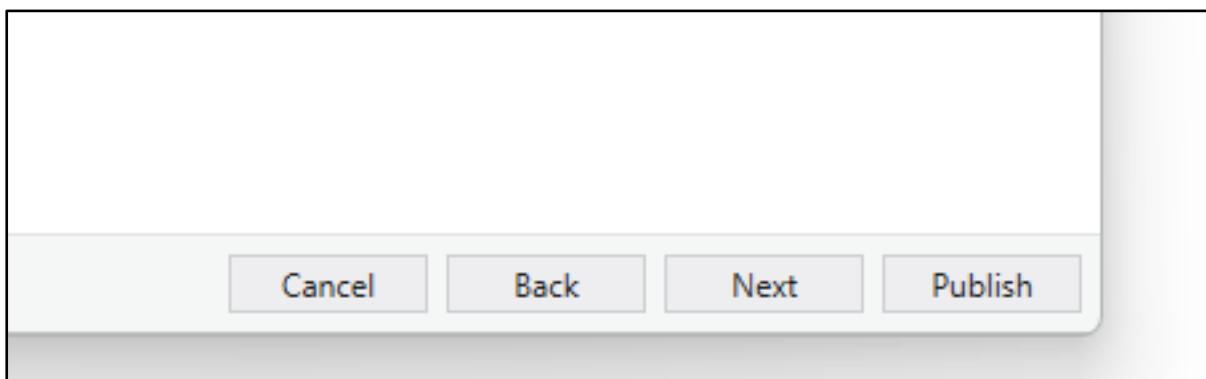
Step 4: Search for “Message Box” in the activities panel. Drag it inside the Sequence and enter the output message.



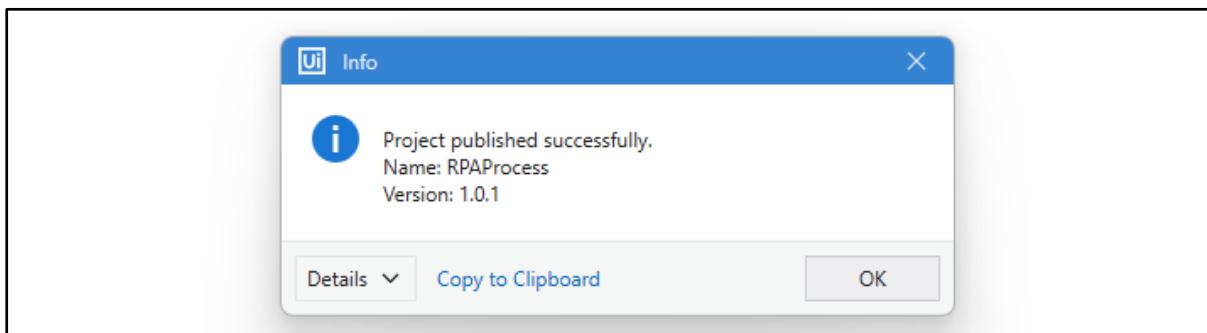
Step 5: To Publish this automation, Click on the Publish Button in the Design tab of the Ribbon and give a suitable name to the package.



Step 6: Make appropriate Changes to the package as per your requirements before Clicking Publish button to publish the utility.



Step 7: The Project has been published successfully.



Step 8: Log into UiPath Orchestrator and find the process in the processes tab.

A screenshot of the 'Processes' tab in the UiPath Orchestrator interface. The top navigation bar includes 'Home', 'Automations' (selected), 'Monitoring', 'Queues', 'Assets', and 'Storage Buckets'. Below the navigation is a search bar, column headers (Name, Version, Job pri..., Execution type, Compatibility, Entry point, Description, Labels, Properties), and a 'Add process' button. The main table lists three processes: 'GreetPrateek' (version 1.0.4, medium, unattended, Windows - Legacy, Main.xaml, Blank Process), 'HelloPrateek' (version 1.0.3, medium, unattended, Windows - Legacy, Main.xaml, Blank Process), and 'RPAProcess' (version 1.0.1, medium, unattended, Windows (.NET5...), Main.xaml, Blank Process to...). The bottom of the screen shows page navigation and item count controls.

Step 9: You could upload packages by clicking on the “Add Packages” button and entering the appropriate details. Finally Click on “Create” to create the Process.

The image consists of two vertically stacked screenshots of the UiPath RPA Platform interface, specifically the 'Add Process' wizard.

Screenshot 1 (Top): Package Configuration

- Package Overview:**
 - Package Source Name *: RPAProcess
 - Package Version *: 1.0.1
- Runtime Arguments:**
 - Entry point: Main.xaml
 - A note states: "The current package version has no input or output arguments."

Screenshot 2 (Bottom): Additional Settings

- Process Details:**
 - Display name: RPAProcess
 - Description: Blank Process to Explore New Automations.
 - A note says: "Describe the process in a few words. Initially inherited based on package version."
- Priority & Running Options:**
 - Job priority *: Medium
 - A note says: "Control which job has precedence over competing jobs."
 - Process can't be stopped from UiPath Assistant: Prevent the process from being stopped or paused using the Assistant.
 - Automatically Start Process: Launch the process automatically when the Robot agent starts. If enabled together with Process can't be stopped from UiPath Assistant, the process launches when Assistant is first started on the user machine.
- Buttons at the bottom:**
 - Cancel
 - Back
 - Next
 - Create (highlighted in blue)

Step 10: Go to Tenants -> Manage Access -> Accounts and Groups -> Robot Account -> Click on the Add Robot Account to create a Robot Account if not created yet.

Step 11: Go to Tenants -> Machines -> Add Machine -> Machine Template to add a New Machine.

Step 12: Click on Provision to add the Machine and Note down the Machine Key.

Tenant > Machines > Machine template

Success! Your machine was created.

You can now authenticate this machine to your Robot in the Assistant by using the details below.

Machine Name
RPAMachine

Client ID / Machine key
d12c6239-2d5b-4630-a108-e7dbbc4f193d

The ID is unique, generated once and used for identification purposes

Client secret
Qs9JmjP07c4qdDwZ

Works in combination with the ID above. You can add or delete secrets when editing the machine.

Keep your secrets safe
Copy the above credentials in a safe storage location. Consider using encryption or hashing to secure your storage. In case the client secret value is lost, you can generate a new one by editing the machine authentication details.

Close

Step 13: Connect the Host Machine using the Licence and the Machine Key/ Client ID and Start the Process.

My Workspace > Automations > Processes > Start Job

Process Name * RPAProcess **Job priority *** Inherited **Runtime type *** Production (Unattended)

Execution Target **Arguments**

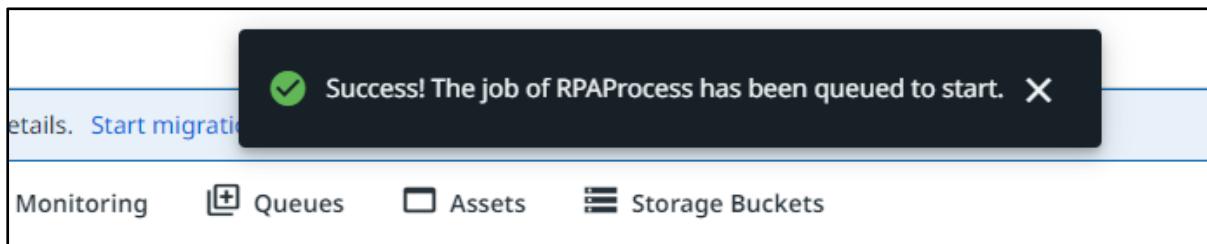
Allocate dynamically
Execute the process 1 times

Schedule ending of job execution
 Generate an alert if the job is stuck in pending or resumed status
 Generate an alert if the job started and has not completed

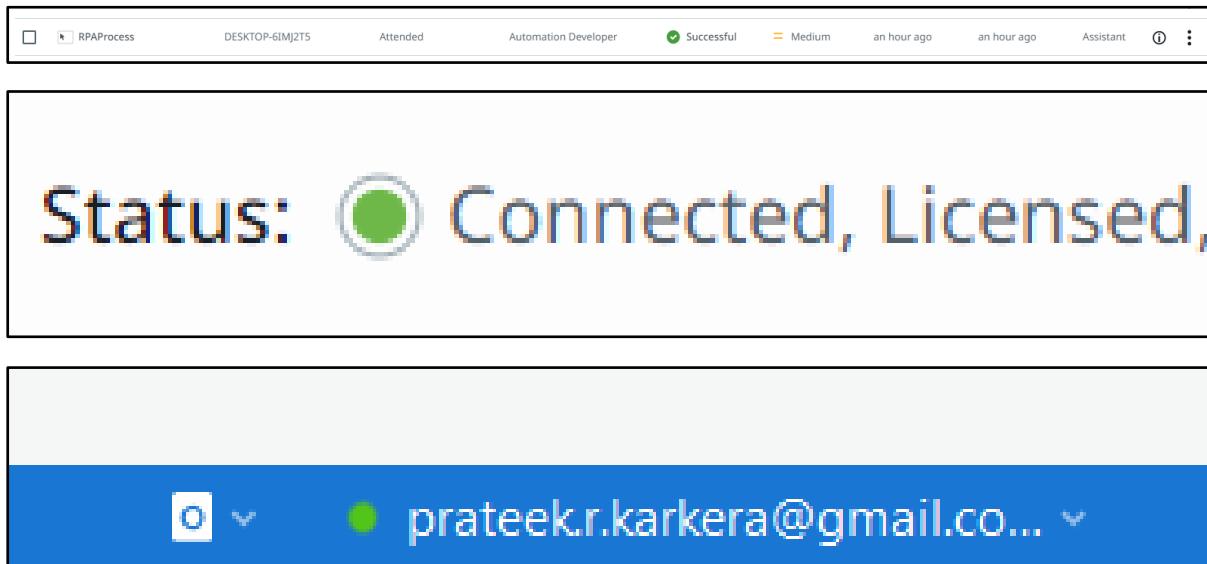
Machine
prateek.r.karkera@gmail.com's workspace machine

Hostname
DESKTOP-6IMJ2T5 - DESKTOP-6IMJ2T5\ADMIN

Cancel **Start**



After the process runs successfully you should see the green light toward the bottom right of your UiPath Designer Panel, connected to the Orchestrator Workspace, which in my case is “prateek.r.karkera@gmail.com’s Workspace”.



Conclusion: The practical to create and provision Robot using Orchestrator was performed successfully.