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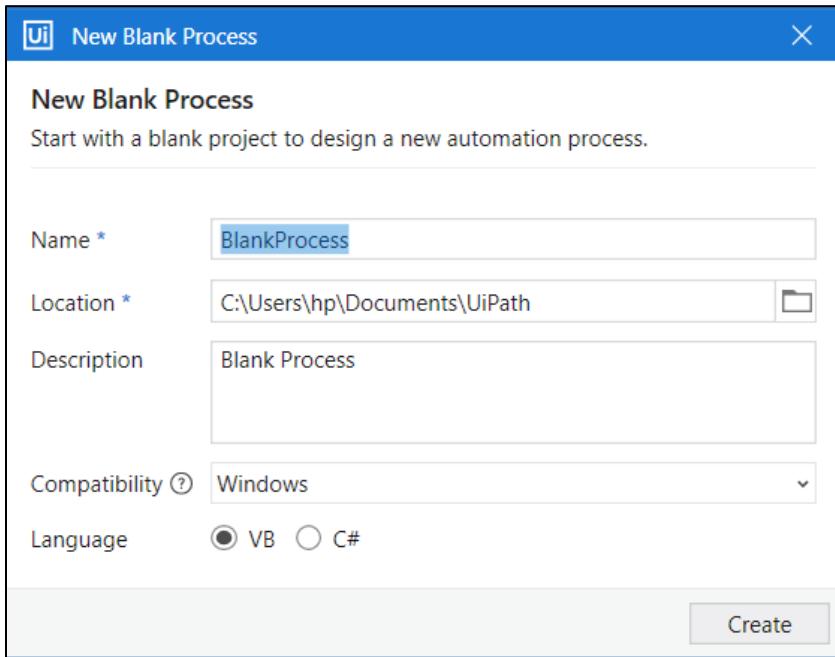
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Practical: 1a

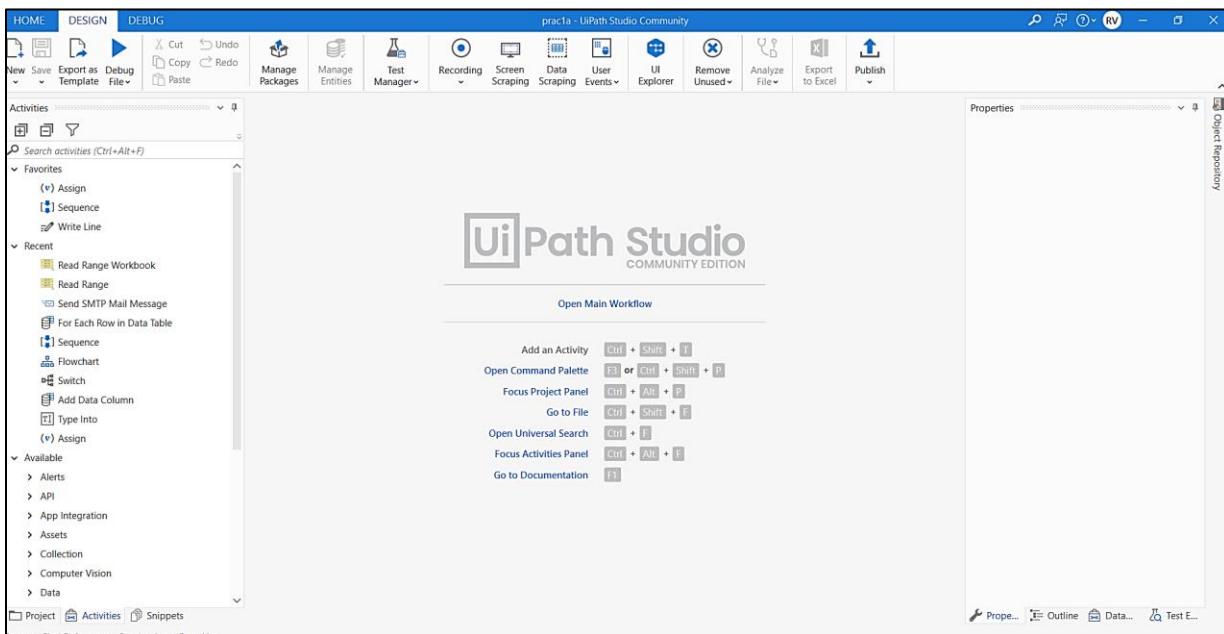
Aim: Create a simple sequence-based project.

Implementation:

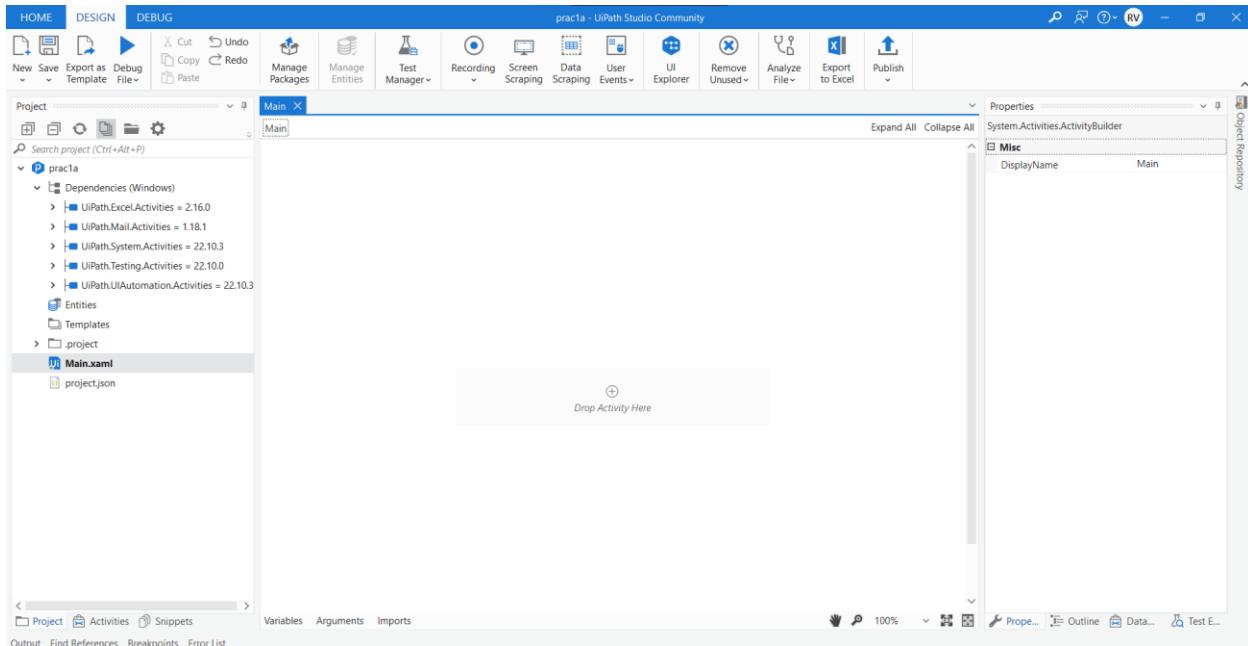
1. Open UI path -> new project -> process



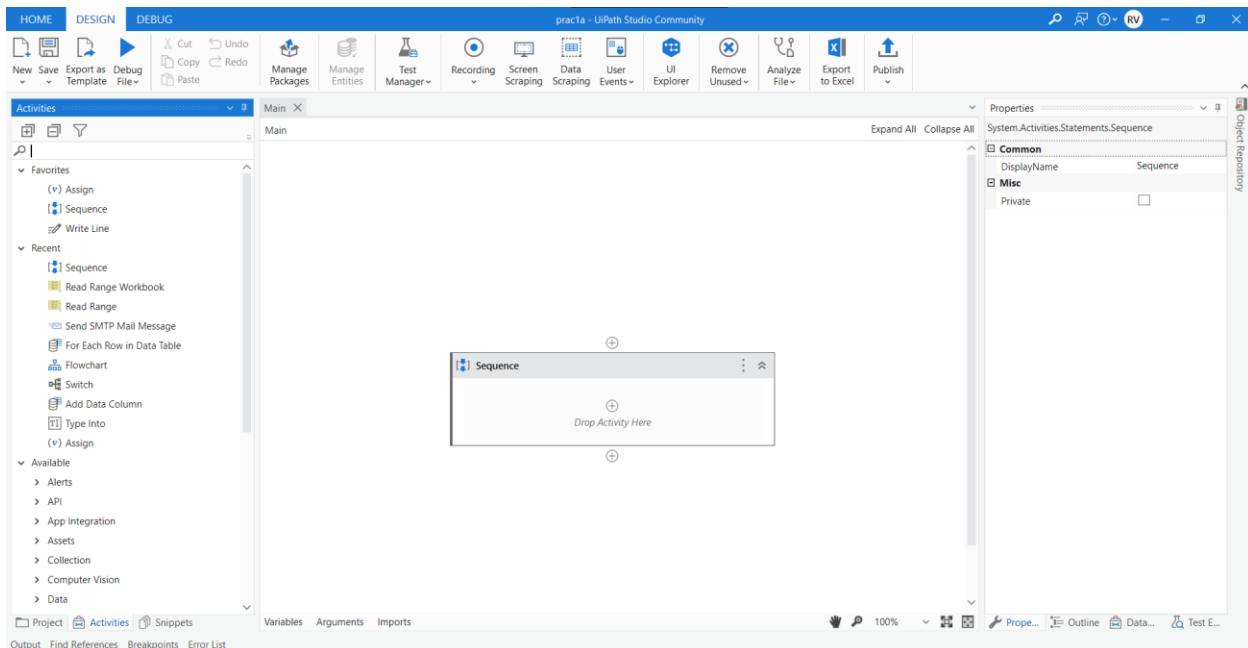
2. Give the sequence a name
3. Set the path for the project.
4. Click "create". It will create a blank project.



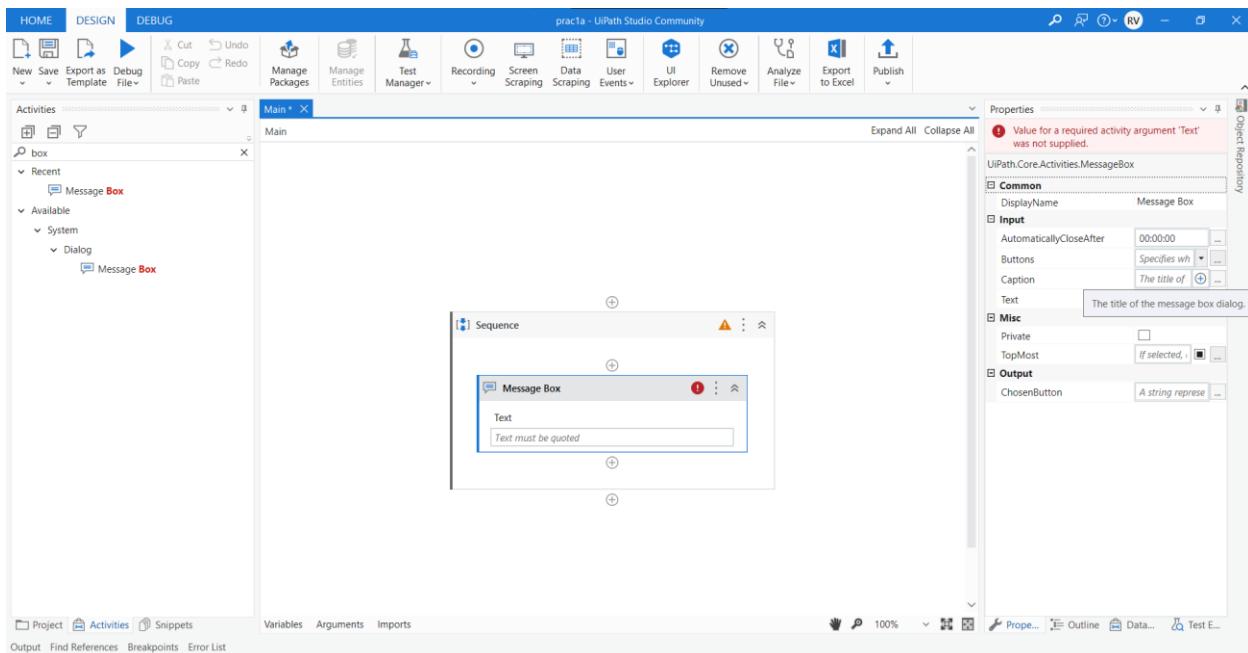
5. click on project tab on bottom left screen -> click main.xaml (this is the file where you have to perform the task).



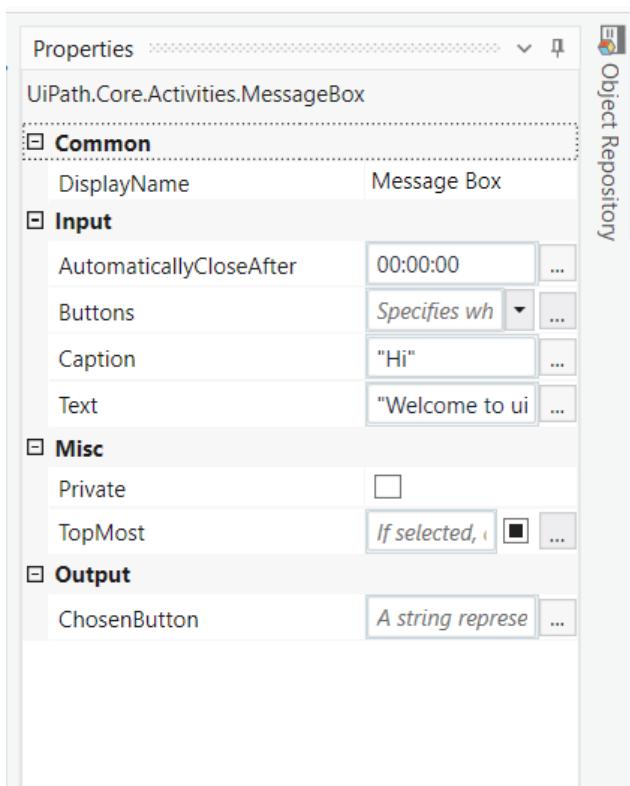
6. click on activities tab -> drag and drop sequence from the activity to the main.xaml file.



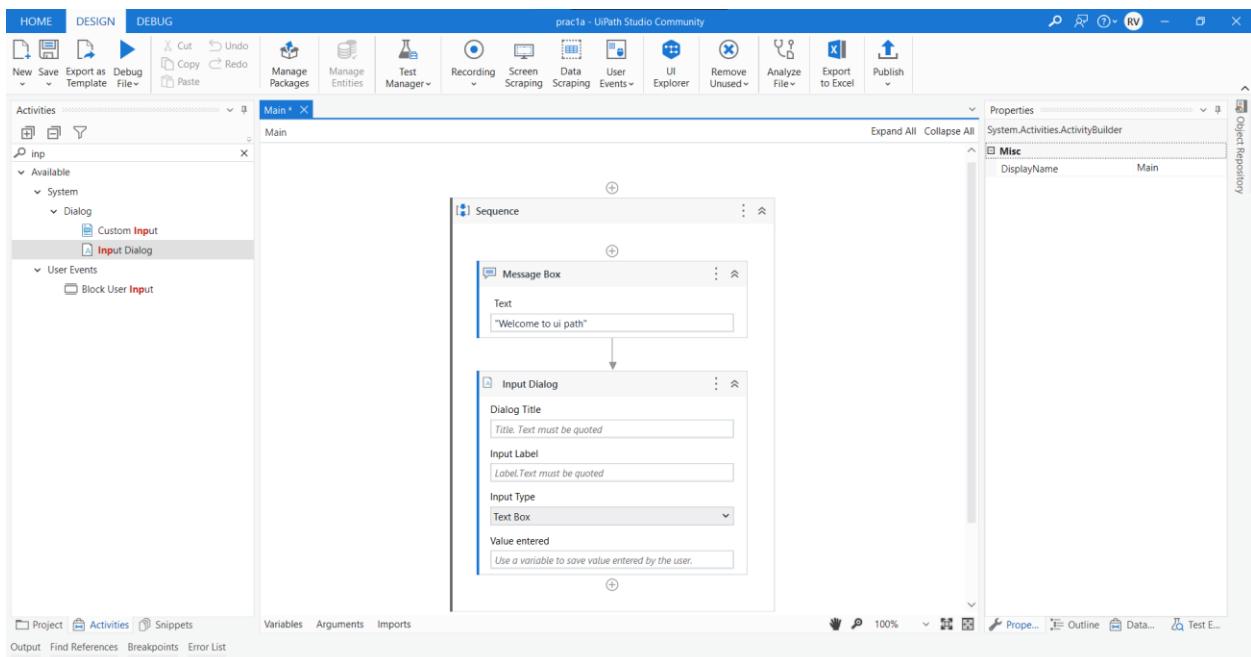
7. search for message box in activity and drag and drop it into the sequence.



8. Change the caption and the text of message box from the properties tab (All text should be in "")

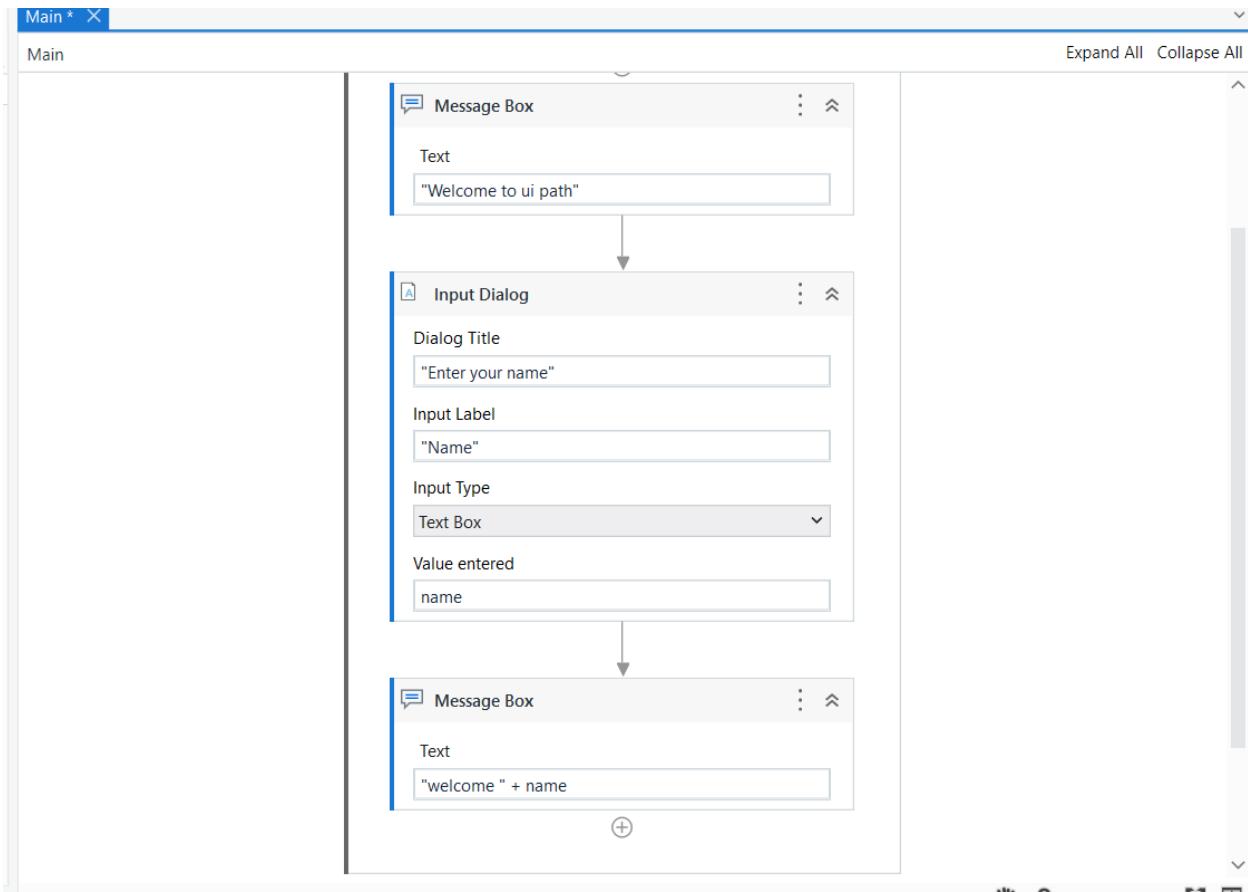


9. drag and drop input Dialog

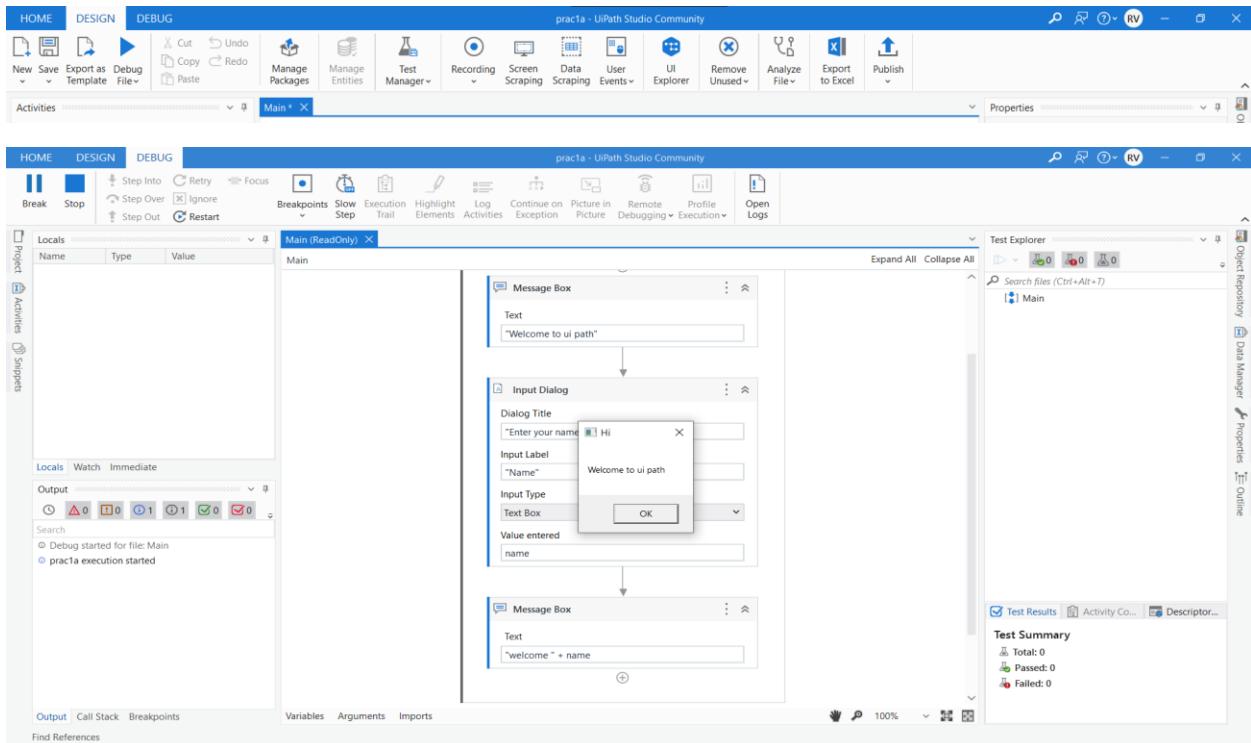


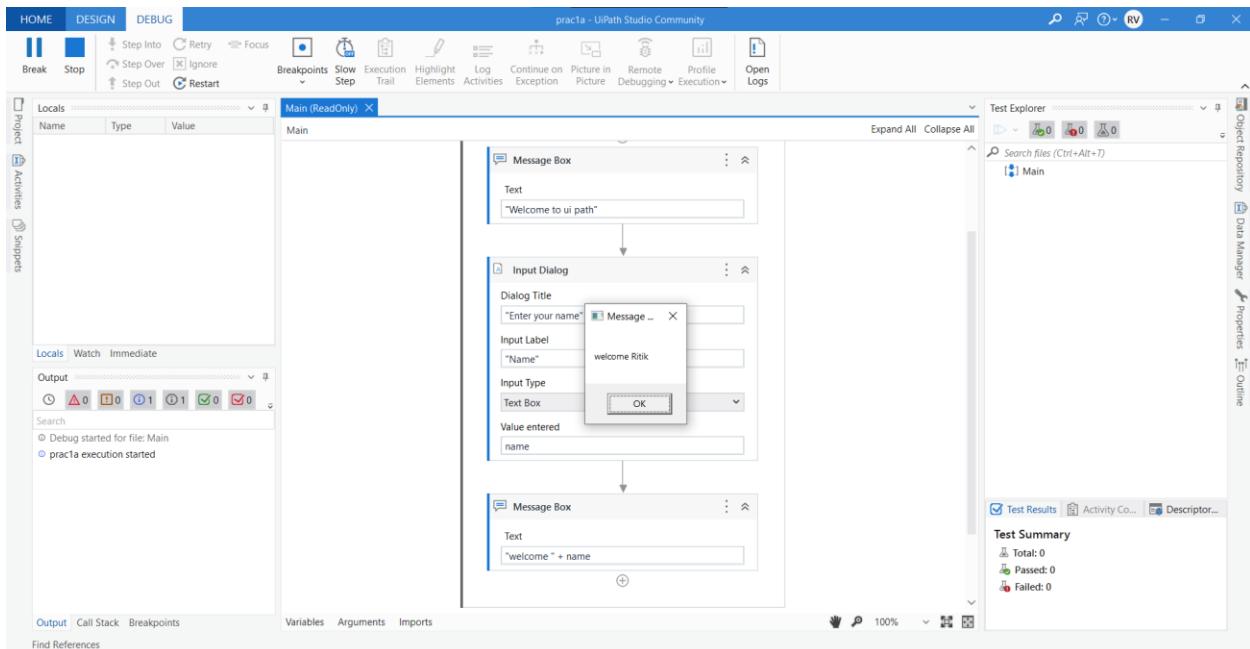
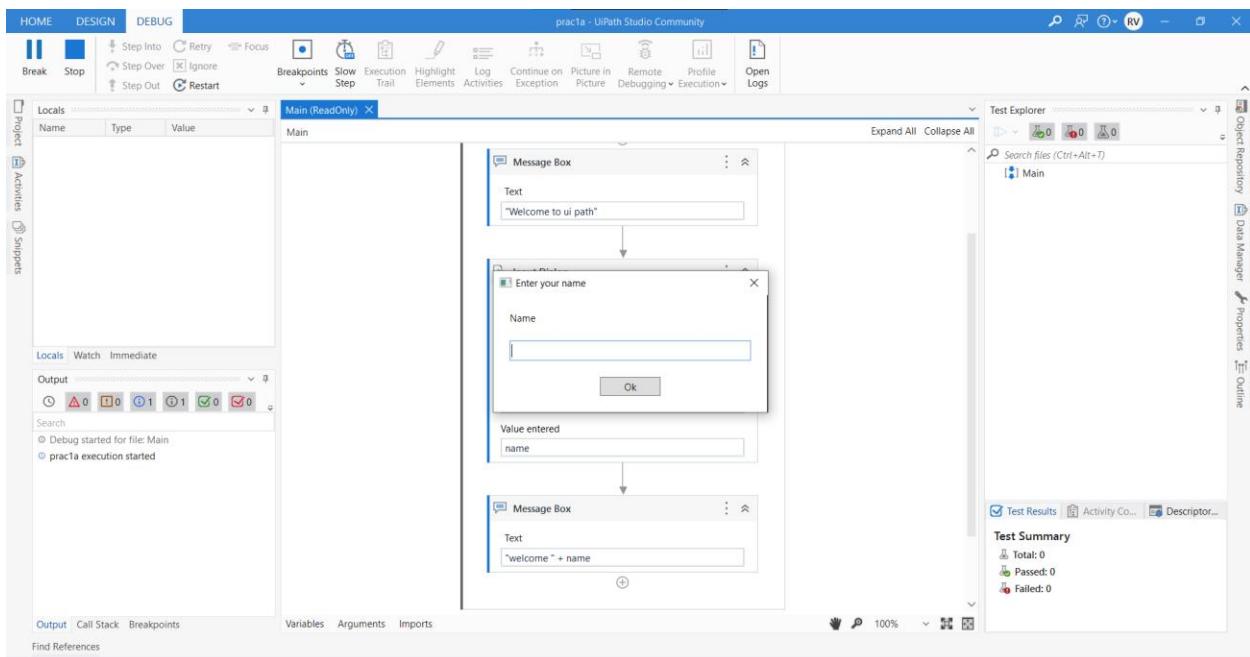
10. add title, label and create a variable to store input that user provides.

11. Add another message box below input dialog to display user a message with users entered name.



12 .Click “Debug file” -> “Run file” . Program will start running.



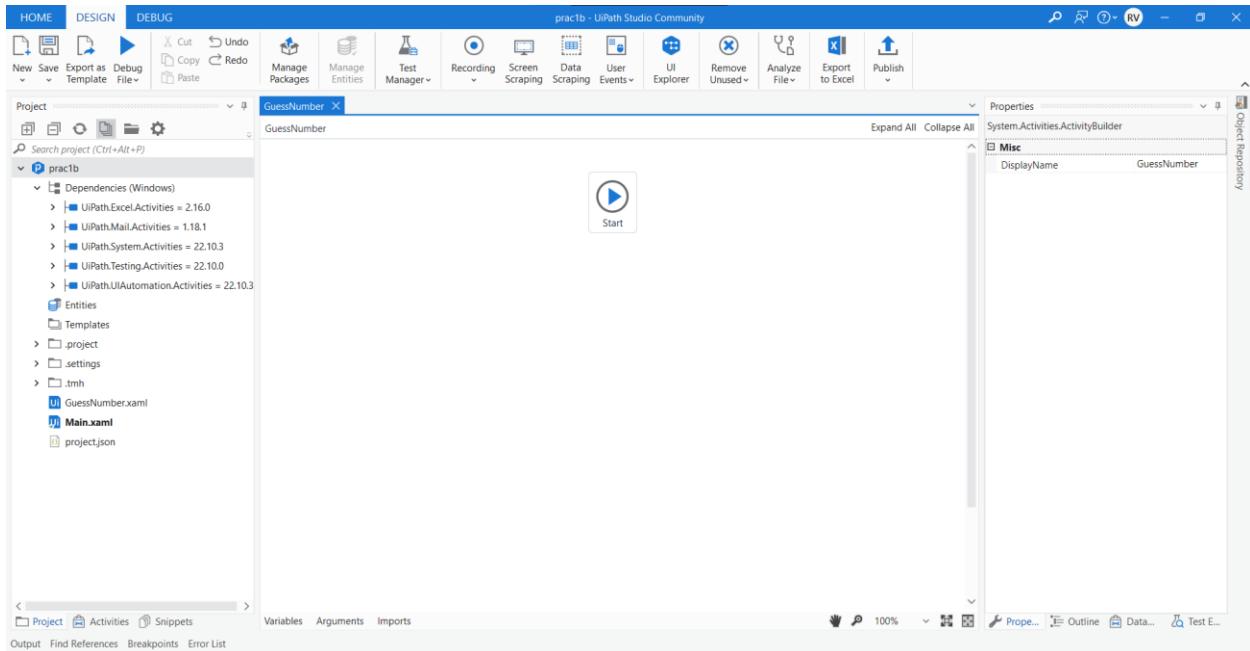


Practical : 1b

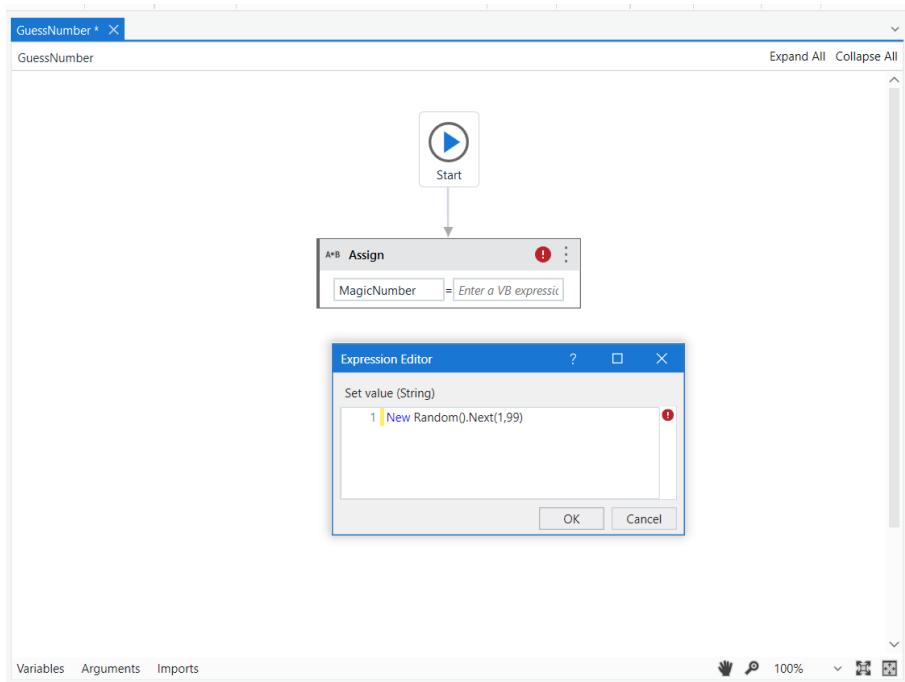
Aim: Create a flowchart-based project.

Implementation:

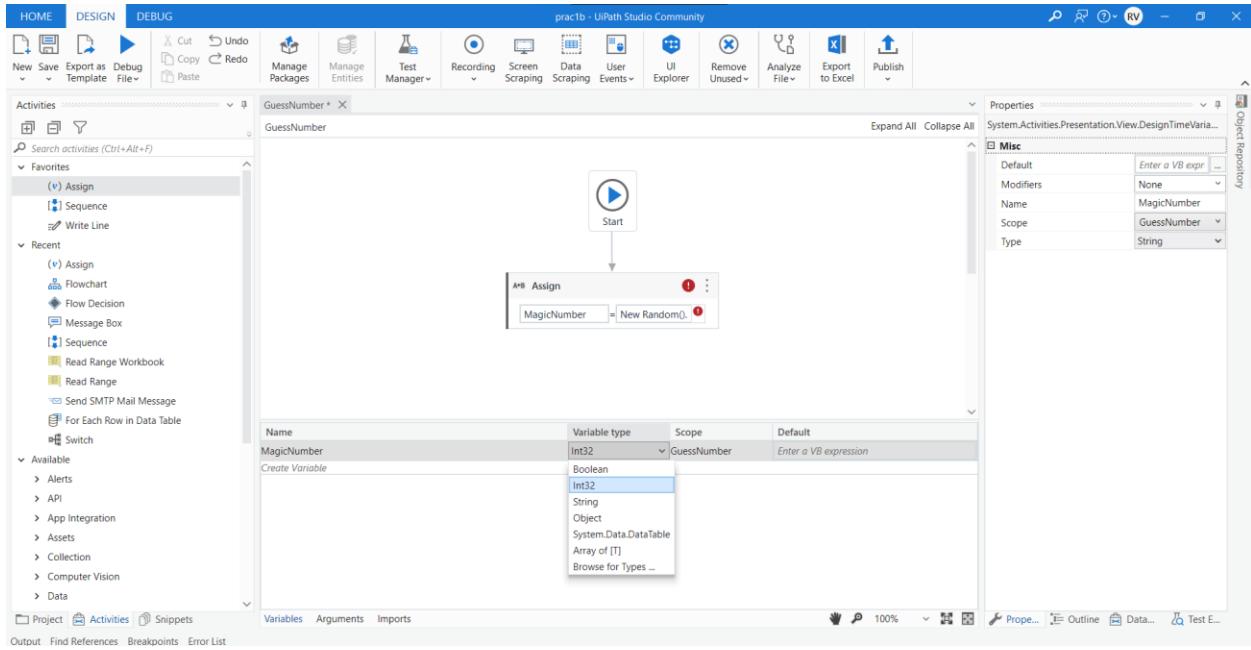
1. create a new blank process -> open main.xaml -> drag and drop flowchart to main.xaml then add a Flowchart from the Activities panel into the Designer panel.



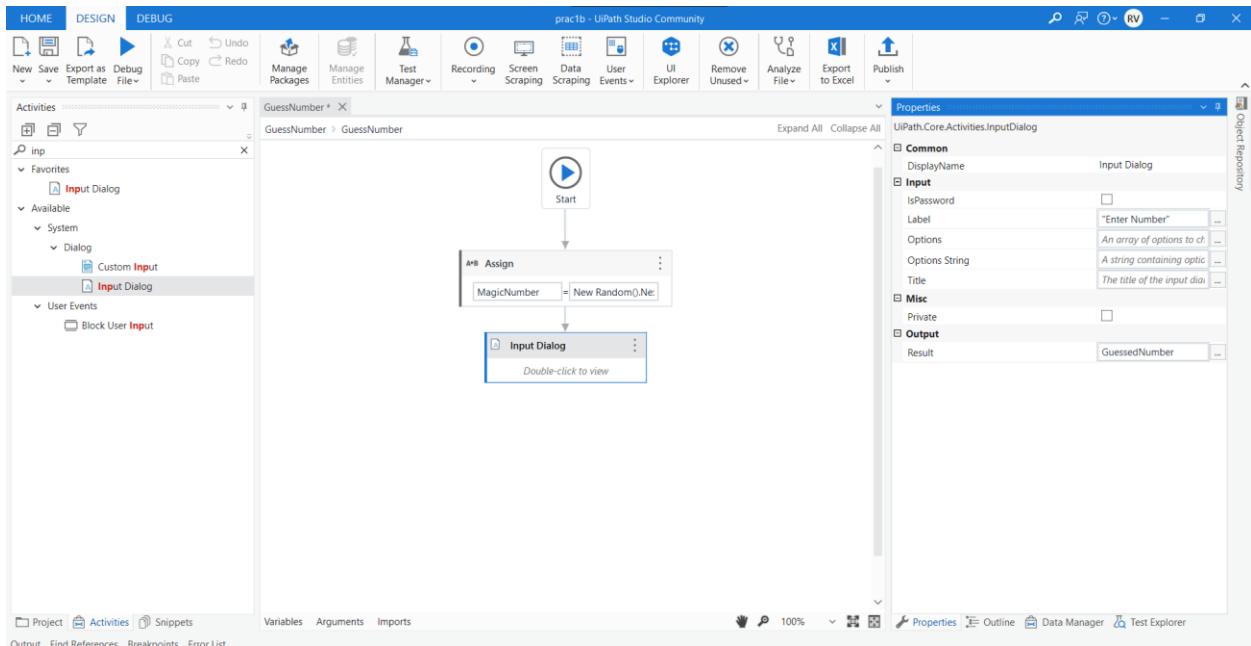
2. Add assign activity to create a expression that create a random number from 1 to 99 and store it to an variable.



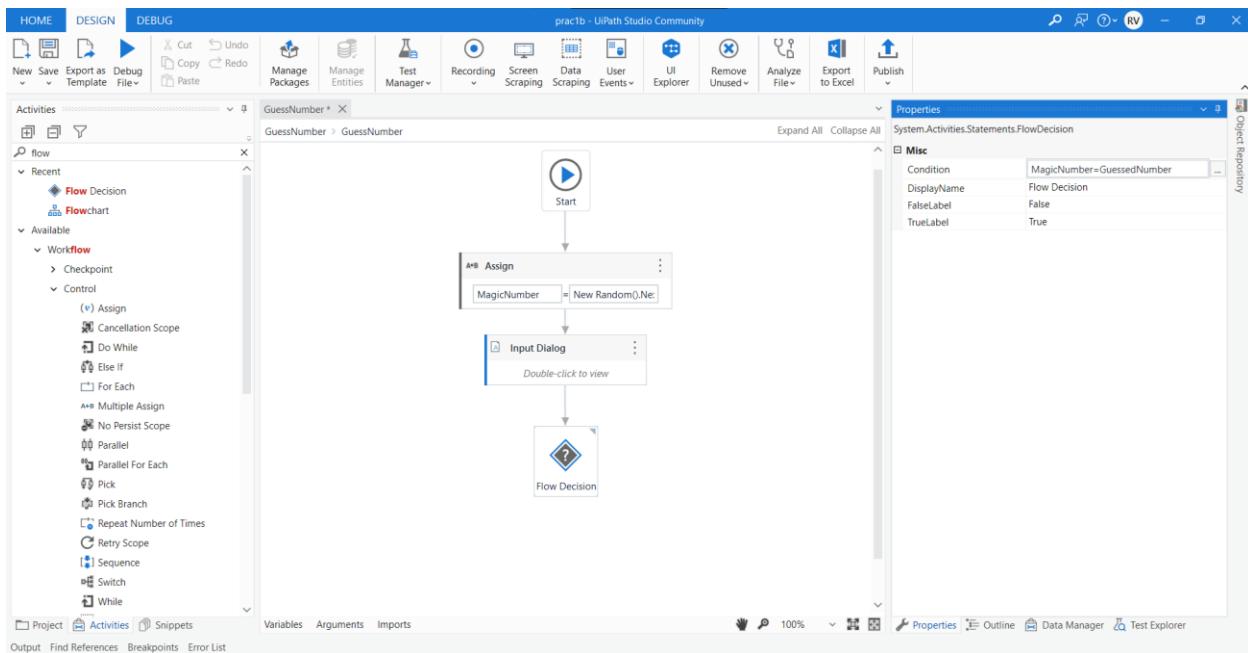
3.set the variable type to int32



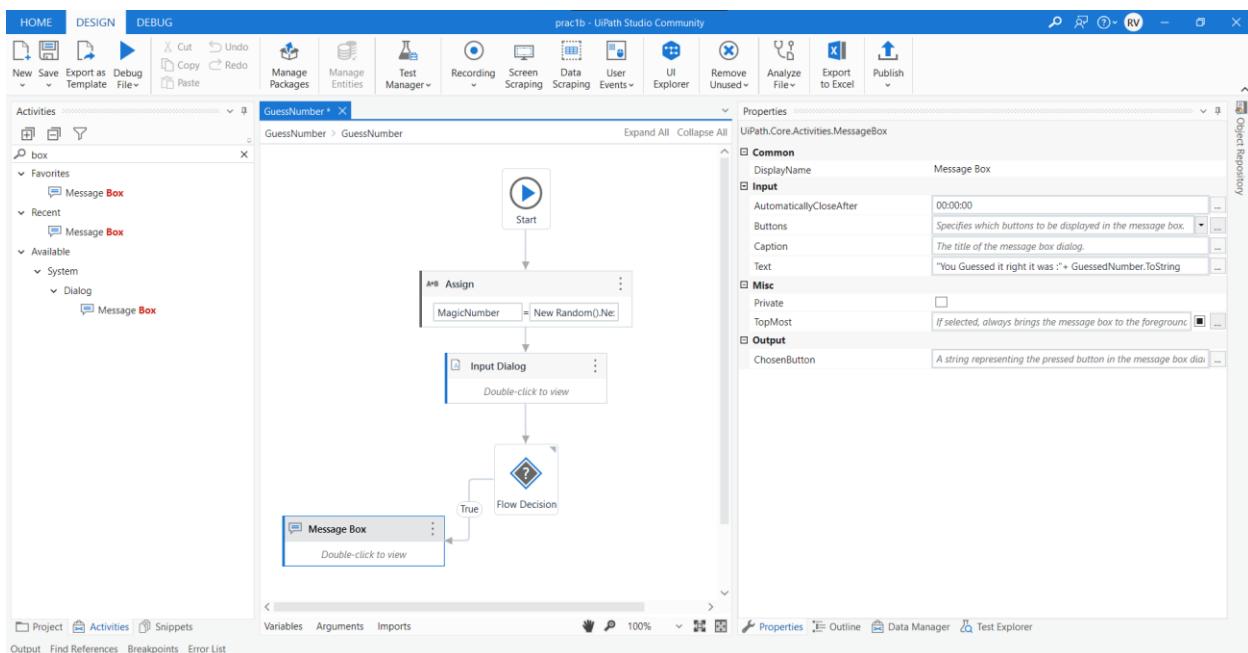
4.Add input dialog activity to take guessed number from user



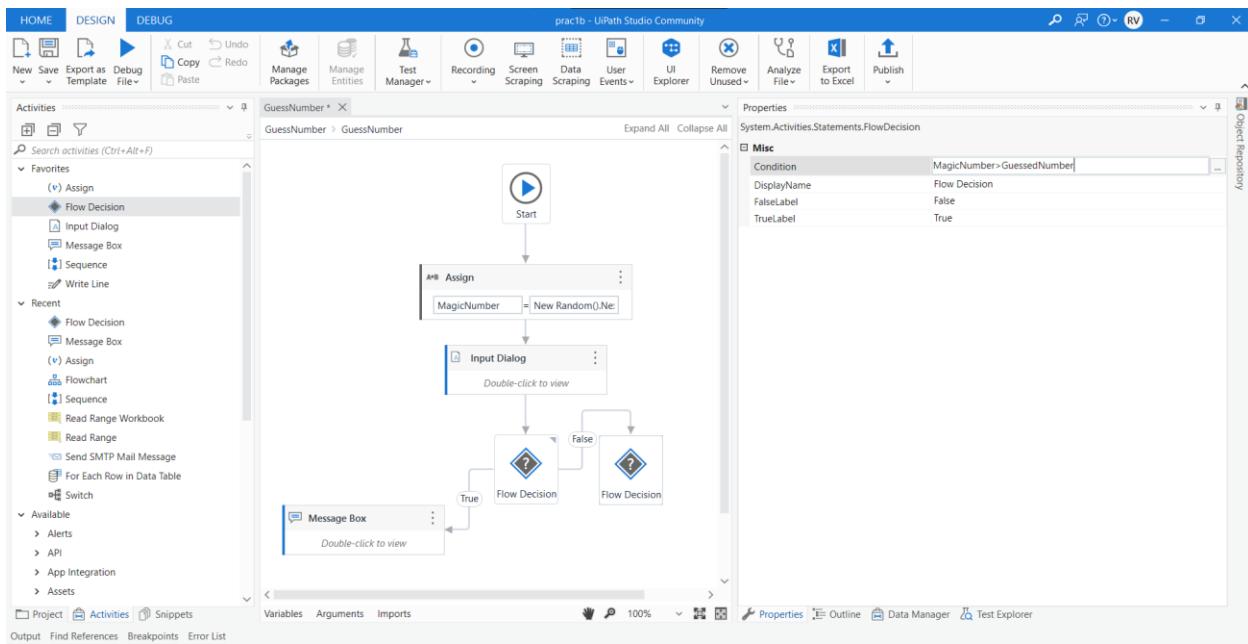
5.create a flow decision and add condition to check if random number is equal to guessed number



6.Create a message box activity and connect to the true end of flow decision and add the text to tell user he/she guessed it right.

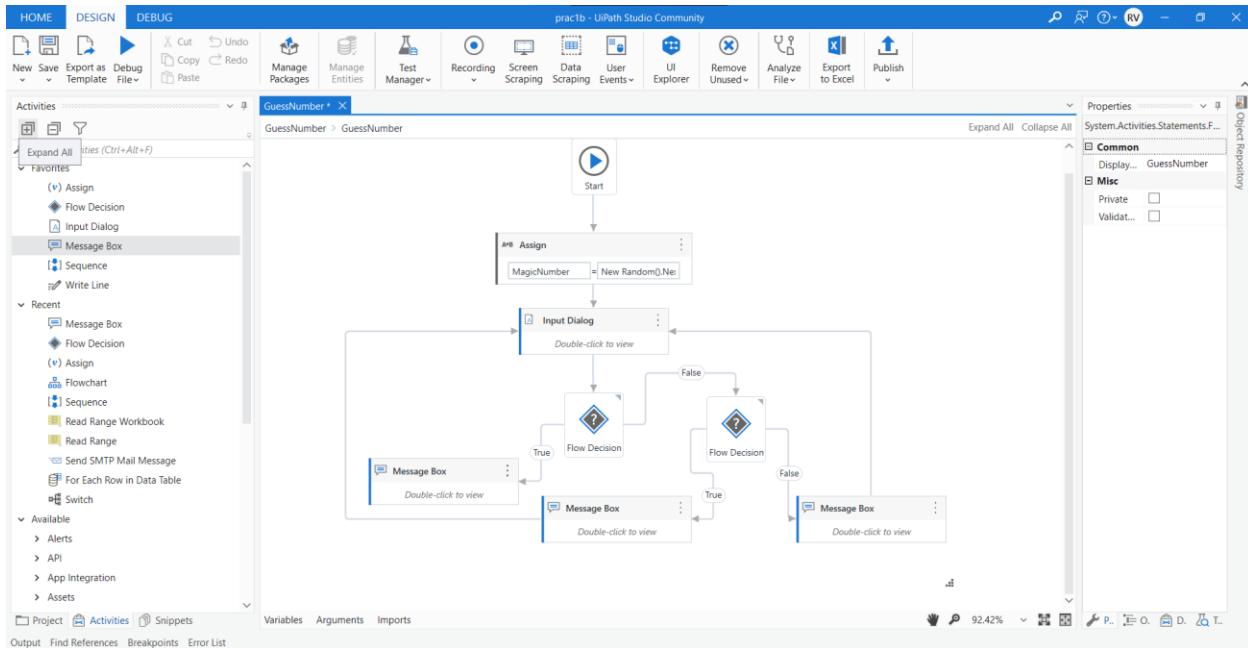


7.Create Another Flow decision on false end and put the condition to check if number guessed

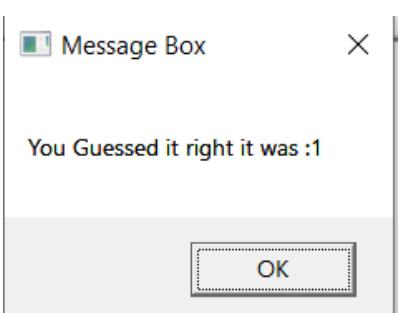
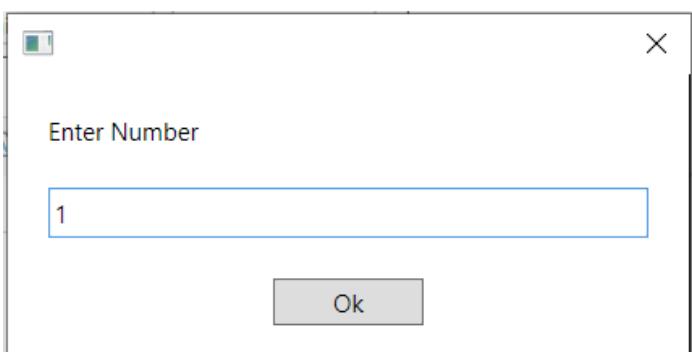
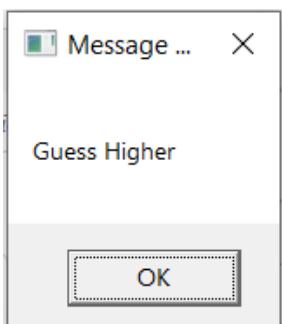
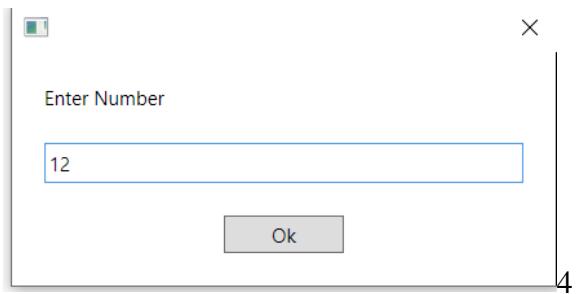


8. create message activity on true end to tell user guess higher and create message activity on false end to tell user guess lower.

And connect these 2 message box to the input dialog to let user enter new number again.



9. Run the program.

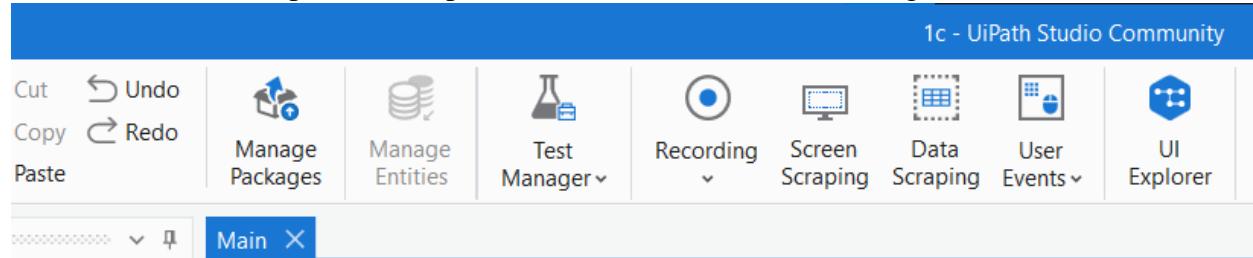


Practical: 1c

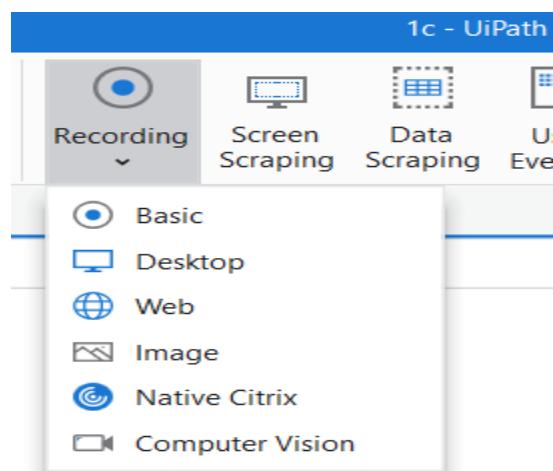
Aim: Create an UiPath Robot which can empty a folder in Gmail solely on basis of recording.

Implementation:

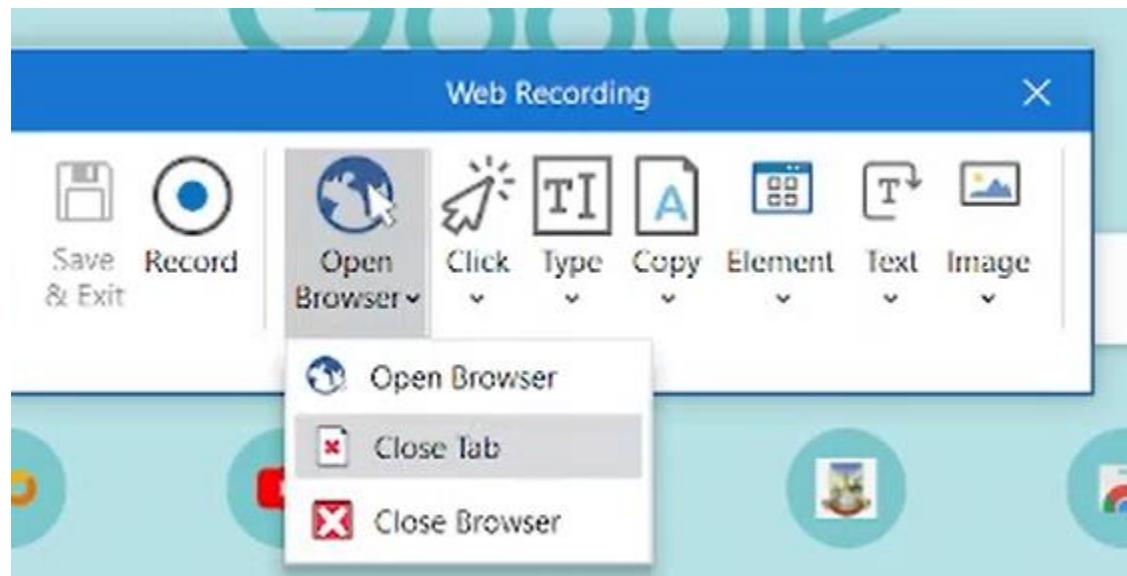
1. create a new blank process -> open main.xaml -> Click on recording



2. Select web



- 3.click on open browser



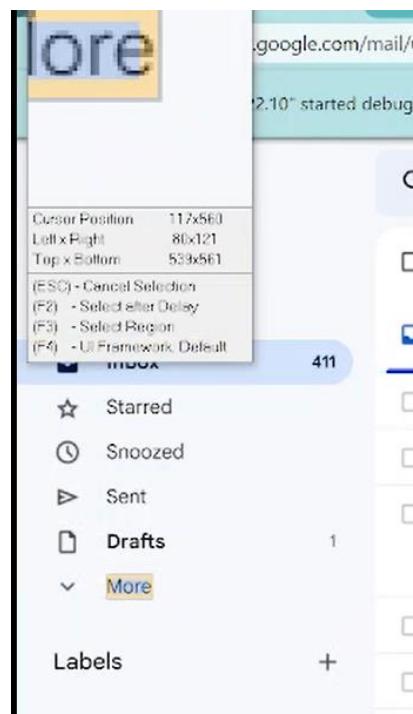
4.click on url to select and click ok



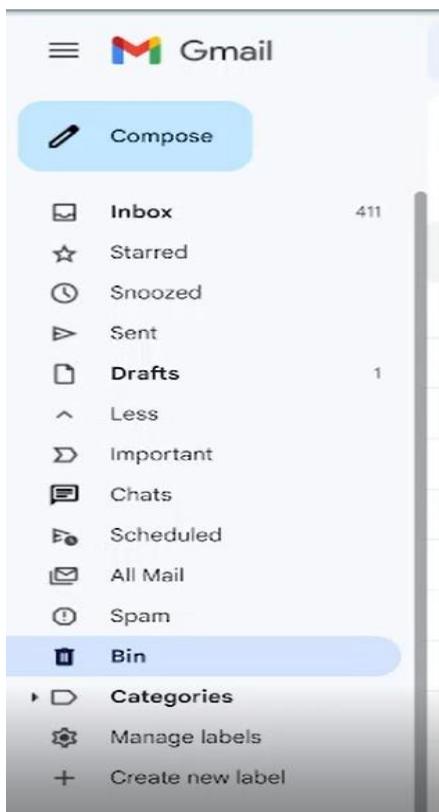
5. Now click on record



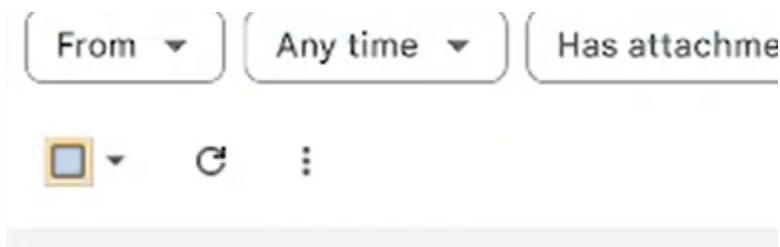
6.click more



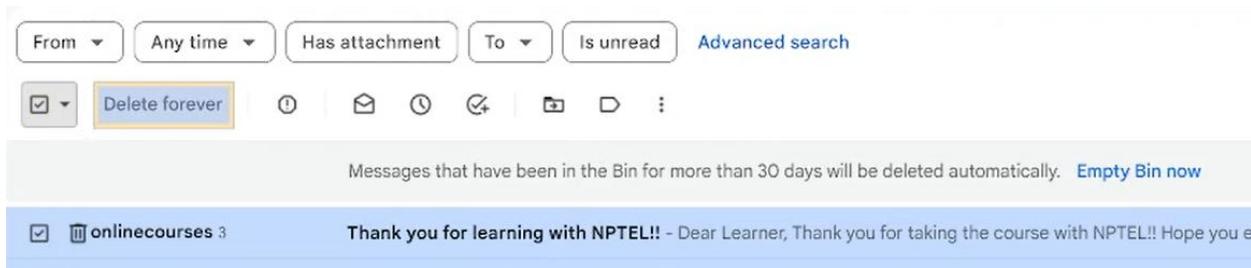
7.click on bin



8.click Checkbox to select all emails

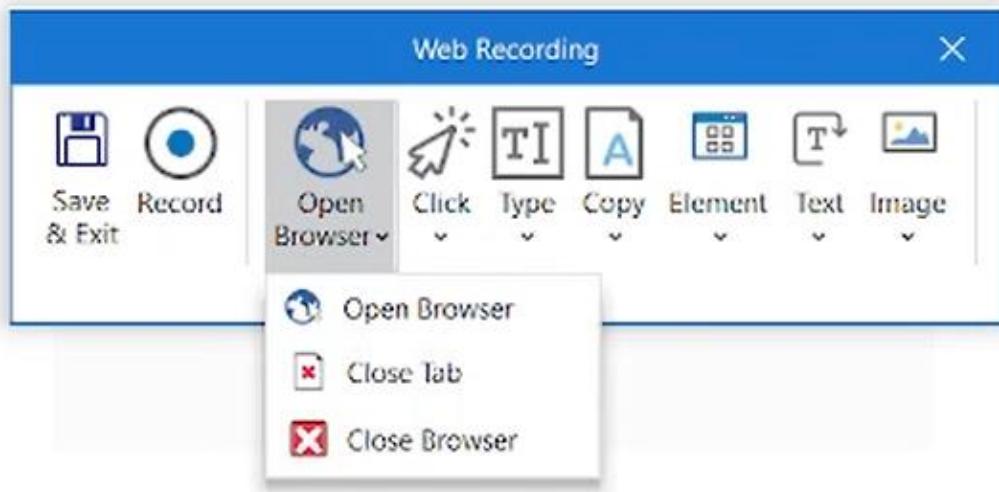


9.Now Click Delete forever

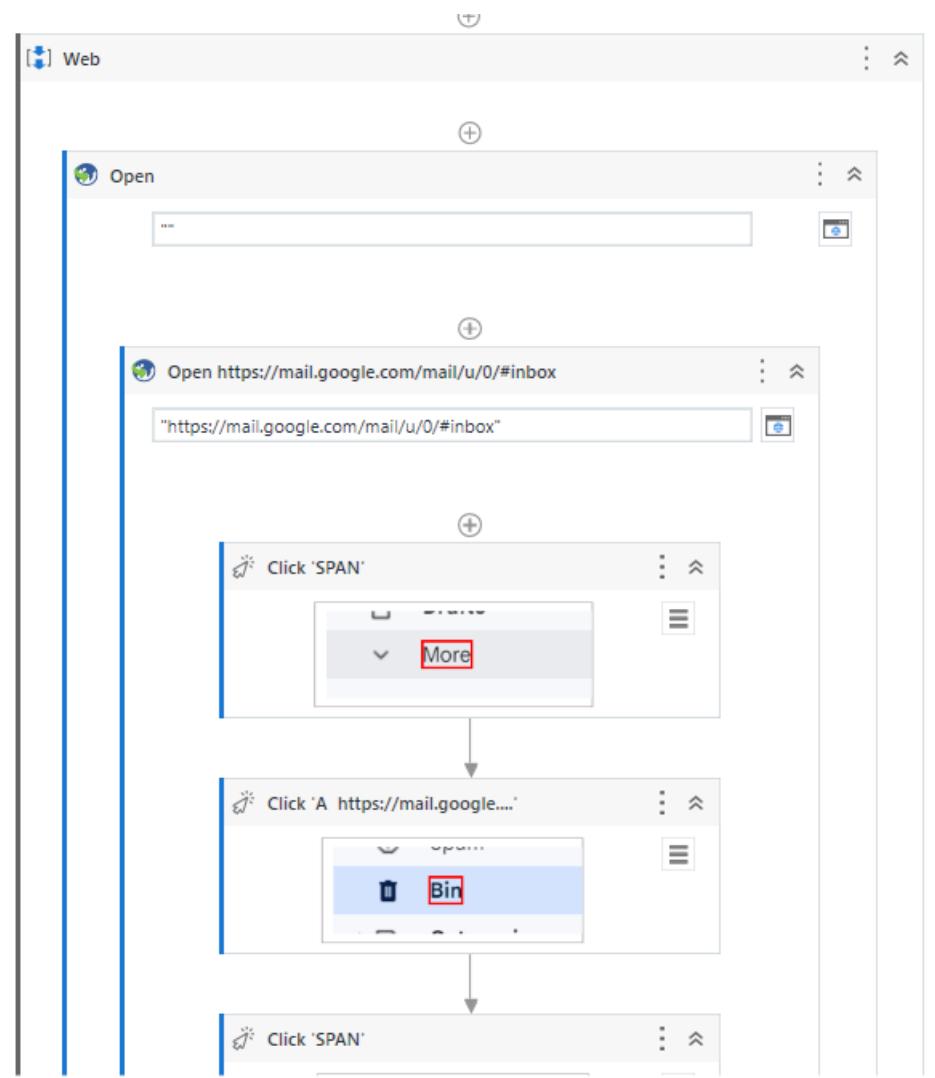


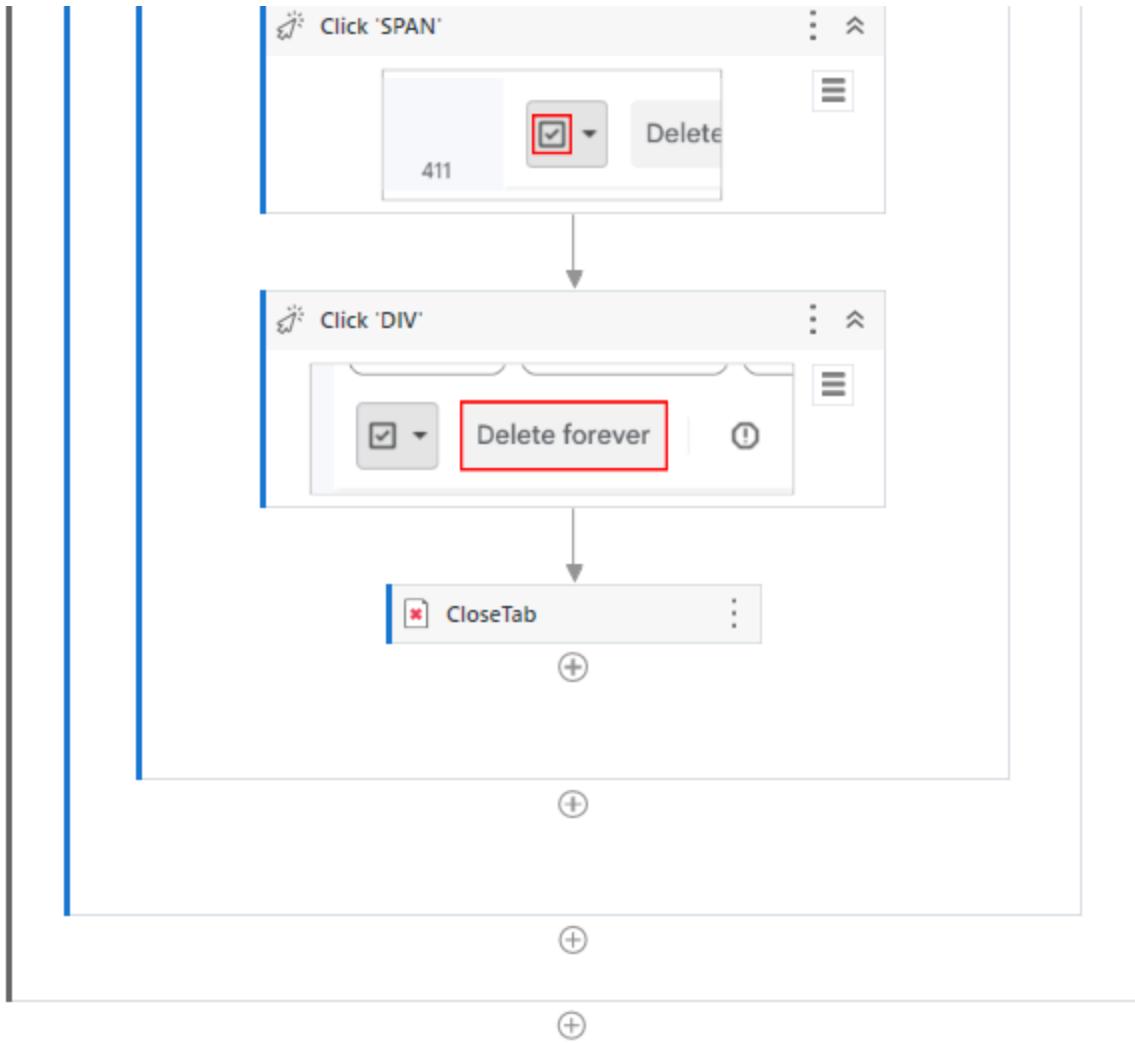
10.press "esc" to stop recording

11.Click close tab and click on the tab.



12. This is how the sequence should look like.





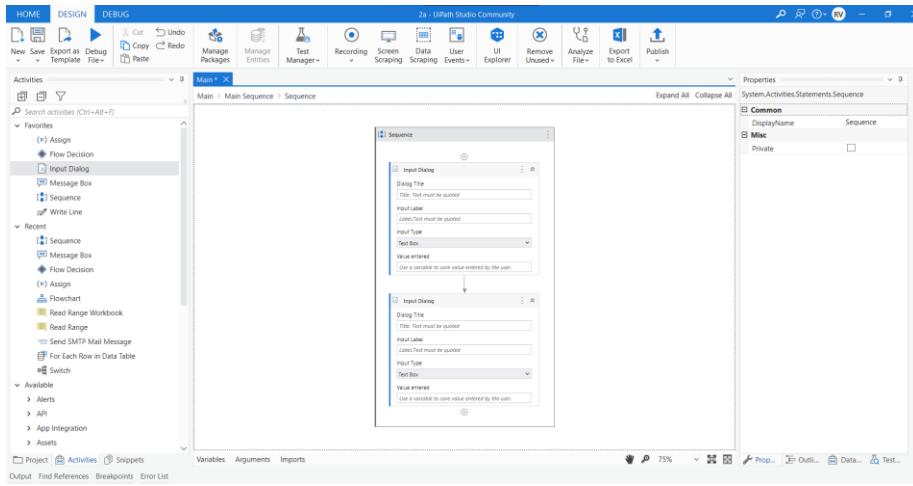
13. run the program.

Practical: 2a

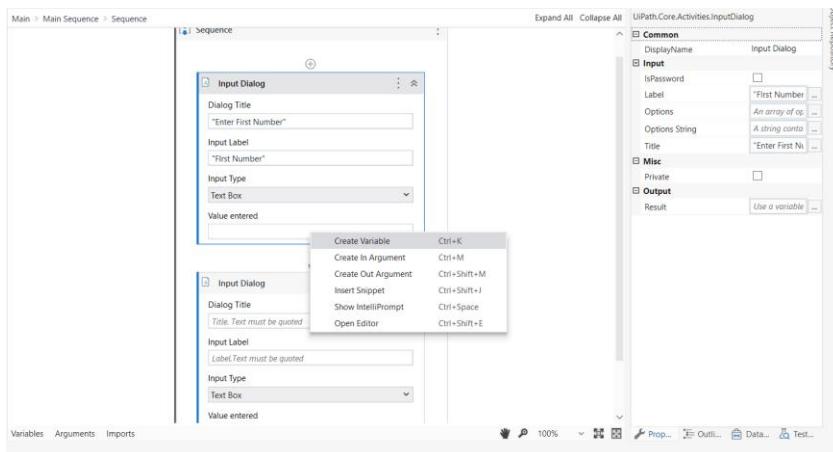
Aim: Automate UiPath Number Calculation (Subtraction, Multiplication, Division of numbers).

Implementation:

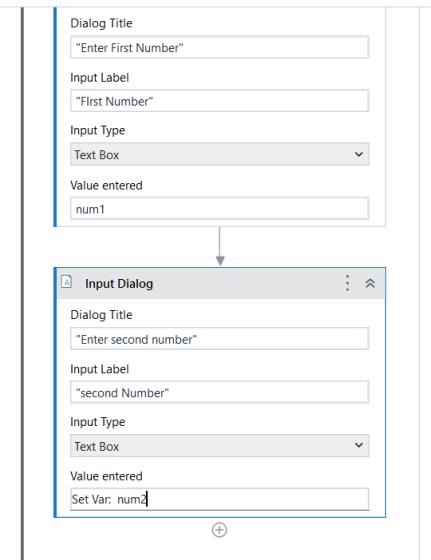
1. create a new blank process -> open main.xaml -> Add sequence activity -> add two input dialog inside sequence.



2. In input Dialog Enter title , label for input, in “Value entered” textbox right click or press “ctrl+k” to create variable to store the entered value , then type the desired variable name and press enter.



3. repeat step 2 for second input dialog



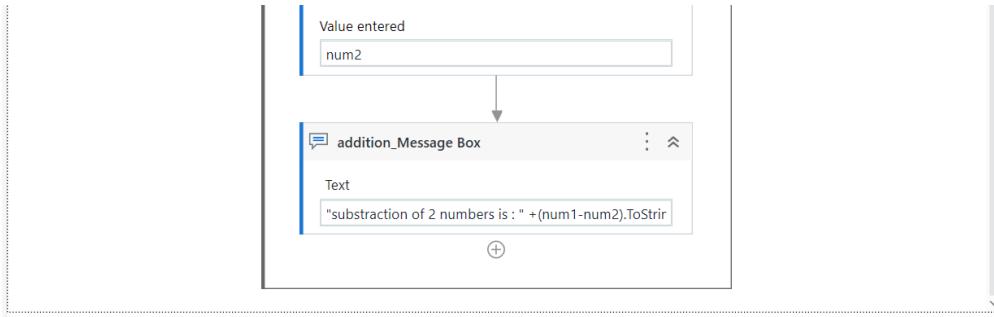
4. change variable type from string to int32

Name	Variable type	Scope	Default
num1	Int32	Sequence	Enter a VB expression
num2	String	Sequence	Enter a VB expression
Create Variable			

5. Add a message box after the input dialog box and type

“subtraction of 2 numbers is : ” +(num1-num2).ToString” inside text field.

This will add subtract numbers and concatenate with the message and will display to user.

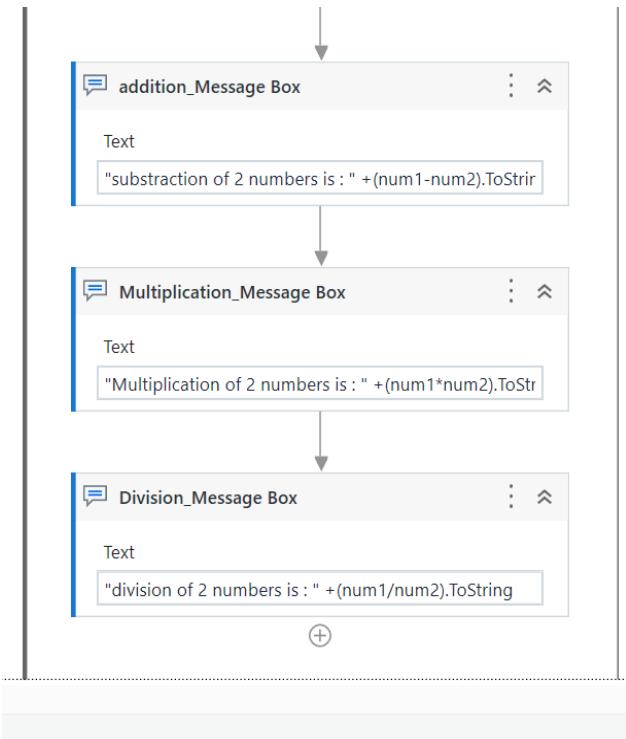


6. Repeat step 5 for multiplications and divisions, use

"Multiplication of 2 numbers is : " +(num1*num2).ToString for multiplication

and for division type

"division of 2 numbers is : " +(num1/num2).ToString



7. Run the program

Enter First Number

First Number

Ok

Enter second number

second Number

Ok

addition_Message Box

subtraction of 2 numbers is : 1

OK

Multiplication_Message Box

Multiplication of 2 numbers is : 20

OK

Division_Message Box

division of 2 numbers is : 1.25

OK

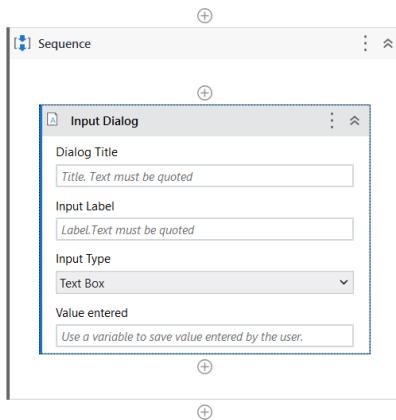
Practical : 2b

Aim: Create an automation UiPath project using different types of variables (number, datetime, Boolean, generic, array, data table)

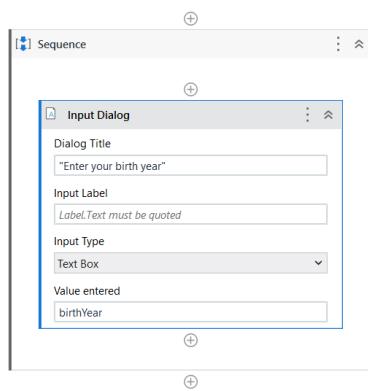
Implementation:

1]Number variable

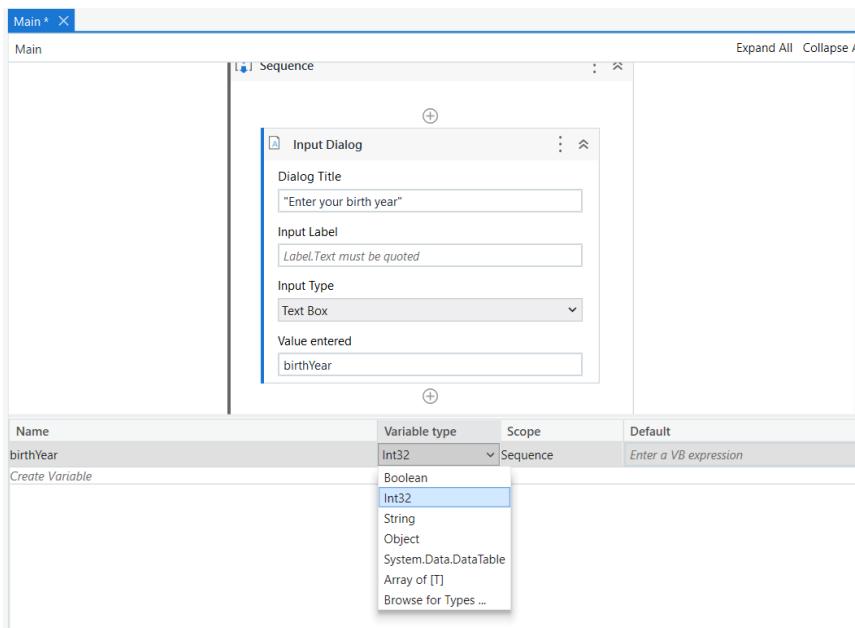
1. create a new blank process -> open main.xaml -> Add sequence activity -> Add input dialog box



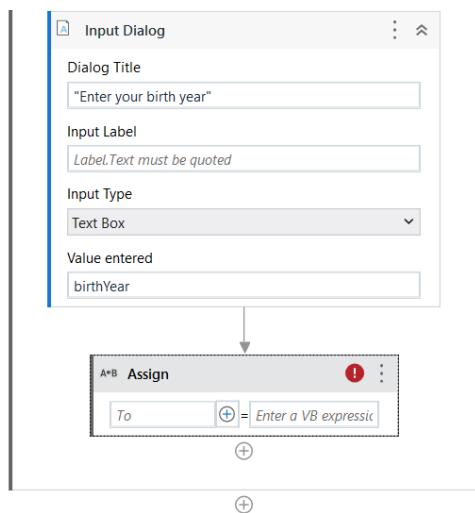
2. Now enter the title and in value entered field press “ctrl+k” to create a variable and give it a desired name then press enter.



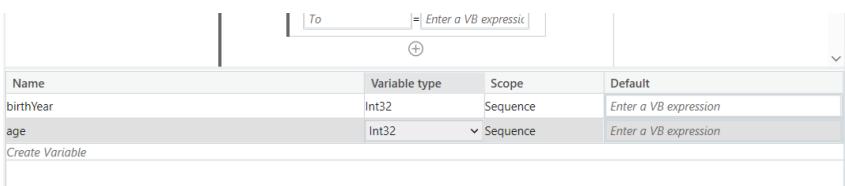
3. Now go to variable option and change the variable datatype to int32.



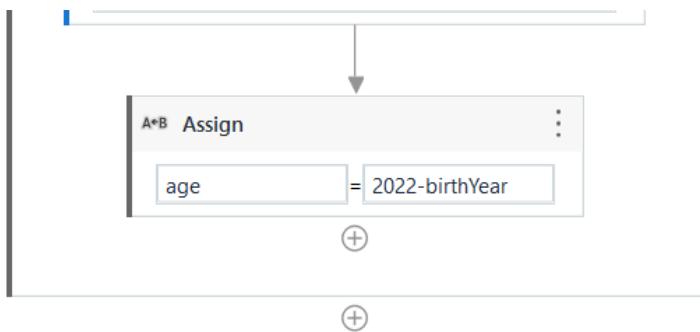
4. now add an assign activity.



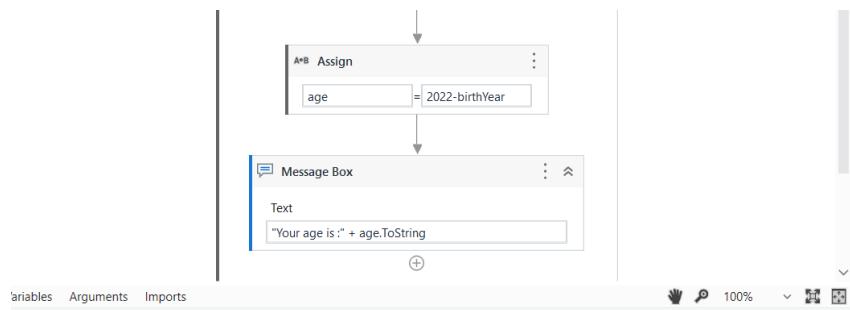
5. Now create an int32 variable.



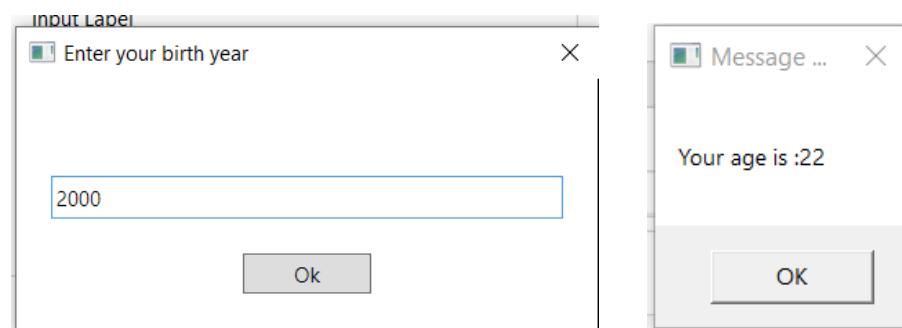
6. now assign the values to calculate the age.



7.add a message box activity to display the age.

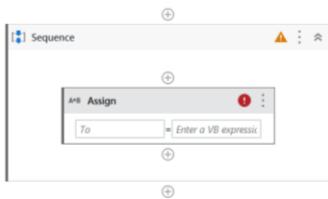


8.Run the file.

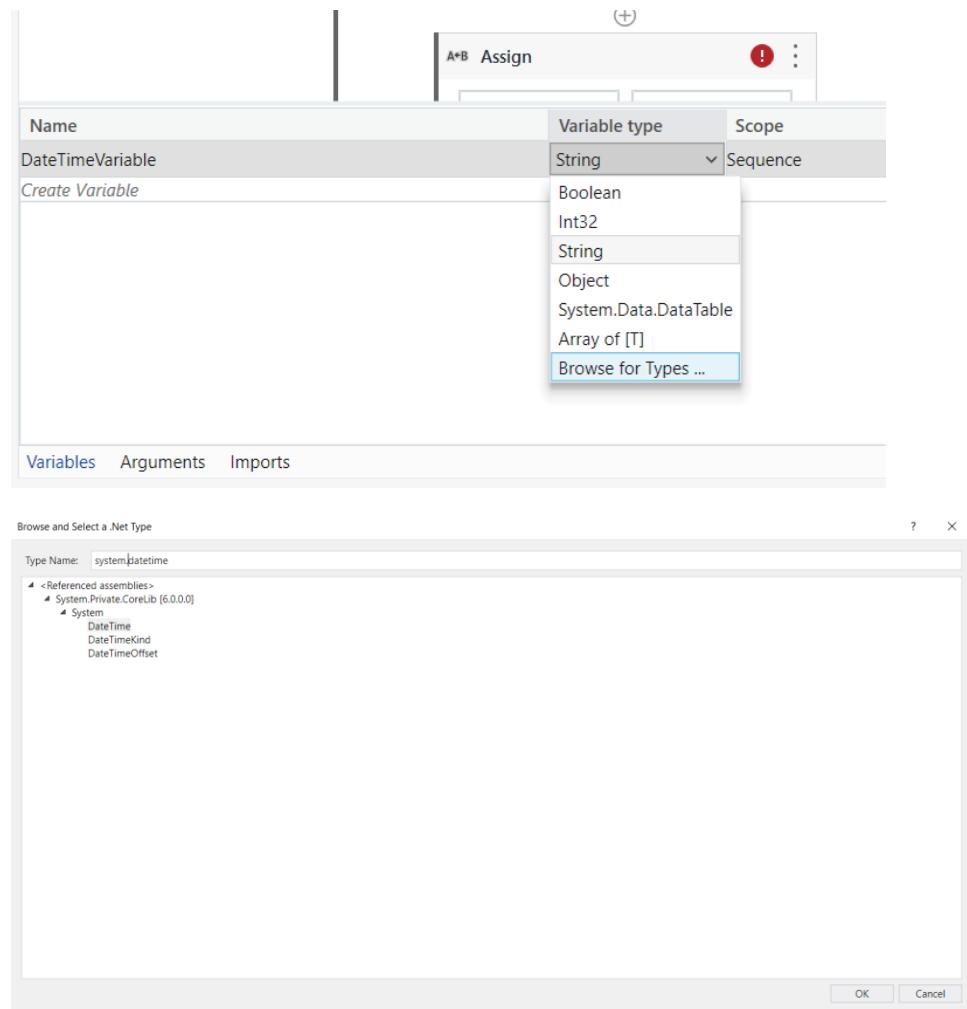


2]DateTime variable

1. create a new blank process -> open main.xaml -> Add sequence activity -> Add Assign activity.

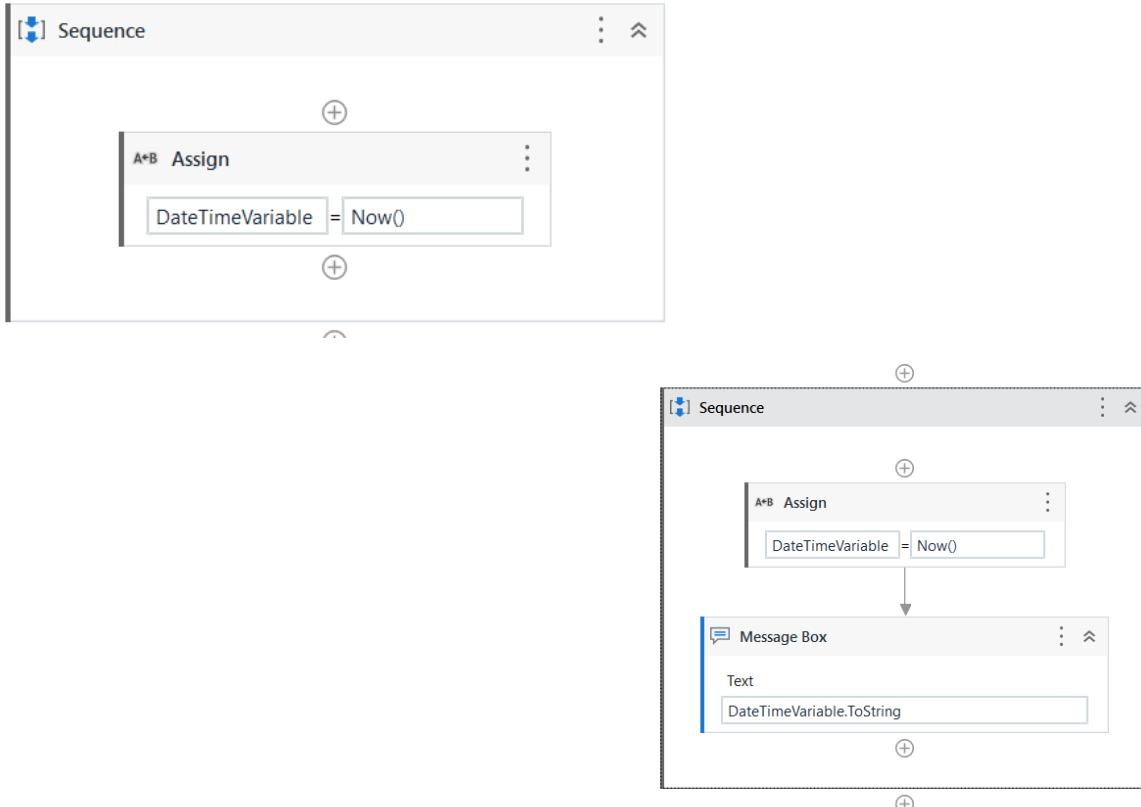


- 2.Create a variable to store dateTime . Click browse if “system.DateTime” is not available in dropdown menu.



Name	Variable type	Scope	Default
DateTimeVariable	System.DateTime	Sequence	Enter a VB expression
Create Variable			

3. Assign variable to “Now()” function, this function returns current date and time.



4. Add a message activity to display date and time.

Here we used “ToString” it converts the data into string so that it can be displayed via message box. This method displays both date as well as time.

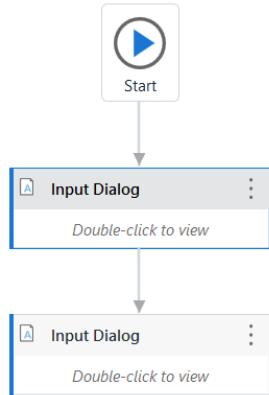
If we want to display only date or time use “ToShortDateString” and “ToShortTimeString” respectively.

5. Run the file.



3] Boolean variable

1. create a new blank process -> open main.xaml -> Add flowchart activity -> Add two input dialog box.



2. Create 2 int32 variable for both input dialog

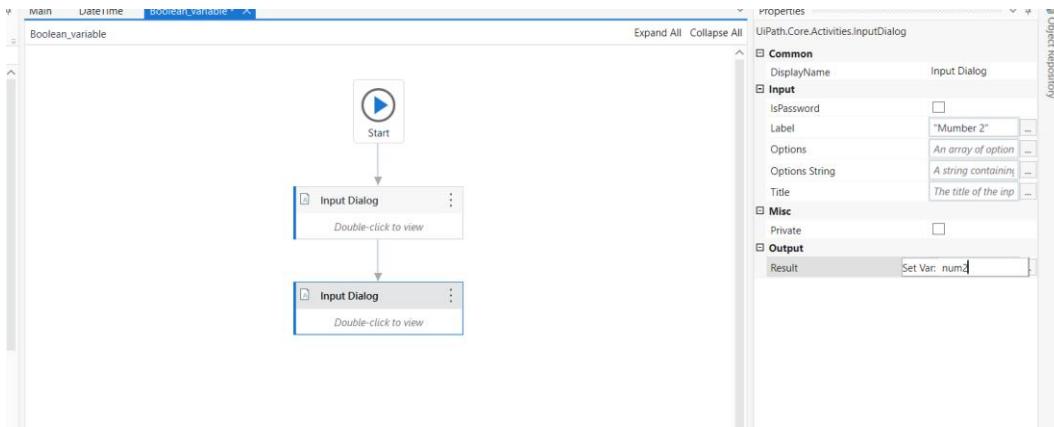
Name	Variable type	Scope	Default
num1	Int32	Boolean_variable	Enter a VB expression
num2	Int32	Boolean_variable	Enter a VB expression

Create Variable

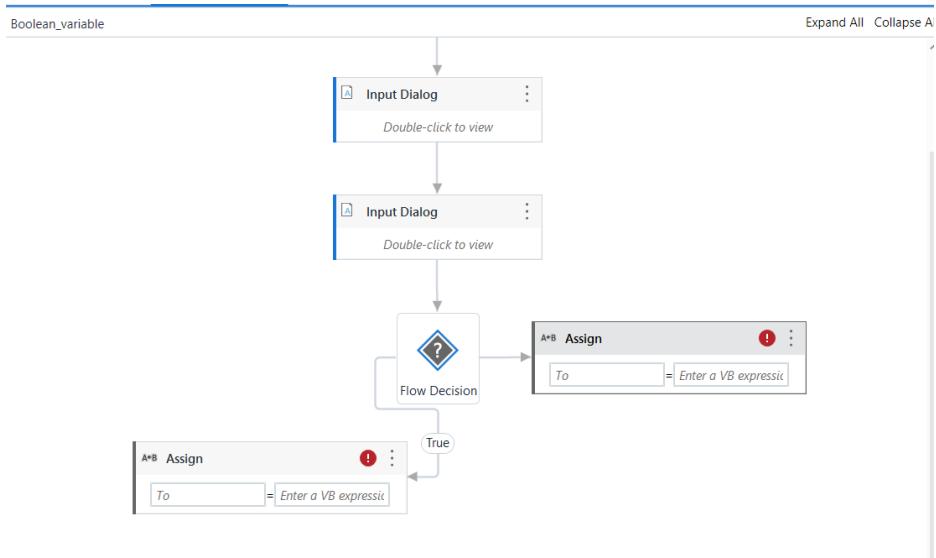
Variables Arguments Imports

3. Click on first input dialog and set title and create the variable. Do the similar step for second input dialog.

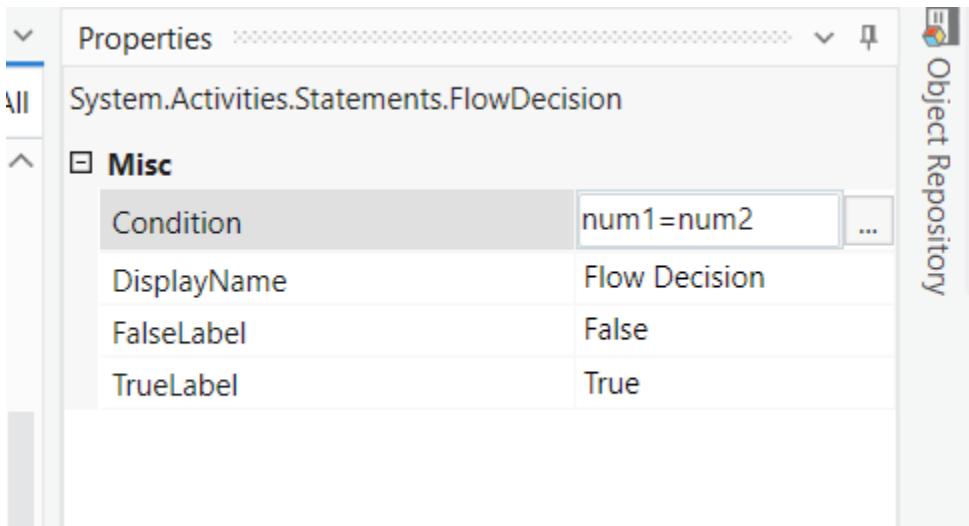
The screenshot shows the UiPath Studio interface with the 'Properties' panel open for the first 'Input Dialog' activity. The 'Common' section is expanded, showing the 'DisplayName' as 'Input Dialog'. In the 'Input' section, the 'Label' is set to '"number 1"', 'Options' is set to 'An array of option...', 'Options String' is set to 'A string containing...', and 'Title' is set to 'The title of the inp...'. In the 'Output' section, the 'Result' is set to 'Set Var: num1'. The 'Object Repository' tab is visible on the right.



4. Take a flow decision and connect 2 assign activity with it.



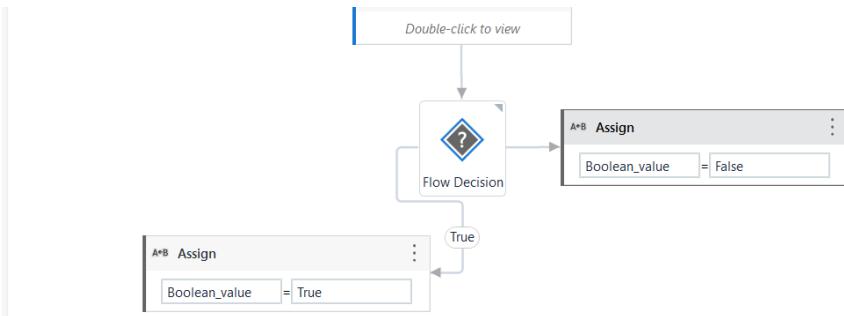
5. Click on flow decision and add condition to its property.



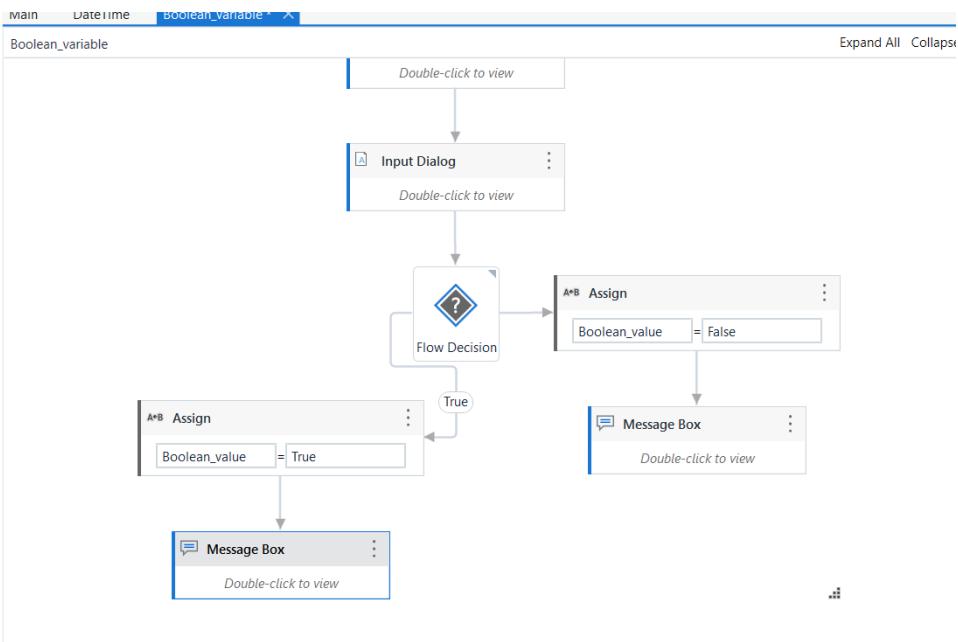
6.create a Boolean variable

Name	Variable type	Scope	Default
num1	Int32	Boolean_variable	Enter a VB expression
num2	Int32	Boolean_variable	Enter a VB expression
Boolean_value	Boolean	Boolean_variable	Enter a VB expression
Create Variable			

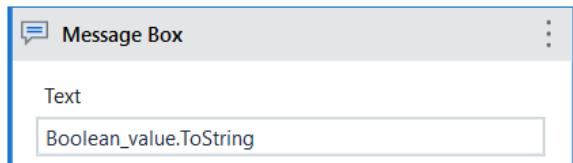
7.Assisgn True and False based on the flow decision.



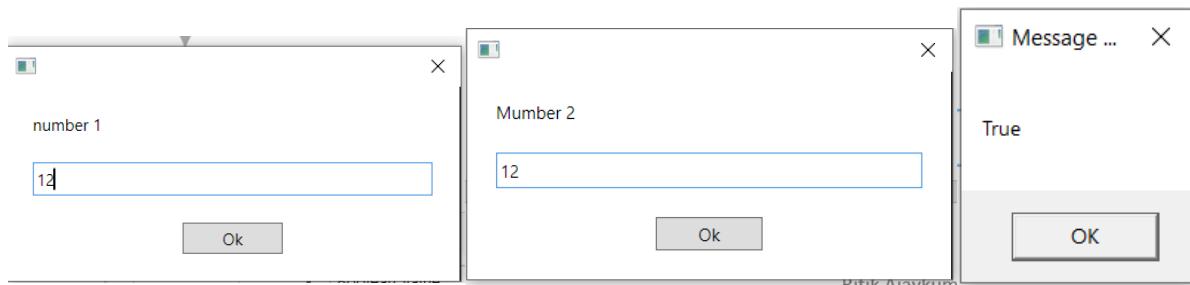
8.Add message To both the assign to display its corresponding Boolean value



9.Open Message box and type this to display message “Boolean_value.ToString”

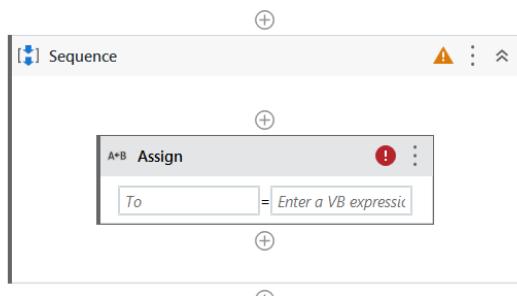


10.Run file.

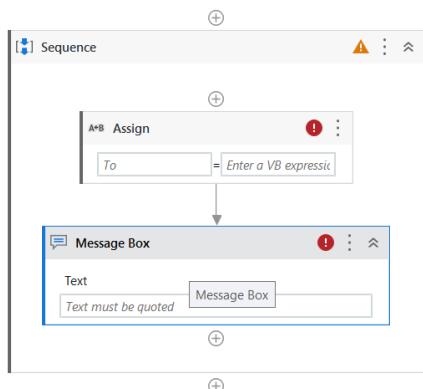


4]generic variable

1. create a new blank process -> open main.xaml -> Add sequence activity -> add assign activity inside it.



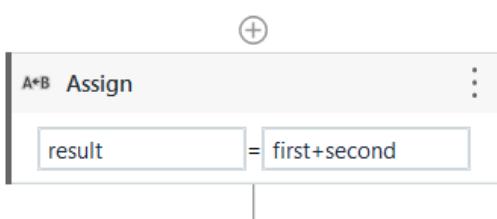
2.Add message box



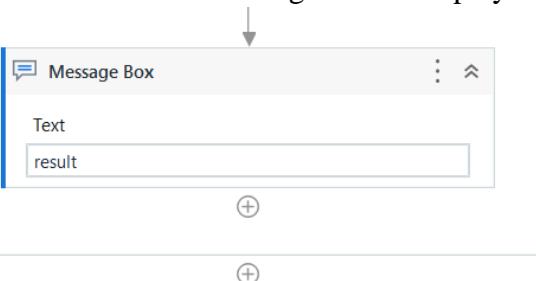
3.Create 3 variable of generic datatype (brows for more and type genericvalue if you cant fint this datatype), I have also added value to first and second variable first one as a string and second one as int datatype, and when we are going to concatenate them the generic datatype will concatenate both on the basis of first given values datatype.

Name	Variable type	Scope	Default
first	GenericValue	Sequence	"Its string value "
second	GenericValue	Sequence	10
result	GenericValue	Sequence	Enter a VB expression

4.Add the parameter in assign activity.



5.Pass result variable to message box to display result.

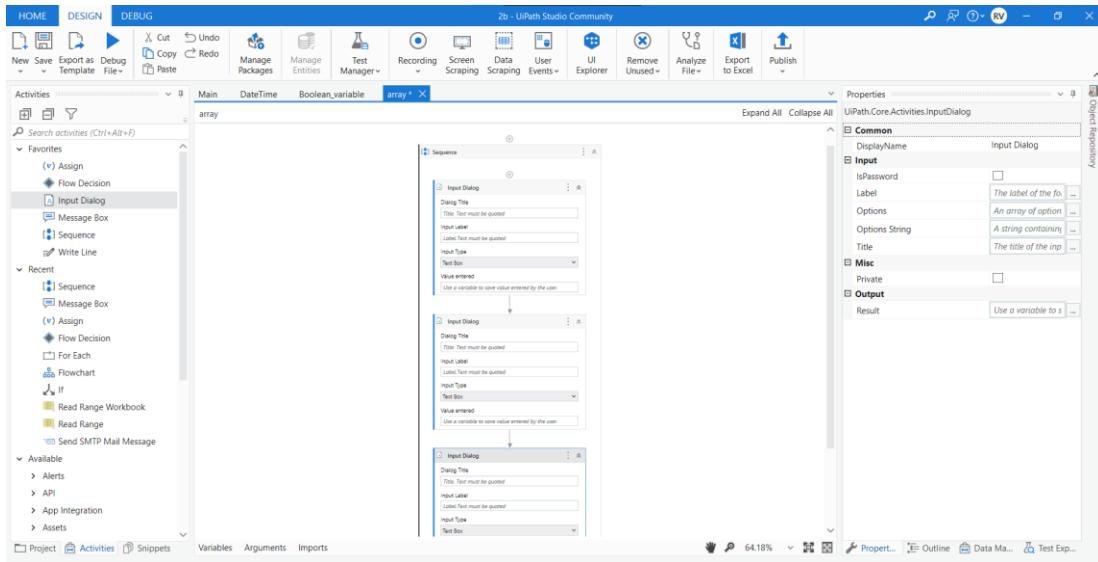


6. run the file.



5]Array variable

1. create a new blank process -> open main.xaml -> Add sequence activity -> add three input dialog box inside it.

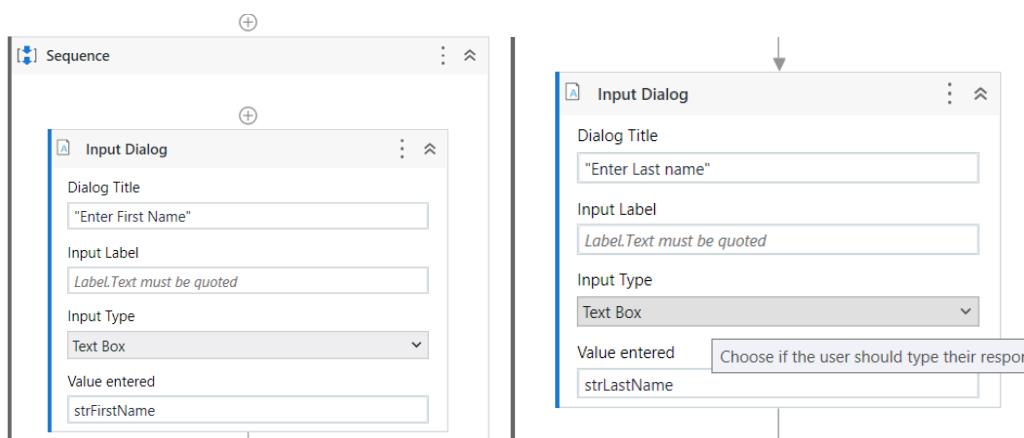


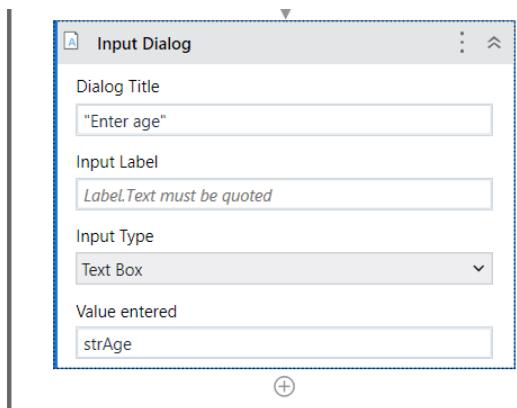
2. now create three variable of string datatype for each input dialog.

Name	Variable type	Scope	Default
strFirstName	String	Sequence	Enter a VB expression
strLastName	String	Sequence	Enter a VB expression
strAge	String	Sequence	Enter a VB expression

Create Variable

- 3.add title and assign variable to each input dialog.



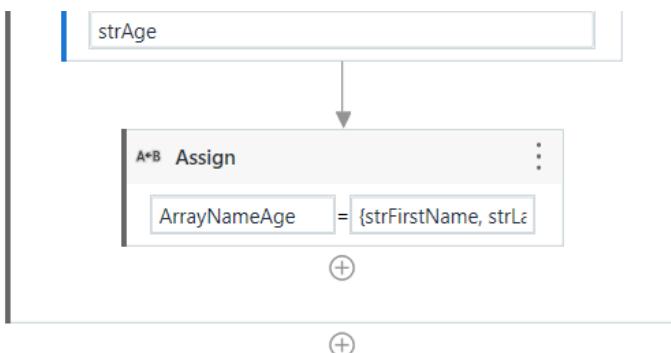


4. Create A variable of array datatype.

Name	Variable type	Scope	Default
strFirstName	String	Sequence	Enter a VB expression
strLastName	String	Sequence	Enter a VB expression
strAge	String	Sequence	Enter a VB expression
ArrayNameAge	Array of [T]	Sequence	Enter a VB expression
Create Variable			

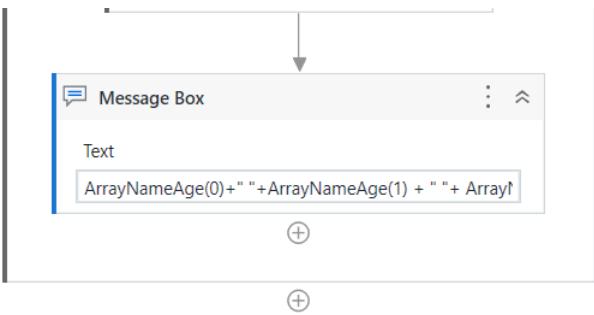
5. Add assign activity and assign all the 3 string to the array variable.

ArrayNameAge={strFirstName, strLastName, strAge}

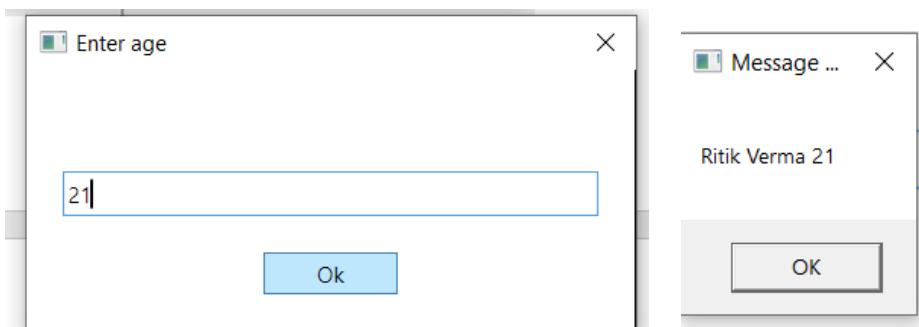
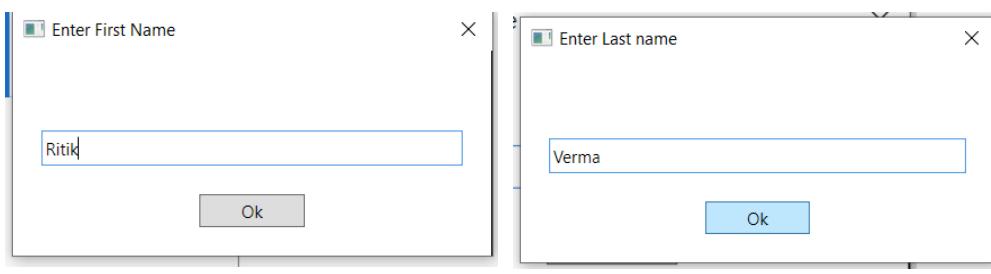


6. Add message box and type inside ->

ArrayNameAge(0)+" "+ArrayNameAge(1) + " "+ ArrayNameAge(2)

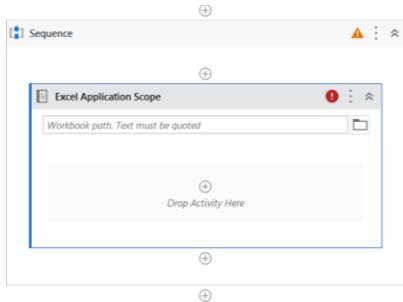


7.Run the file.

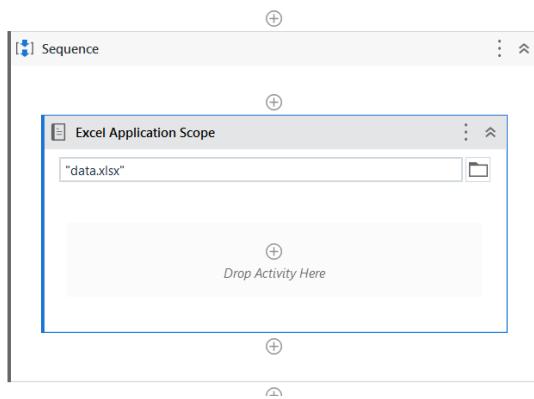


6]DataTable variable

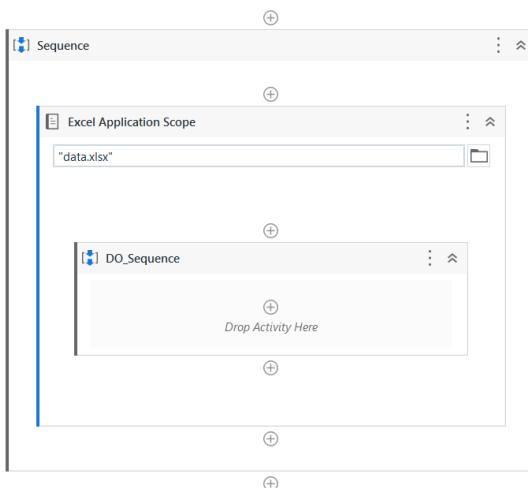
1. create a new blank process -> open main.xaml -> Add sequence activity -> add “Excel Application scope” inside sequence .



2. Add workbook path

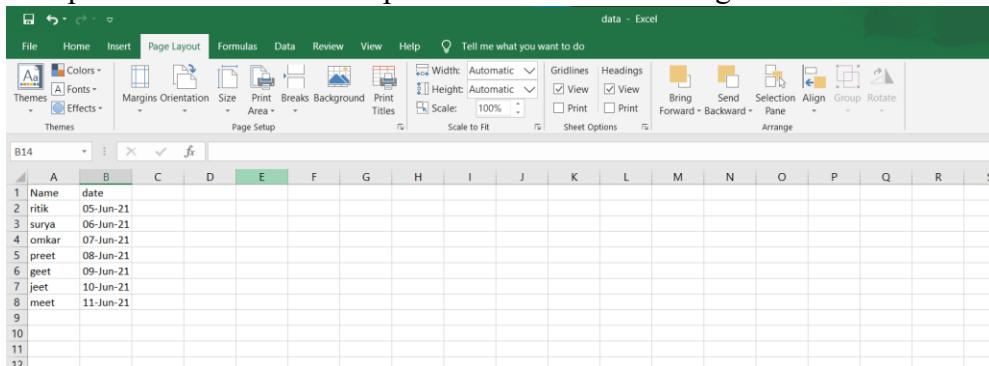


- 3.Added another sequence inside excel application scope and renamed for better understanding.



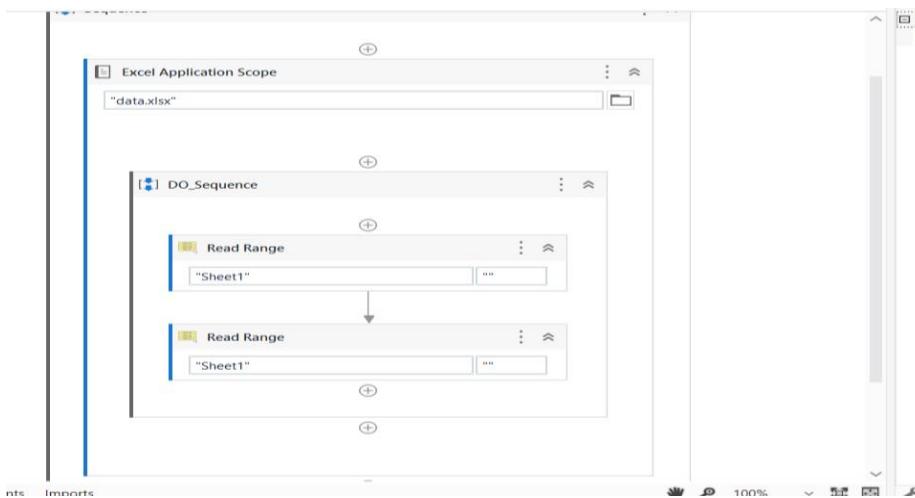
- 4.Create an excel worksheet, our worksheet has one sheet “sheet 1” which we are going to use as an input and we will make the program create another excel workbook and with the sheet as

“Output” and make it store input data from selected range in it.

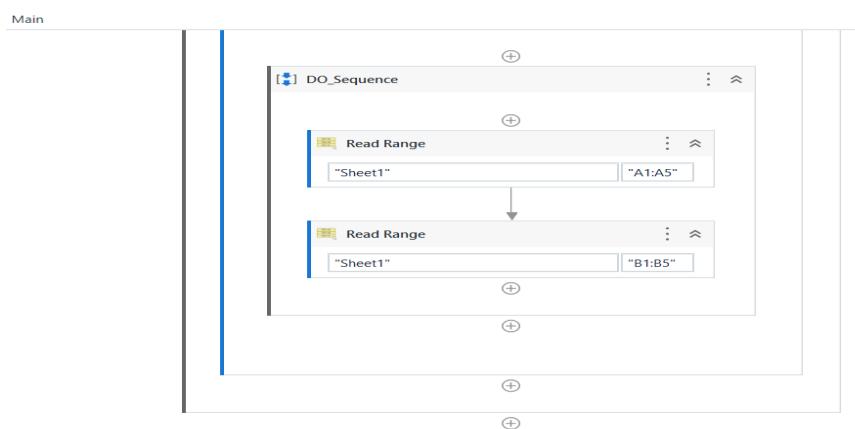


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Name	date																	
2	ritik	05-Jun-21																	
3	surya	06-Jun-21																	
4	omkar	07-Jun-21																	
5	preet	08-Jun-21																	
6	geet	09-Jun-21																	
7	jeet	10-Jun-21																	
8	meet	11-Jun-21																	
9																			
10																			
11																			
12																			

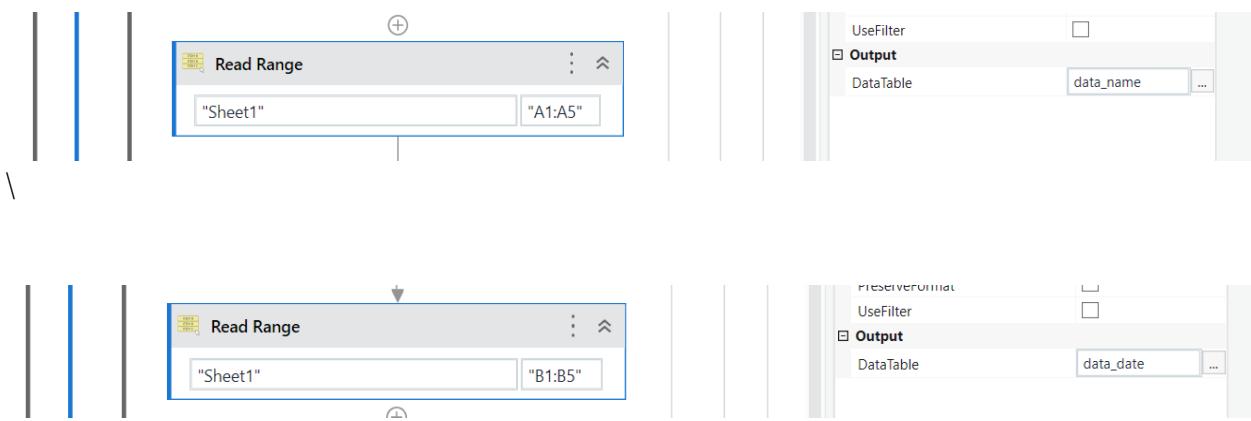
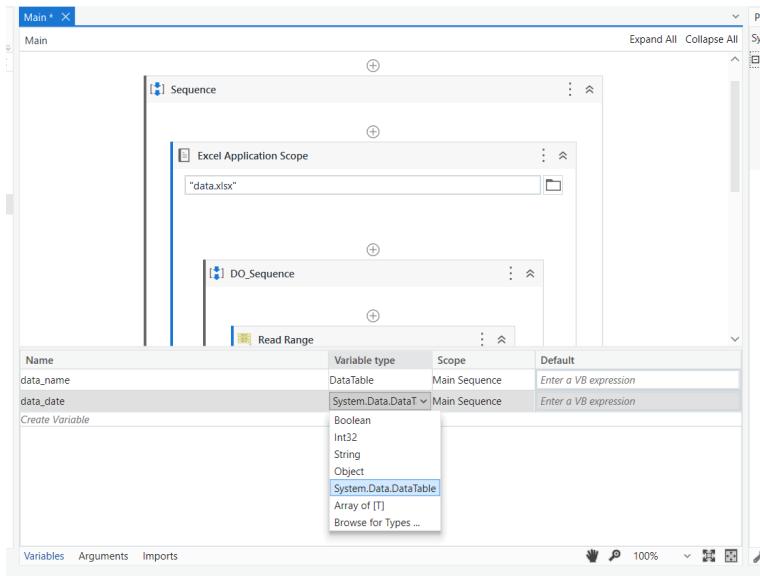
5.Now add 2 read range inside DO_Sequence , it will read the data from excel.



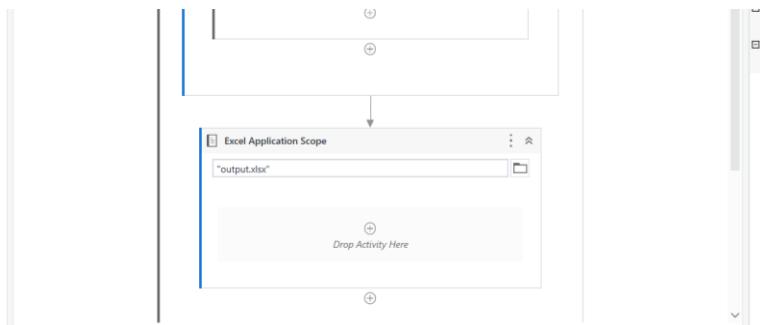
6.assign the range of data we want as input to each “read range” activity. Here we want data from only A1:A5 (name) and B1:B5 (date).



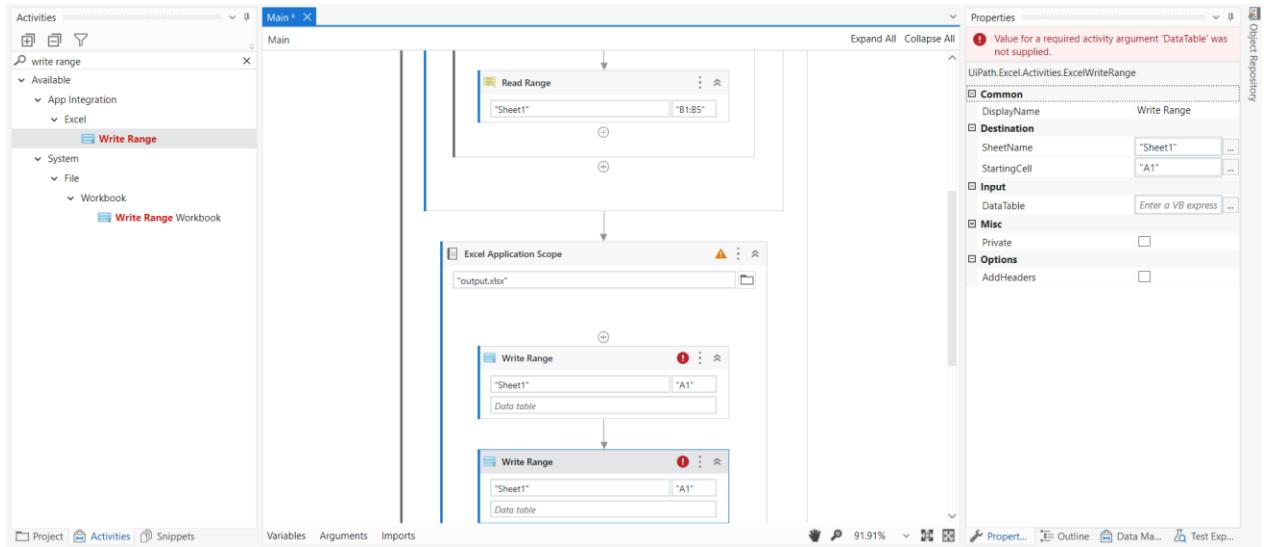
5. now create 2 data table variable for each read range and assign then to each read range.



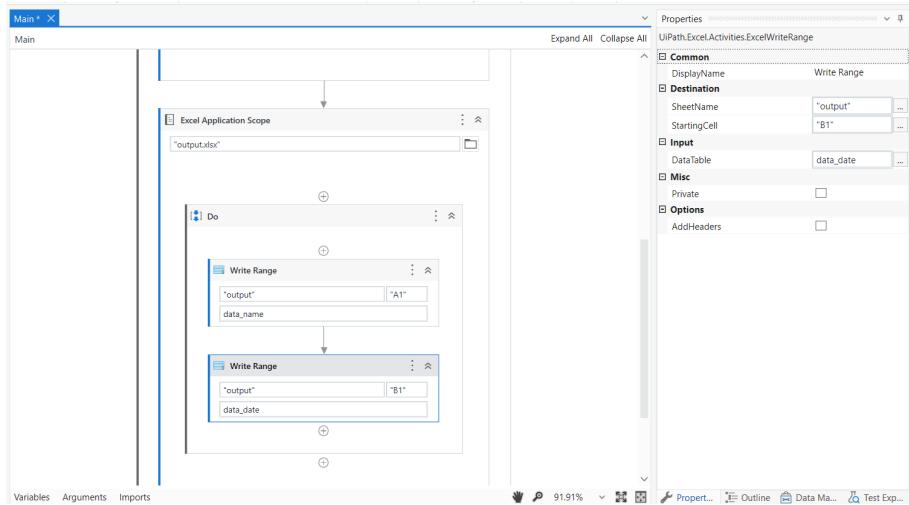
6. Now we added another excel application scope to work with another excel file in which we want to store the output.



7.Now take 2 Write range to write the data inside the excel.



8.Now instead of default name “sheet1” we created a sheet called “output”(This is not present already and its going to created by ui path, we can also provide an existing file to it), then we added range for the output sheet and assigned the data table variable to each write range.



8.Run the file.

9.After running the program t created the file Output and added the data inside it

Name	Date modified	Type	Size
.entities	05-12-2022 06:31 PM	File folder	
.local	05-12-2022 07:06 PM	File folder	
.project	05-12-2022 06:31 PM	File folder	
.settings	05-12-2022 06:31 PM	File folder	
.templates	05-12-2022 06:30 PM	File folder	
.tmh	05-12-2022 06:31 PM	File folder	
data	05-12-2022 07:13 PM	Microsoft Excel W...	9 KB
Main	05-12-2022 07:22 PM	Windows.XamlDo...	10 KB
output	05-12-2022 07:22 PM	Microsoft Excel W...	10 KB
project	05-12-2022 06:31 PM	JSON Source File	2 KB

output - Excel

The screenshot shows a Microsoft Excel spreadsheet titled "output - Excel". The ribbon menu is visible at the top, with "Home" selected. The worksheet contains a single table with two columns: "Name" and "date". The data is as follows:

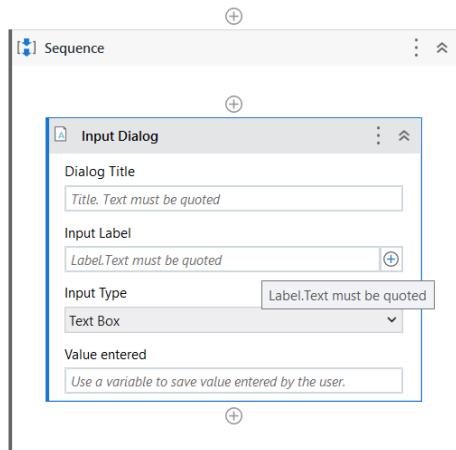
	Name	date
1	ritik	05-06-2021
2	surya	06-06-2021
3	omkar	07-06-2021
4	preet	08-06-2021
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		

Practical : 3a

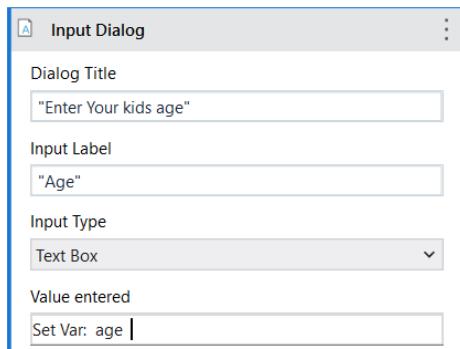
Aim: Create an automation UiPath Project using decision statements.

Implementation:

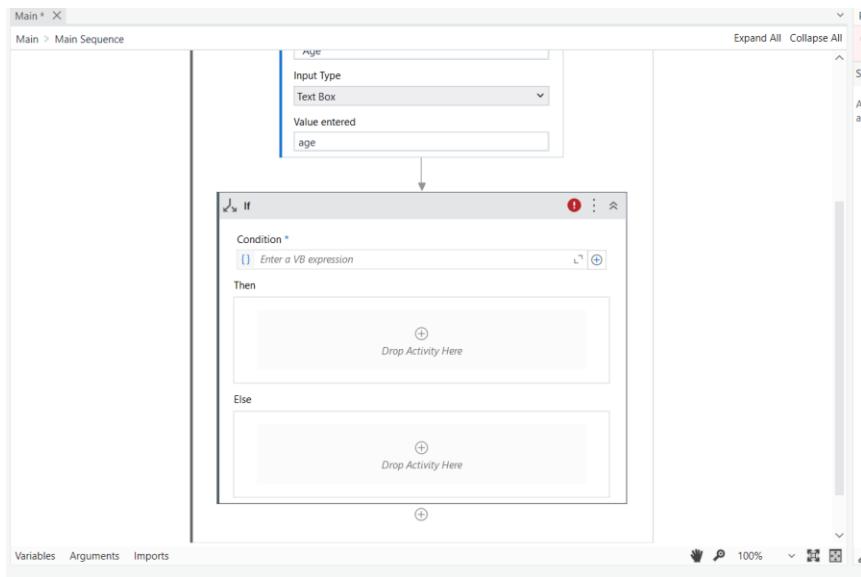
1. create a new blank process -> open main.xaml -> Add sequence activity -> add input dialog inside sequence.



2. Enter the title and label for message box and create a variable to store the value entered by user.



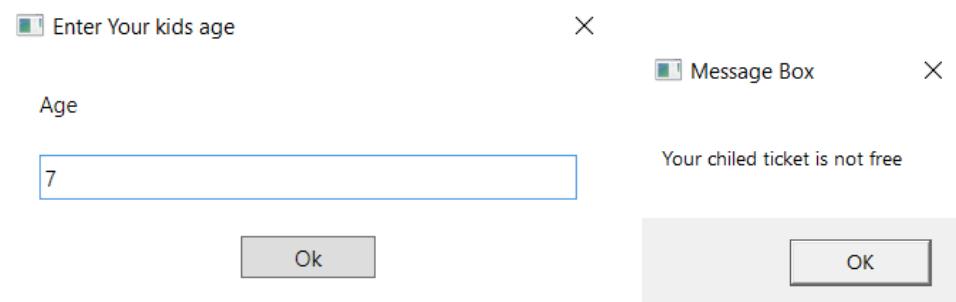
3. Add An if control flow below input dialog.



4. Set condition as “age<=5” to check the age and enter the message accordingly.



5. Run the program.

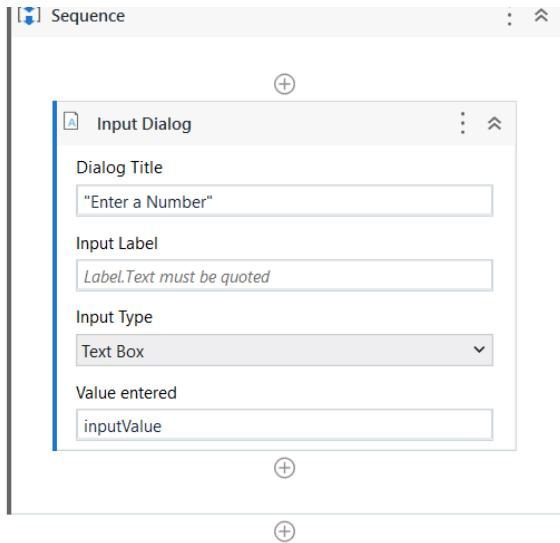


Practical : 3b

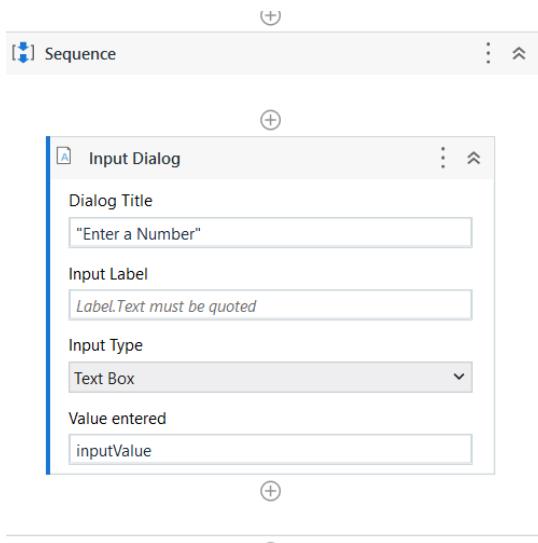
Aim: Create an automation UiPath Project using looping statements..

Implementation:

1. create a new blank process -> open main.xaml -> Add sequence activity -> add input dialog inside sequence.



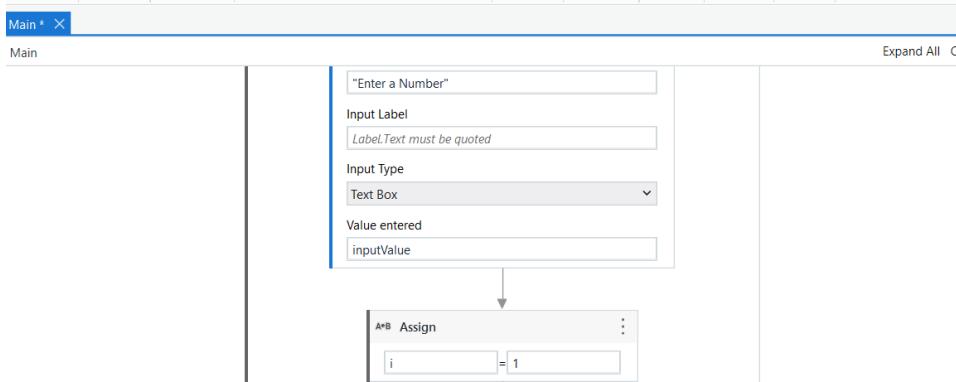
2. In input Dialog Enter title , label for input, in “Value entered” textbox right click or press “ctrl+k” to create variable to store the entered value , then type the desired variable name and press enter.



3.Now create variable I and set variable type as int 32.

Name	Variable type	Scope	Default
inputValue	Int32	Sequence	Enter a VB expression
i	Int32	Sequence	Enter a VB expression
Create Variable			

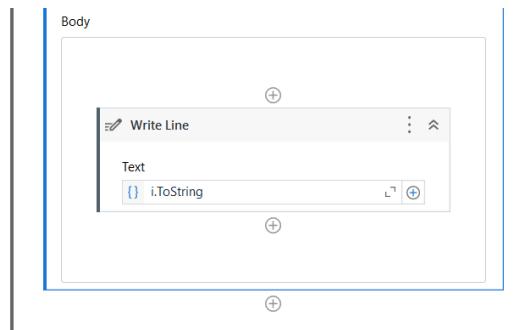
4.Now add assign activity and set value of i to 1.



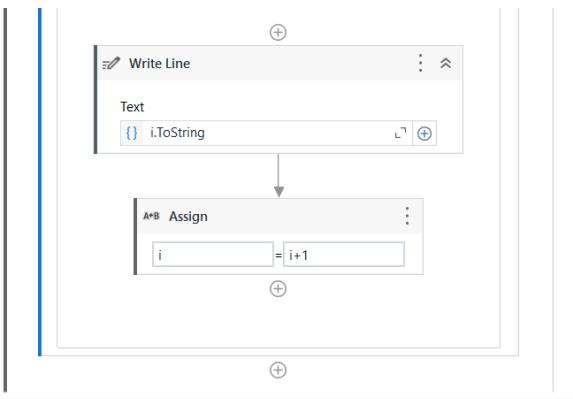
5.Now add While activity and set the condition .



6.Now inside the body of while loop ad write line activity, and inside text enter “i.ToString” .



7. Now add assign activity and assign $i=i+1$



8. Run the program

Enter a Number

7

Ok

Output

① 1
② 2
③ 3
④ 4
⑤ 5
⑥ 6
⑦ 7
⑧ 3b execution ended in: 00:00:17

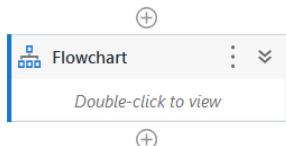
Output Find References Breakpoints Error List

Practical : 4a

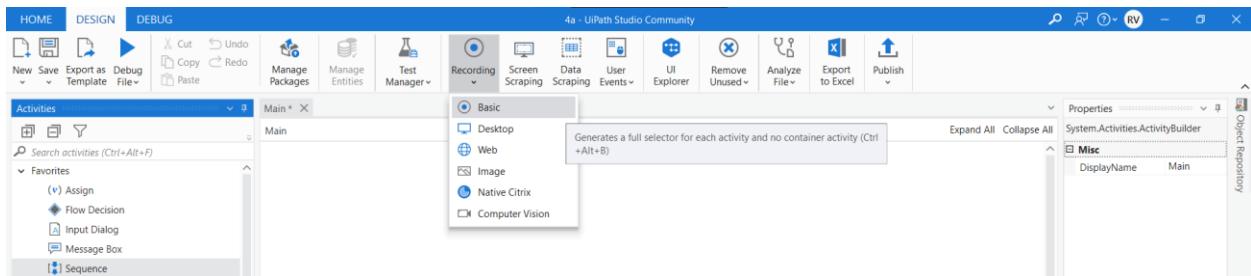
Aim: Automate any process using basic recording.

Implementation:

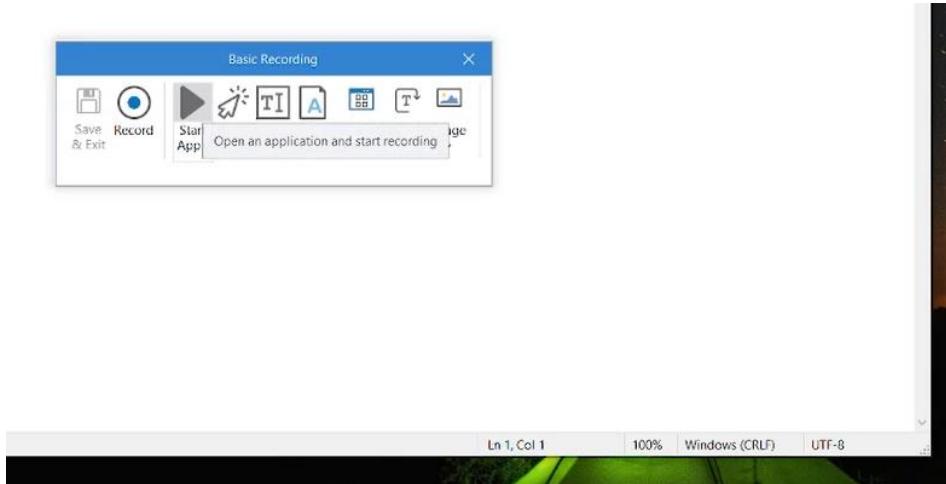
- 1.Create A notepad file and open it.
- 2.Add flowchart activity.



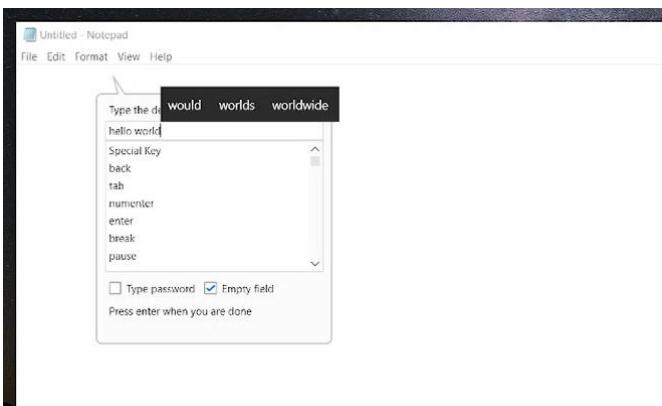
3. Open flowchart, Select Basic recording.



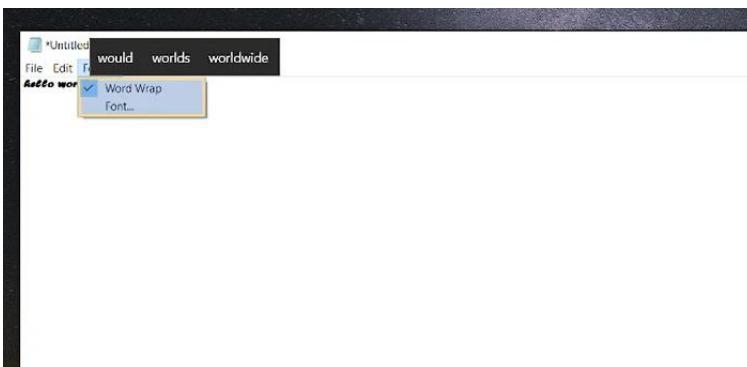
- 4.Click Start record



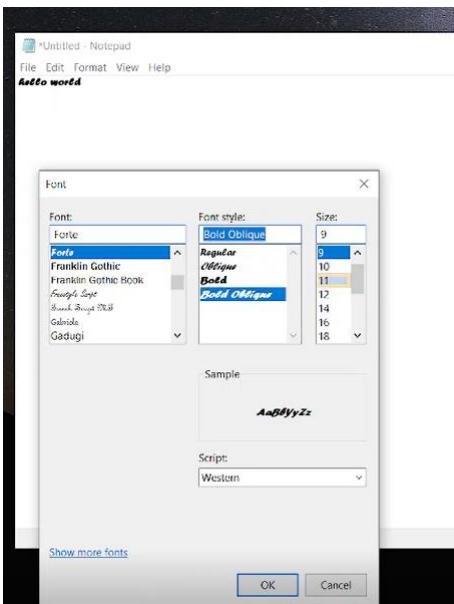
- 5.click on the notepad and enter the desired value, click checkbox for empty field, It will first delete all the text inside notepad before writing new value.



6. Select font



7. Choose desired font option and click ok.

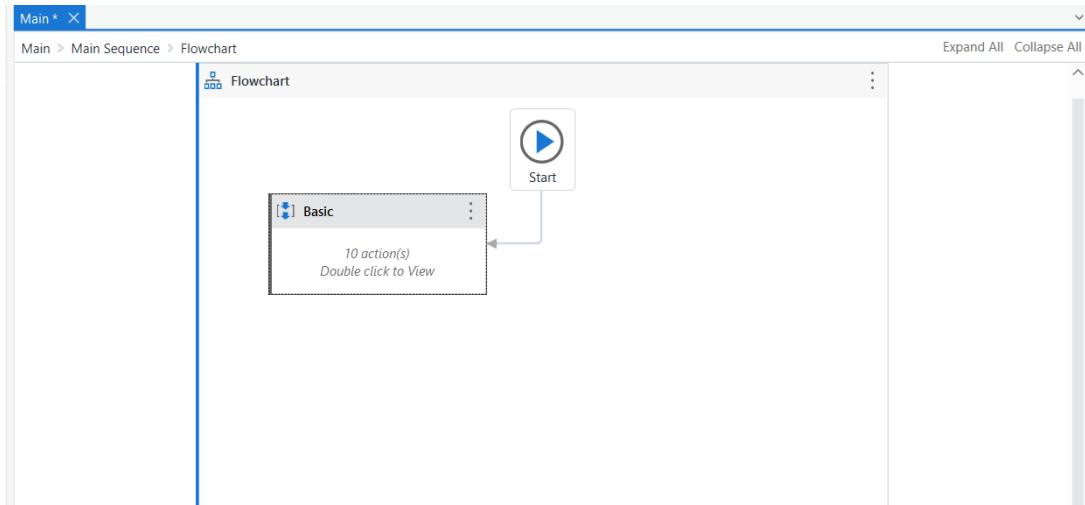


8. press "esc" to stop recording.

9. Press "save and exit"



10. right click on the recorded sequence and set as a start node.



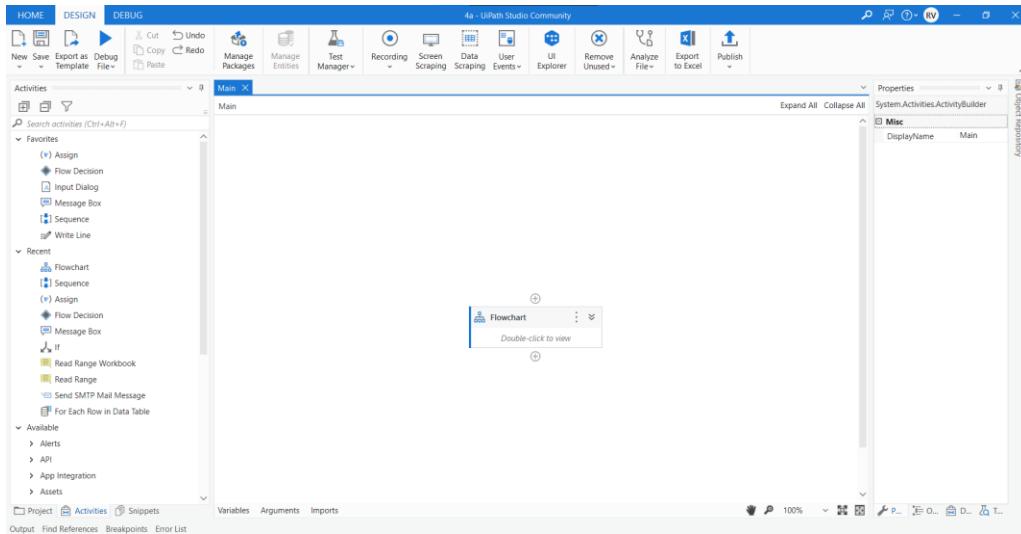
11. Run the file.

Practical: 4b

Aim: Automate any process using desktop recording.

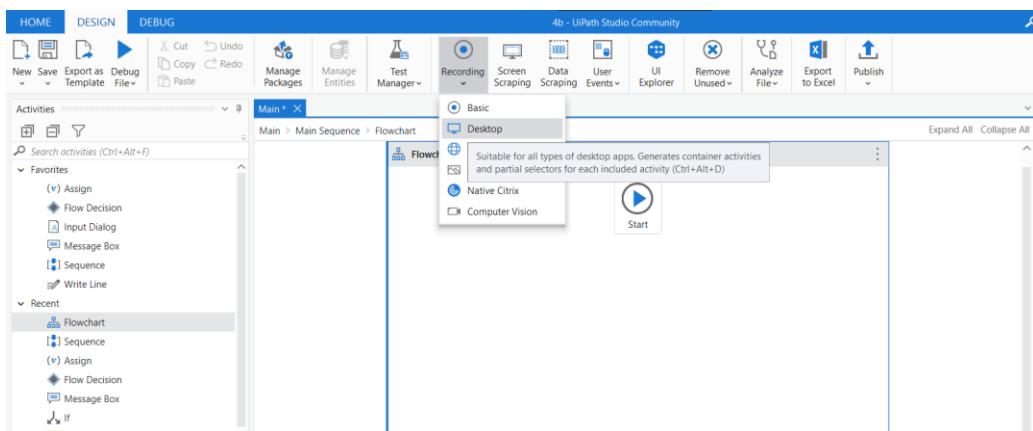
Implementation:

- 1.Create A notepad file and open it.
- 2.Add flowchart activity.

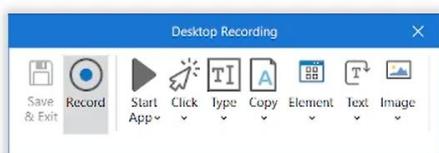


3.open a new notepad file in background.

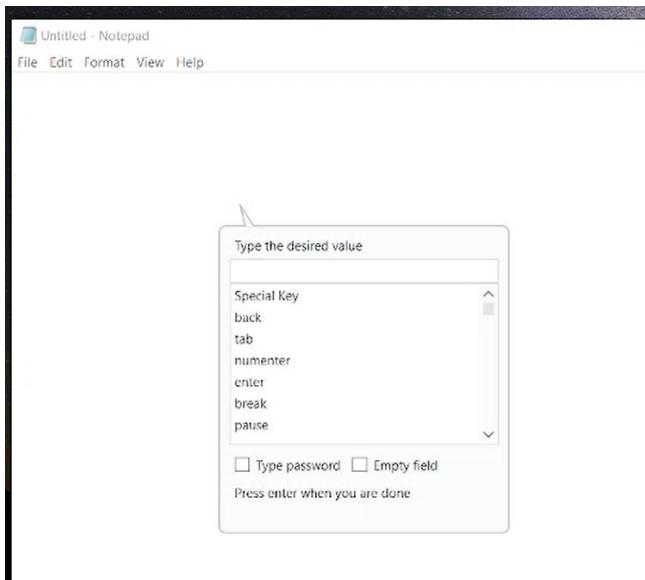
4. Open flowchart, Select desktop recording.



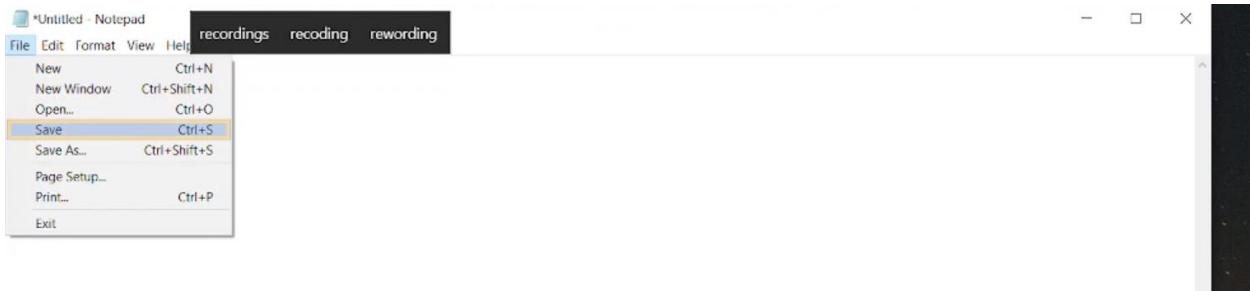
4.Click on record button.



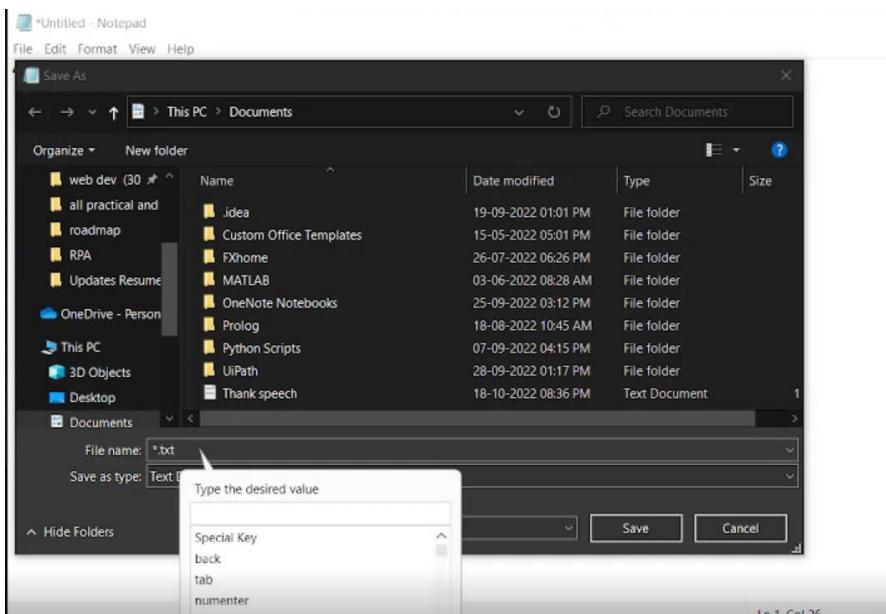
5. Now click on the notepad and Enter the desired value in the popup.



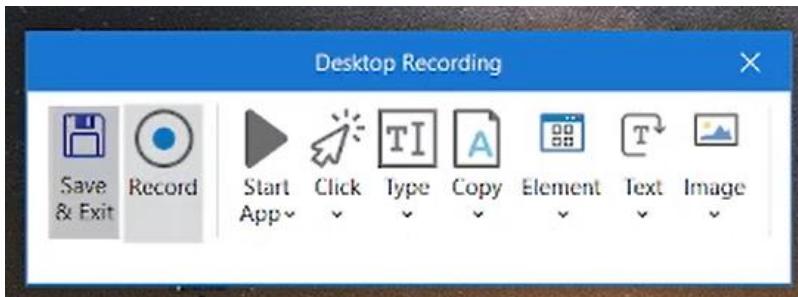
6. click save.



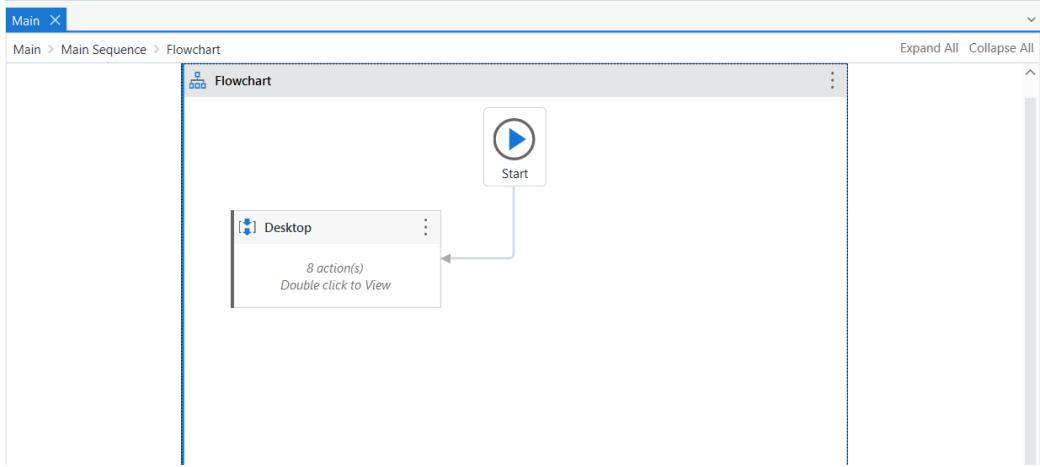
7. click on the file on the file explorer and enter the name in popup prompt and click save.



8.press “esc” to stop recording. Click save and exit.



9.connect the main sequence to flowchart.



10.Run the file.

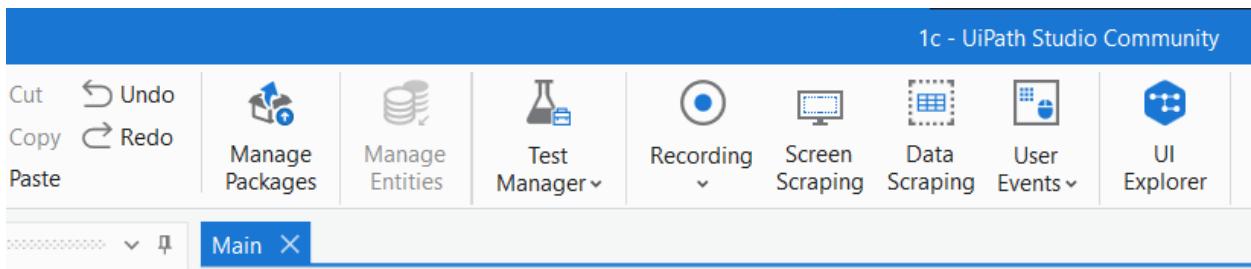
Practical : 4c

Aim: Automate any process using web recording.

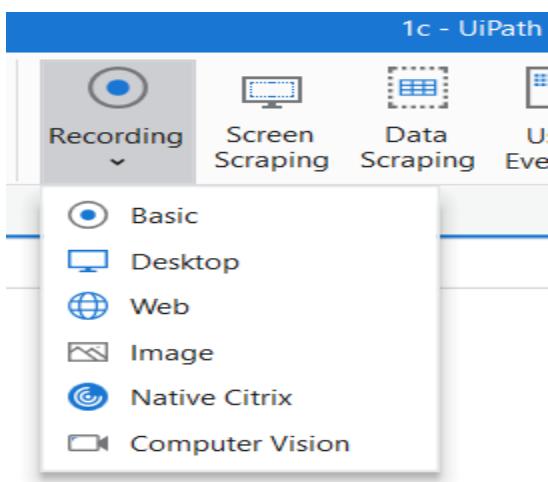
Description:

Implementation:

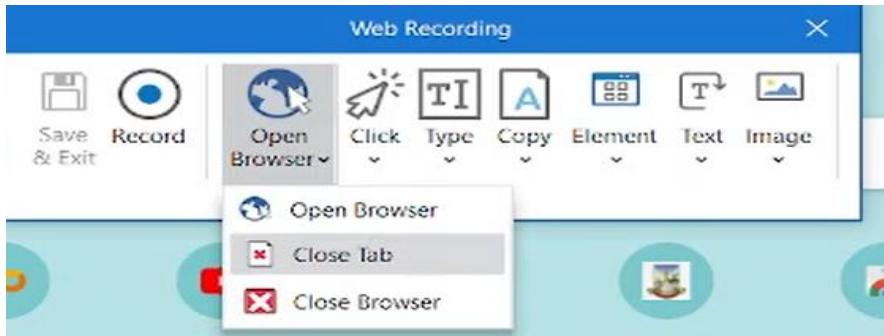
1. create a new blank process -> open main.xaml -> Click on recording



2. Select web



- 3.click on open browser



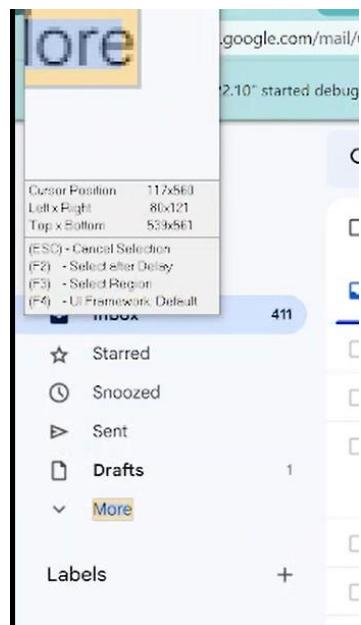
- 4.click on url to select and click ok



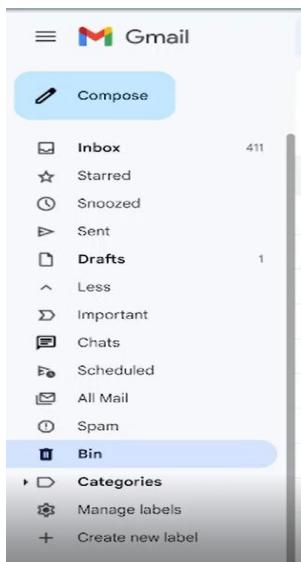
5. Now click on record



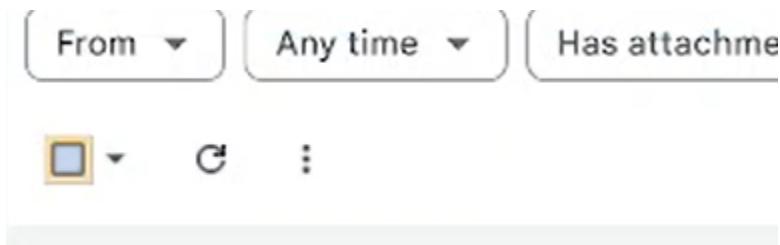
6.click more



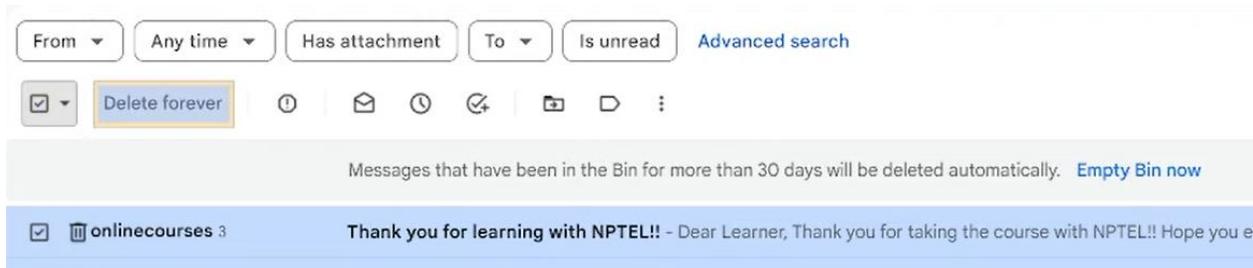
7.click on bin



8.click Checkbox to select all emails



9.Now Click Delete forever

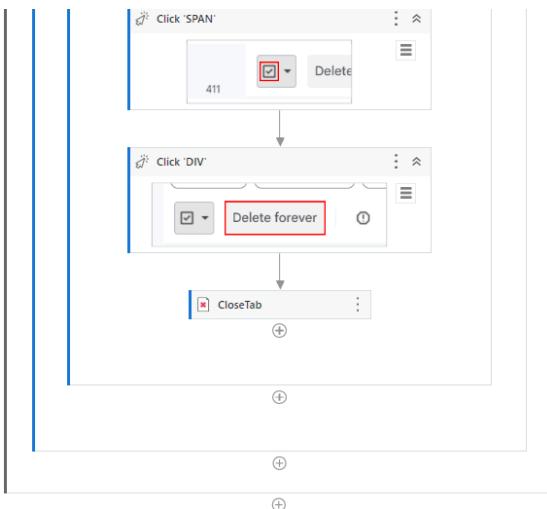
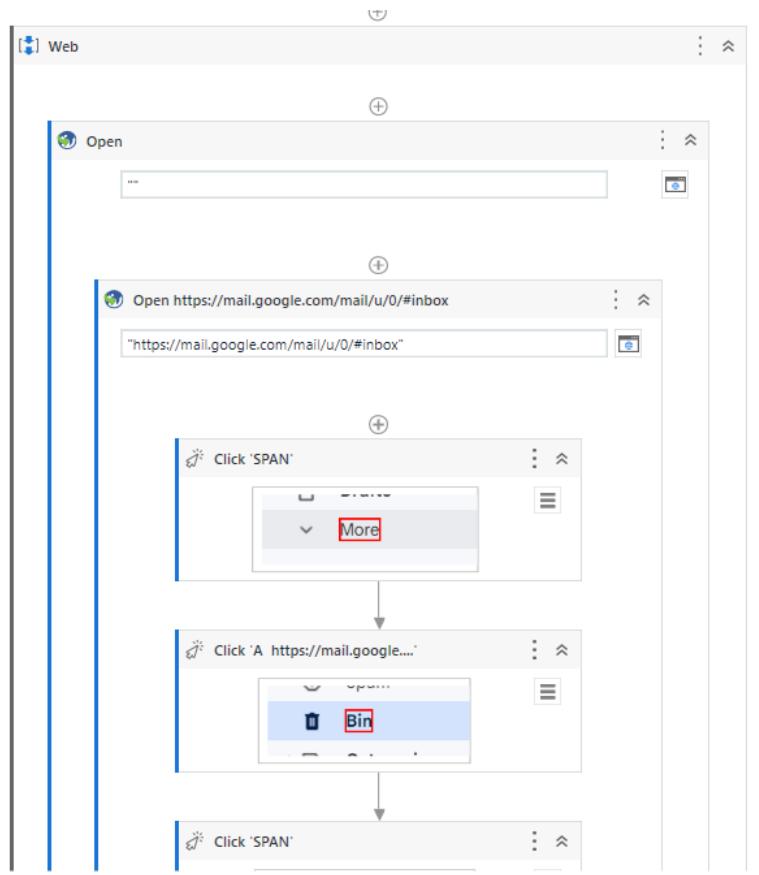


10.press "esc" to stop recording

11.Click close tab and click on the tab.



12.This is how the sequence should look like.



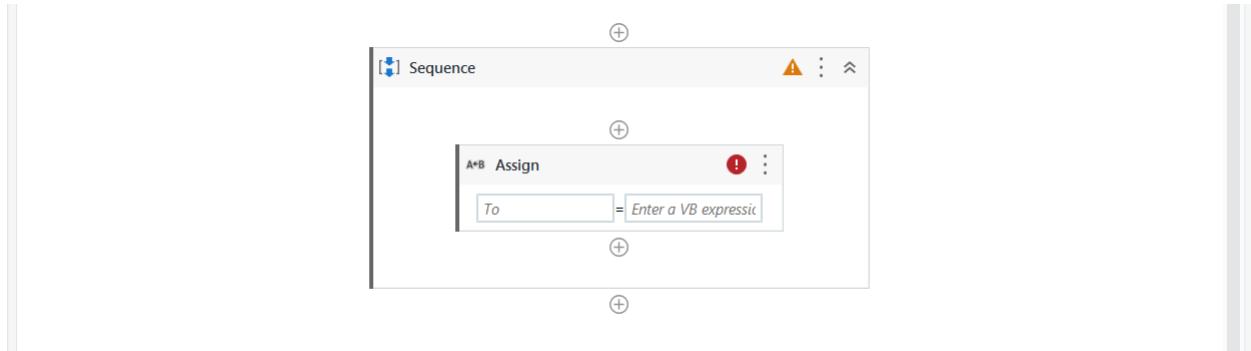
13. run the program.

Practical : 5a

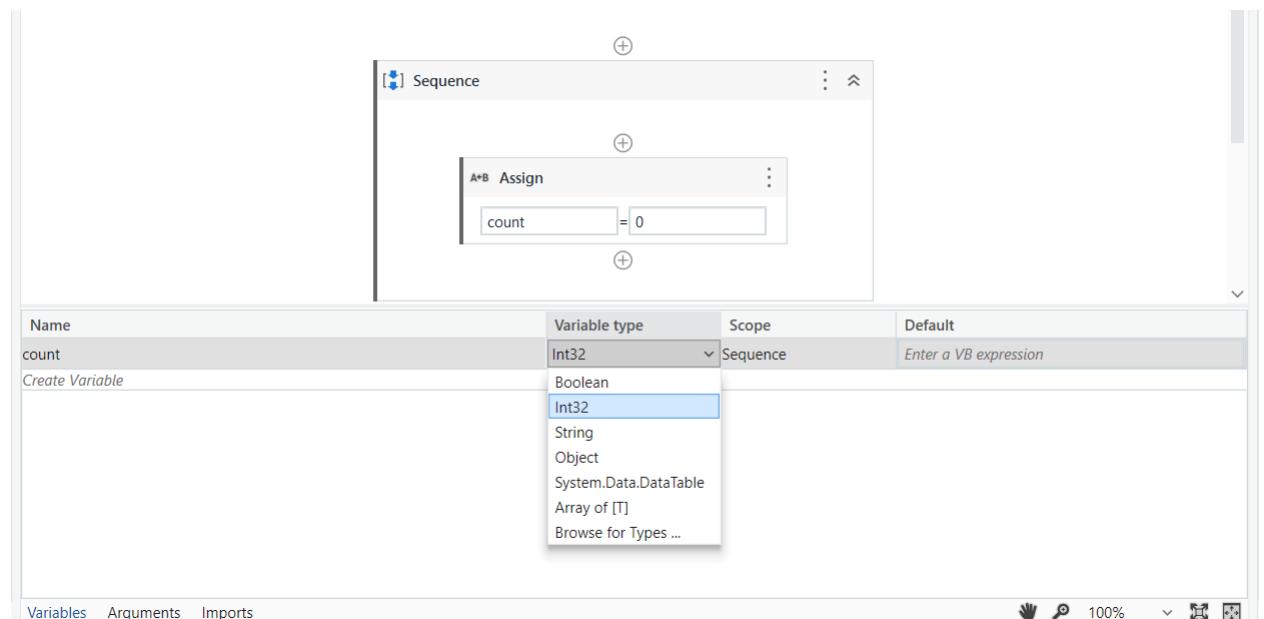
Aim: Consider an array of names. We have to find out how many of them start with the letter "a". Create an automation where the number of names starting with "a" is counted and the result is displayed.

Implementation:

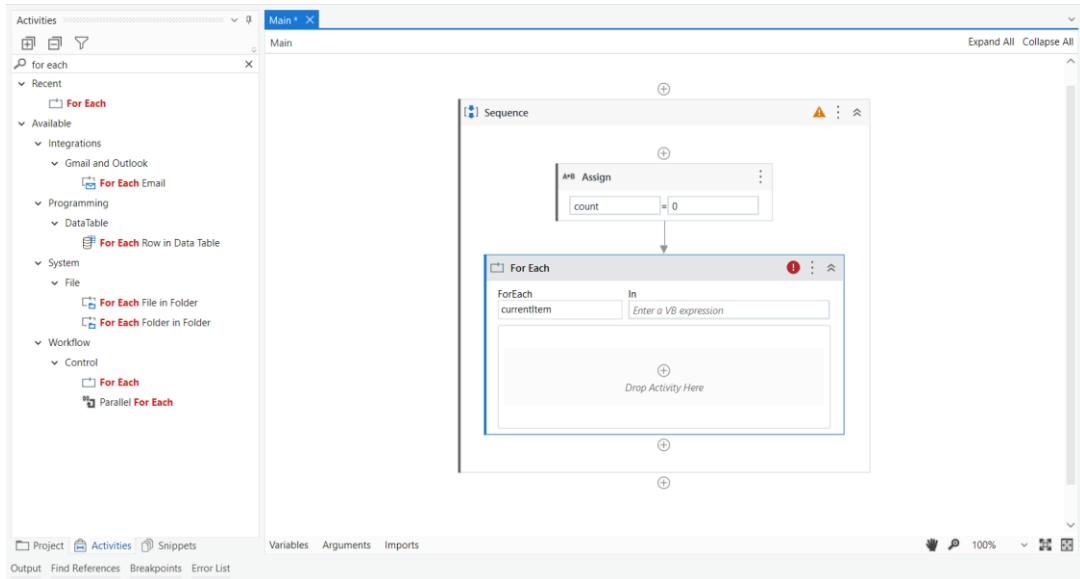
1. create a new blank process -> open main.xaml -> Add sequence activity ->Add Assign activity.



2. Create a variable "count" with datatype of int32 and assign its value to 0.



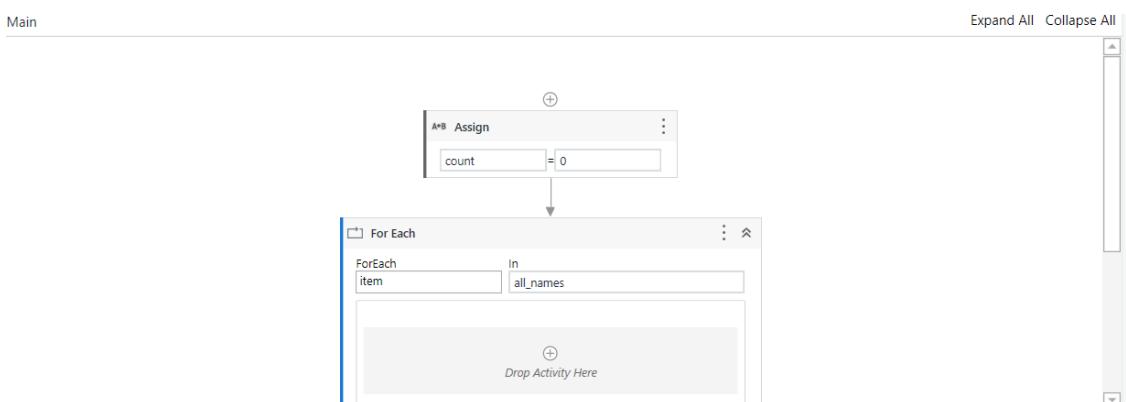
3. now from workflow>control>for each add for each activity after the assign.



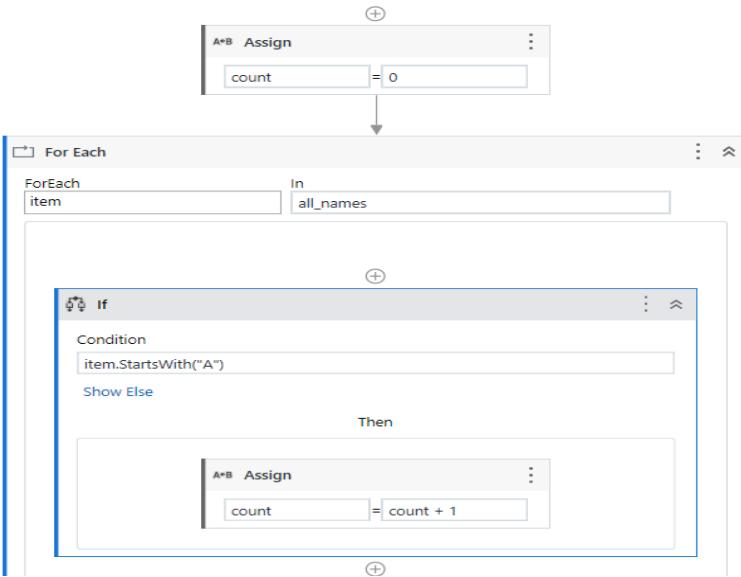
4. Now create a sting "all_names"

Name	Variable type	Scope	Default
all_names	String[]	Sequence	{"Ram","Sita","Arjun","Ayush"}
count	Int32	Sequence	0
Create Variable			

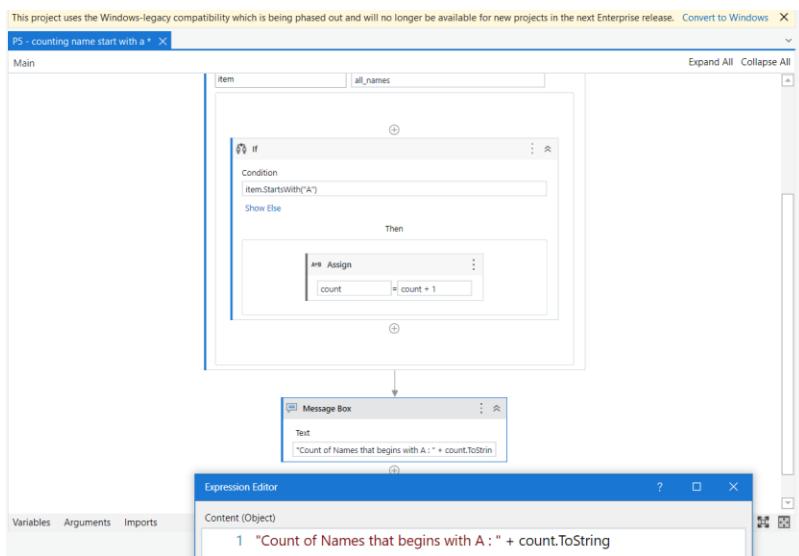
5. Now in for each loop enter the condition and variable name.



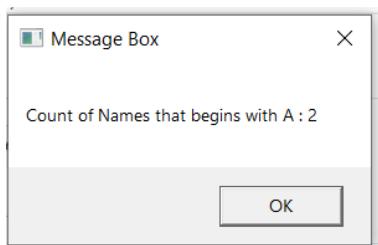
6. Now Add is statement inside for each loop and enter the condition and add the statement inside the body.



7.now add the message activity below the foe each loop and type the text inside -> "Count of Names that begins with A : " + count.ToString



8.Run the program.

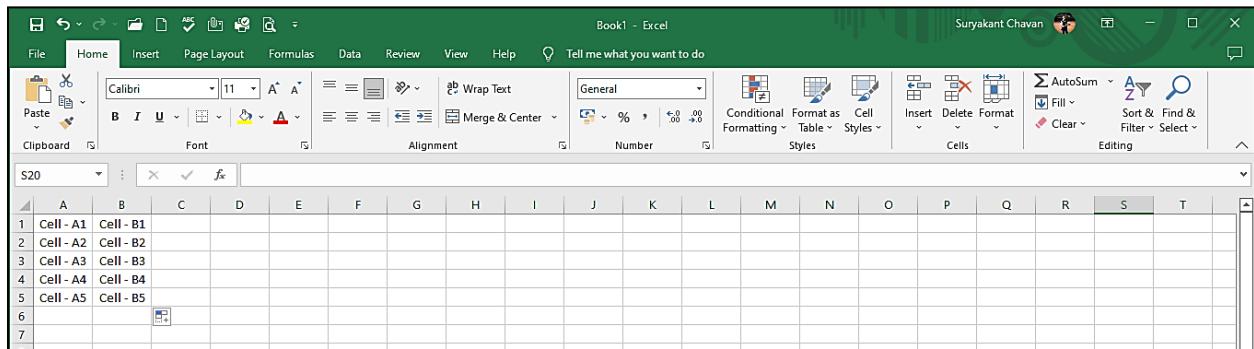


Practical : 6a

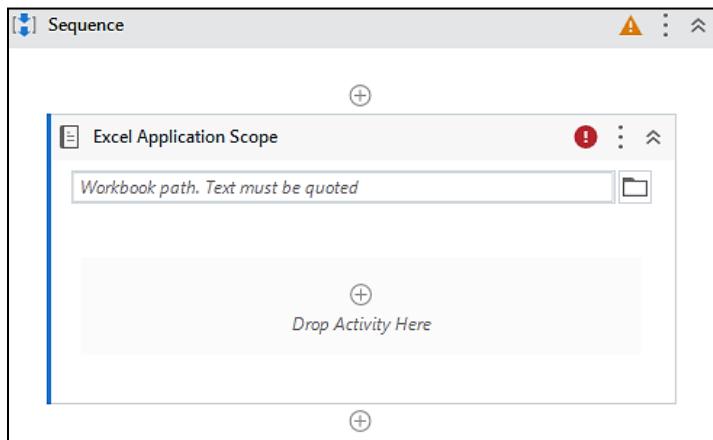
Aim: Create an application automating the read, write and append operation on excel file.

Implementation:

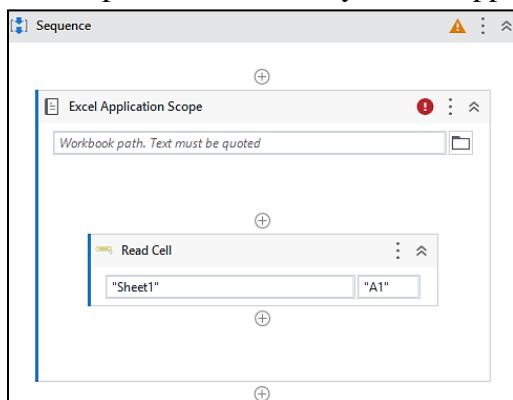
1. Start Ui Path Studio->Click on Process->Create New Blank Process->add sequence to main workflow.
2. Open a blank Excel sheet and add some data so that read operation can be performed



3. In Ui Path -> Project -> Settings -> Disable Modern Design Experience and Reload
4. Then drop Excel Application Scope inside sequence.

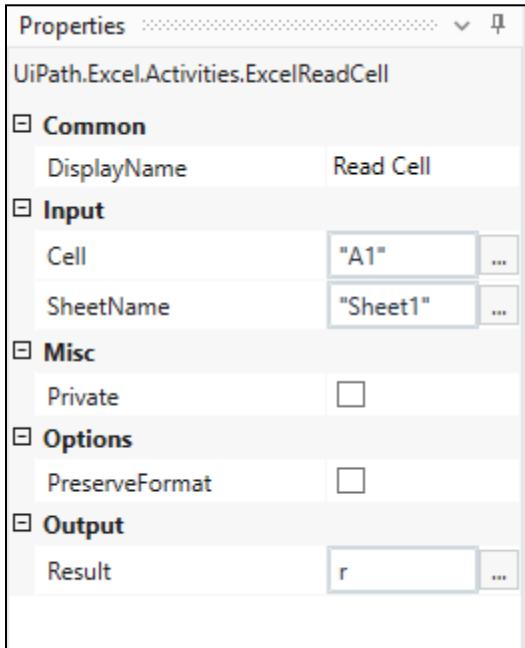


5. Drop Read Cell activity inside Application Scope

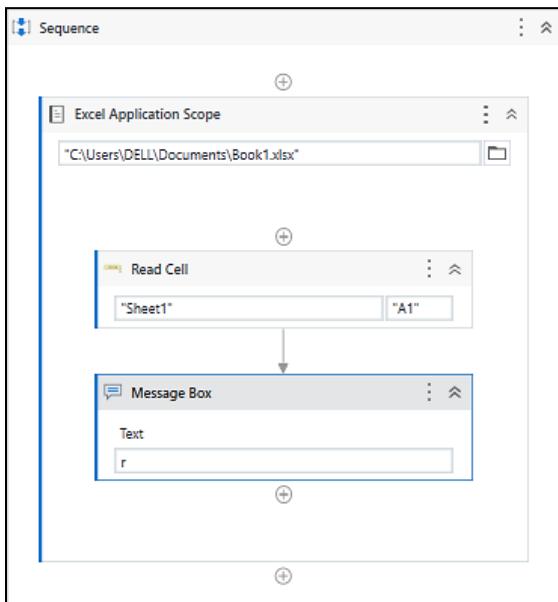


❖ For Read Cell activity –

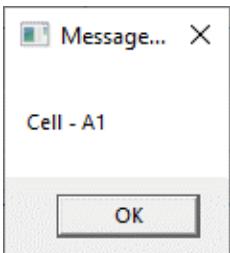
6. In Properties Window create a variable in Output

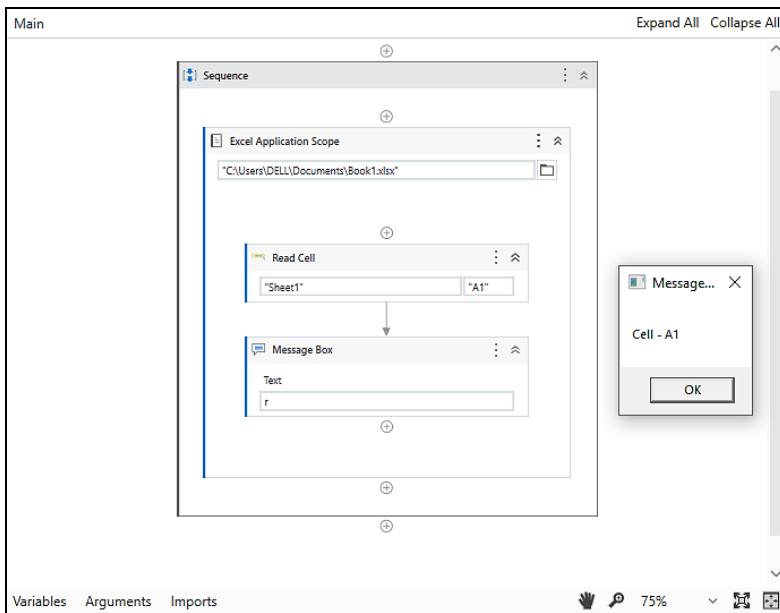


7. Add a message box for Read Cell and initiate with variable created



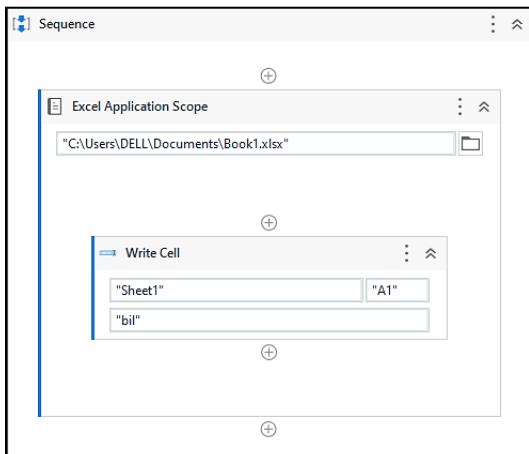
8. Click on Debug and Run





❖ For Write Cell –

9. Replace Read Cell with Write Cell Activity and Remove Message Box
10. Create a text to write in Write Cell



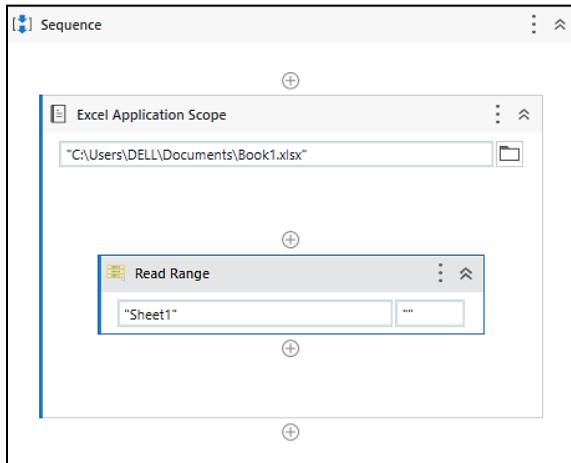
11. Run the File

12. It will write the text in Excel File as follows –

	A	B
1	bil	Cell - B1
2	Cell - A2	Cell - B2
3	Cell - A3	Cell - B3
4	Cell - A4	Cell - B4
5	Cell - A5	Cell - B5
6		

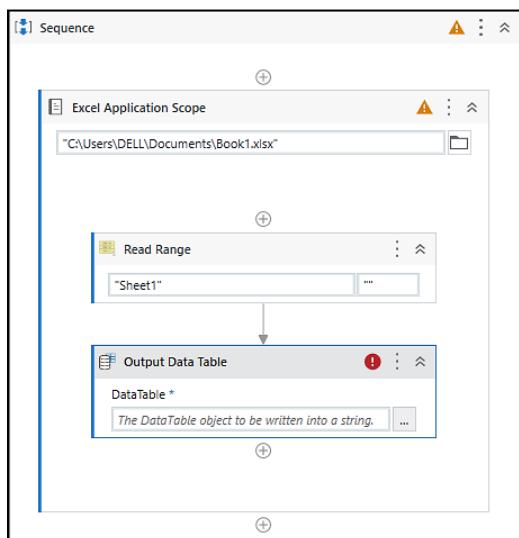
❖ For Reading whole content from Excel file –

13. Remove Write Cell Activity and add Read Range Activity from Activity menu

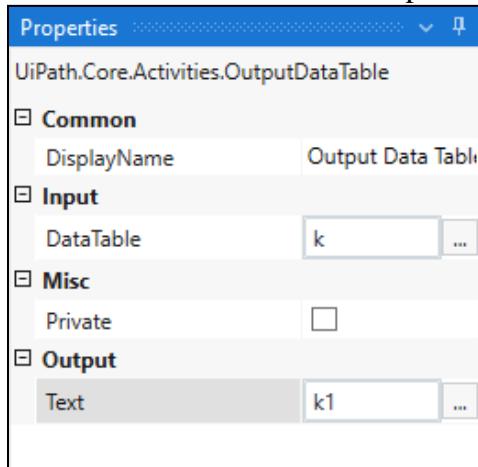


14. Create an output variable e.g., k

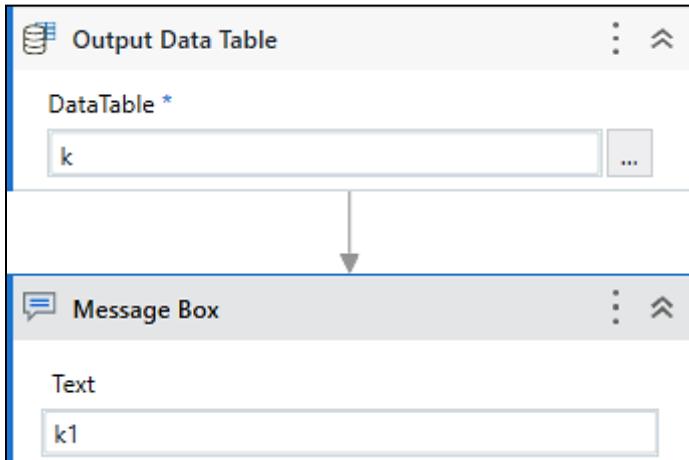
15. And Attach an Output Data Table to the Read Range



16. Use created variable k as input and set new variable e.g., k1 for output

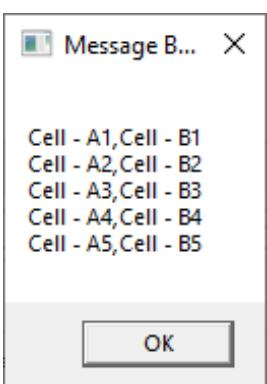
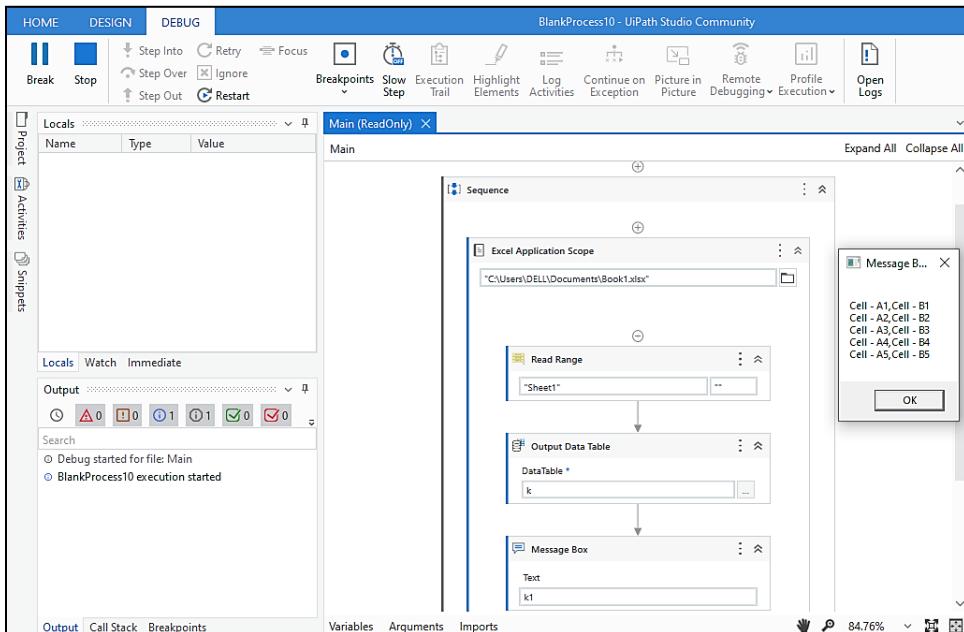


17. Attach message box and pass k1



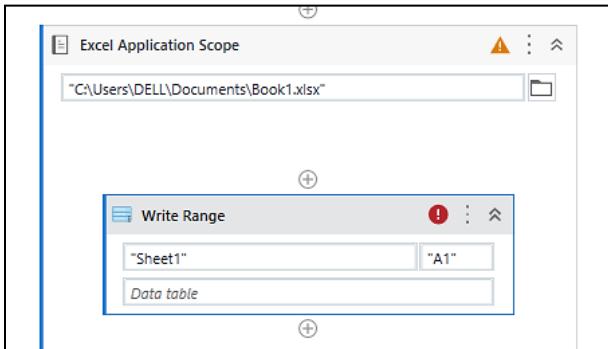
18. Debug & Run

19. Whole Content from Excel file will appear ...

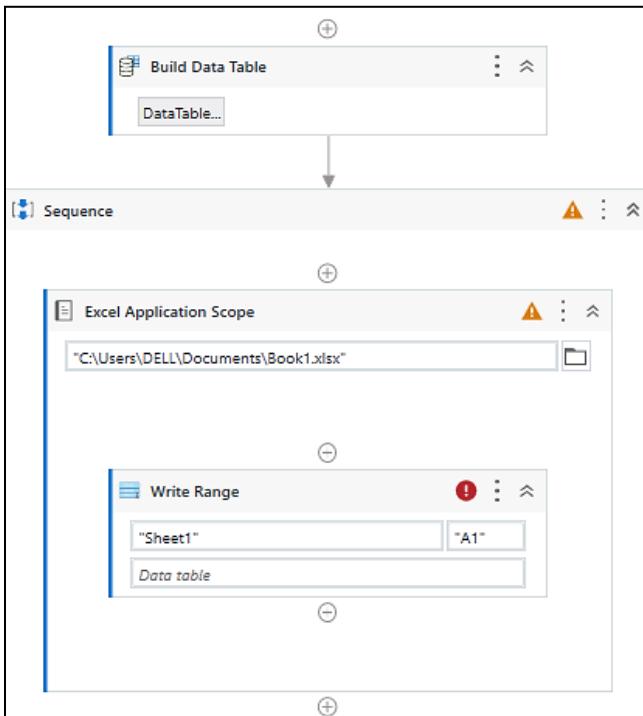


❖ For Over Writing Multiple Cells at a time –

20. Replace Read Range with Write Range and Remove Message Box and Output Data Table



21. Attach Build Data Table to the Sequence

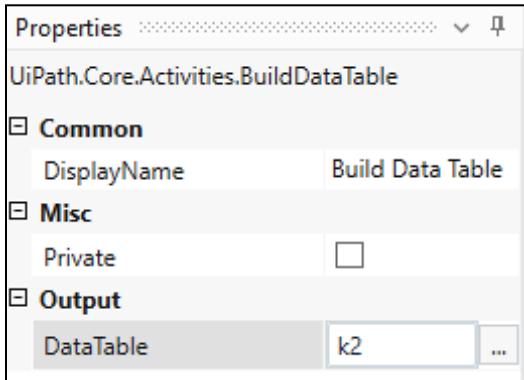


22. Add Data to be overwrite in Build Data Table

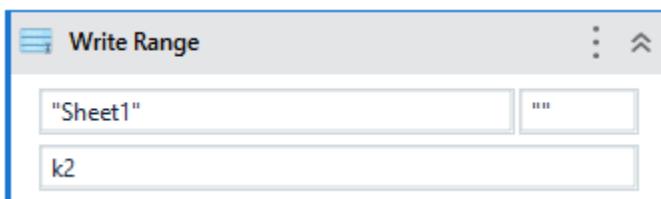
The screenshot shows the 'Build Data Table' dialog box. It contains two columns: 'Column1 (String)' and 'Column2 (Int32)'. There are three rows of data: 'text' with value 1, 'text2' with value 2, and 'text3' with value 3. The dialog box has 'OK' and 'Cancel' buttons at the bottom.

Column1 (String)	Column2 (Int32)
text	1
text2	2
text3	3

23. Create an Output Variable e.g., k2 for Build Data Table

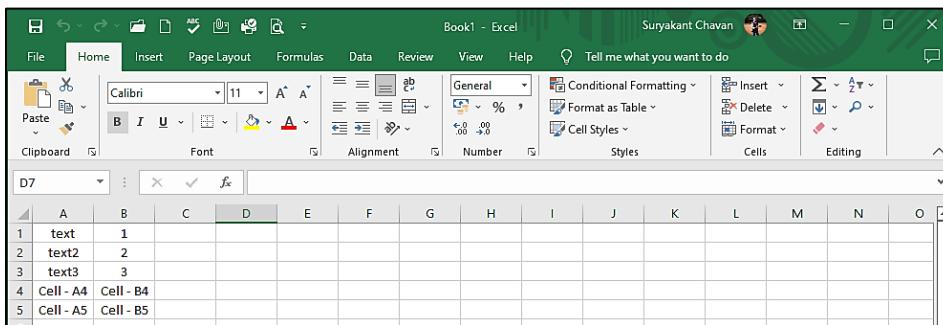


24. Pass k2 through k2 as follows and since we are writing data to whole Excel data, we should remove A1 from case and keep it blank within double quotes -



25. Debug And Run

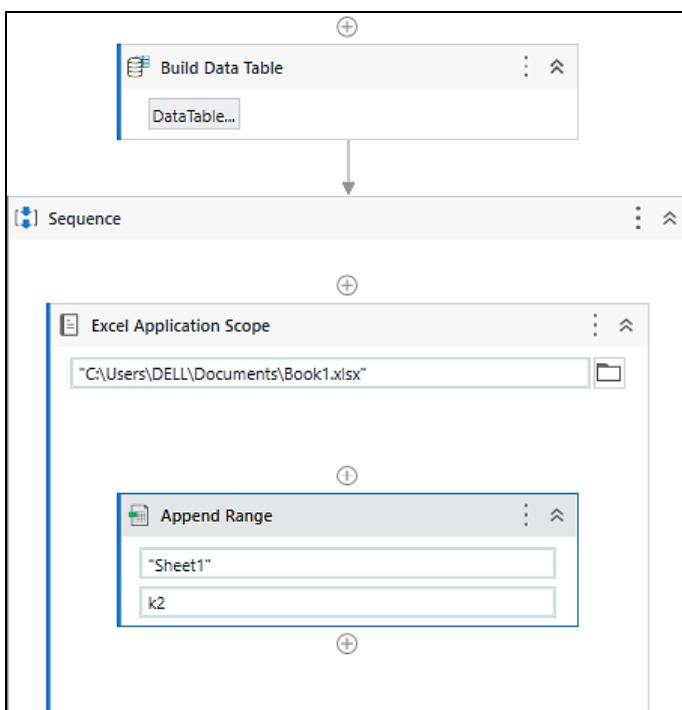
26. Since we added only 3 rows in build data table it will overwrite only first 3 rows of Excel data



❖ Append Operation will extend the table in Excel file with the existing data –

27. Remove Write Range Activity and add Append Range Activity

28. Pass k2 which we have already assigned to data table



29. Debug and Run

The screenshot shows a Microsoft Excel window titled 'Book1 - Excel'. The ribbon tabs are Home, Insert, Page Layout, Formulas, Data, Review, View, Help, Tell me. The Home tab is selected. The Excel interface includes the ribbon, the formula bar with cell reference 'D14', and the main worksheet area.

Worksheet Data:

	A	B	C	D	E	F	G	H	I	J	K
1	text	1									
2	text2	2									
3	text3	3									
4	Cell - A4	Cell - B4									
5	Cell - A5	Cell - B5									
6											
7											
8											
9											
10											
11	text	1									
12	text2	2									
13	text3	3									
14											
15											

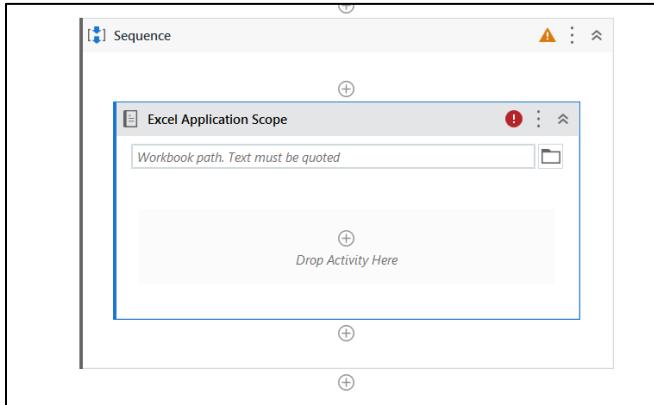
The cells D14 through D15 are highlighted with a green selection bar, indicating they are the current active range. The status bar at the bottom shows 'Ready' and 'Accessibility: Good to go'.

Practical: 6b

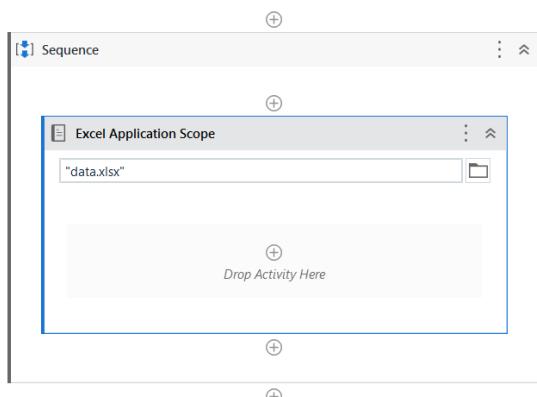
Aim: Automate the process to extract data from an excel file into a data table and vice versa.

Implementation:

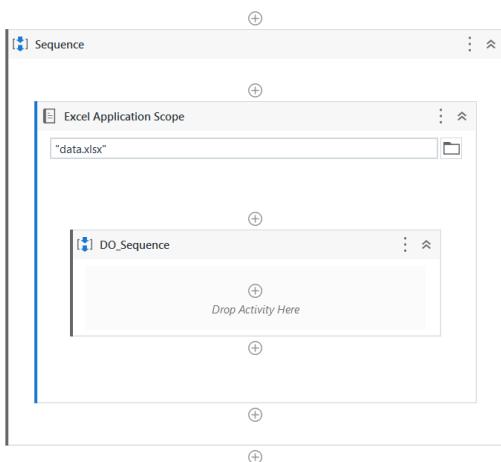
1. create a new blank process -> open main.xaml -> Add sequence activity -> add “Excel Application scope” inside sequence.



2. Add workbook path



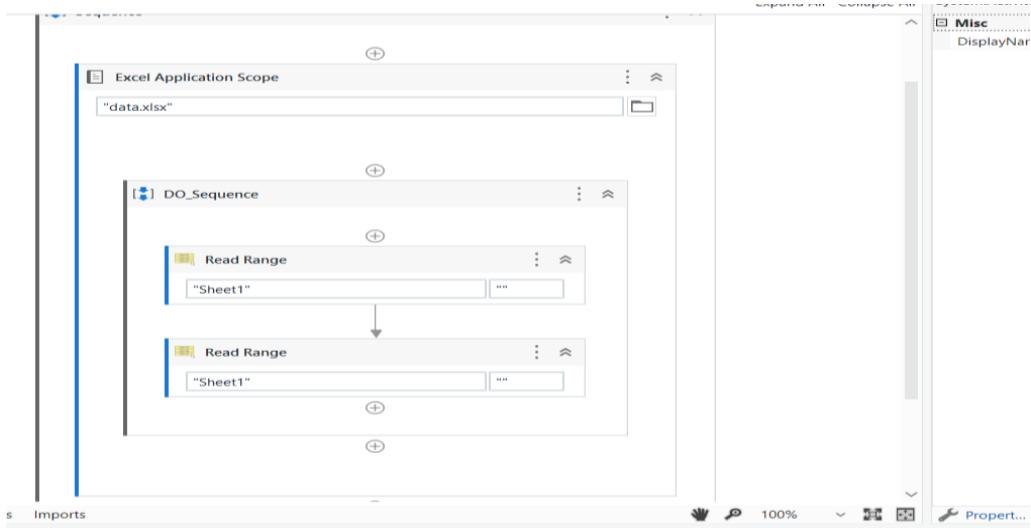
3. Added another sequence inside excel application scope and renamed for better understanding.



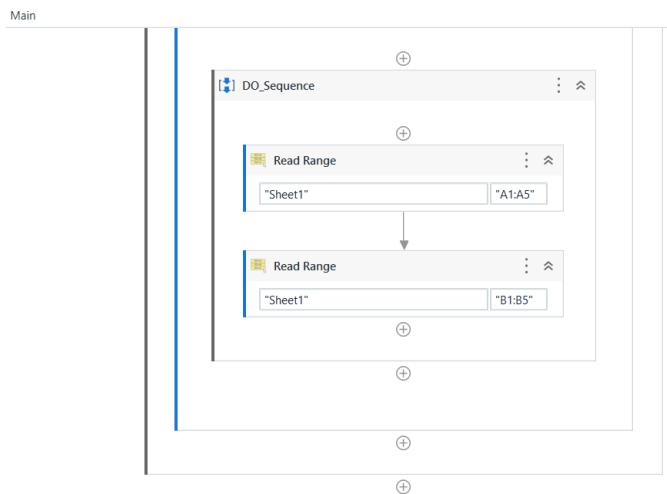
4.Create an excel worksheet, our worksheet has one sheet “sheet 1” which we are going to use as an input and we will make the program create another excel workbook and with the sheet as “Output” and make it store input data from selected range in it.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Name	date																	
2	ritik	05-Jun-21																	
3	surya	06-Jun-21																	
4	omkar	07-Jun-21																	
5	preet	08-Jun-21																	
6	geet	09-Jun-21																	
7	jeet	10-Jun-21																	
8	meet	11-Jun-21																	
9																			
10																			

5.Now add 2 read range inside DO_Sequence , it will read the data from excel.



6.assign the range of data we want as input to each “read range” activity. Here we want data from only A1:A5 (name) and B1:B5 (date).



5. now create 2 data table variable for each read range and assign them to each read range.

Main * X

Main Expand All Collapse All

Sequence

Excel Application Scope

"data.xlsx"

DO_Sequence

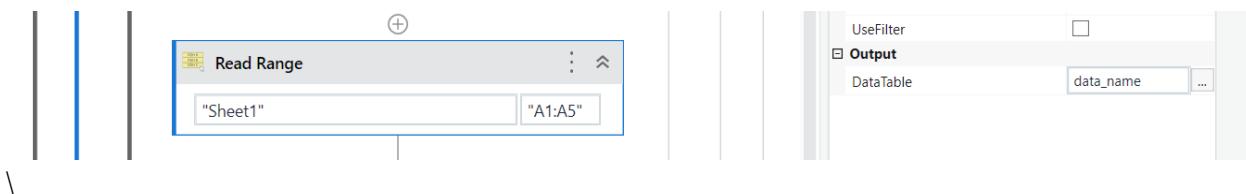
Read Range

Name	Variable type	Scope	Default
data_name	DataTable	Main Sequence	Enter a VB expression
data_date	System.Data.DataTable	Main Sequence	Enter a VB expression
Create Variable			

Boolean
Int32
String
Object
System.Data.DataTable
Array of [T]
Browse for Types ...

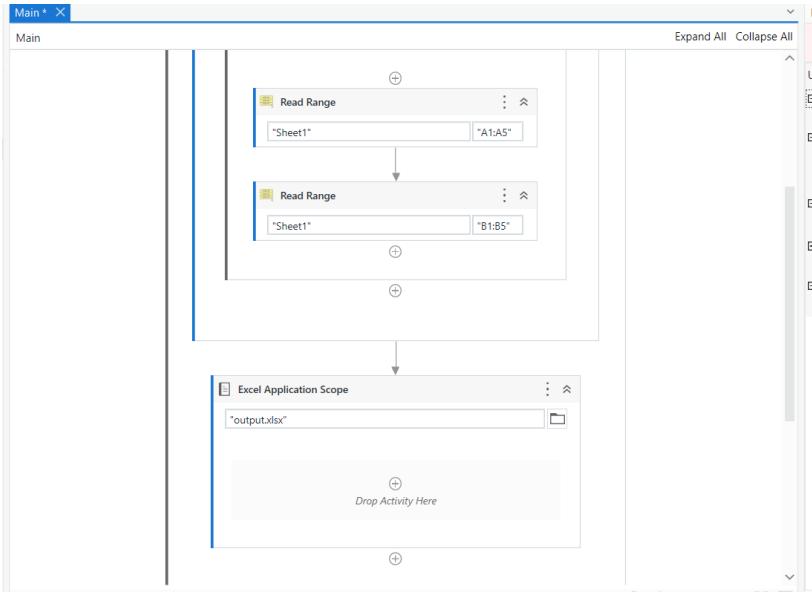
Variables Arguments Imports

100%

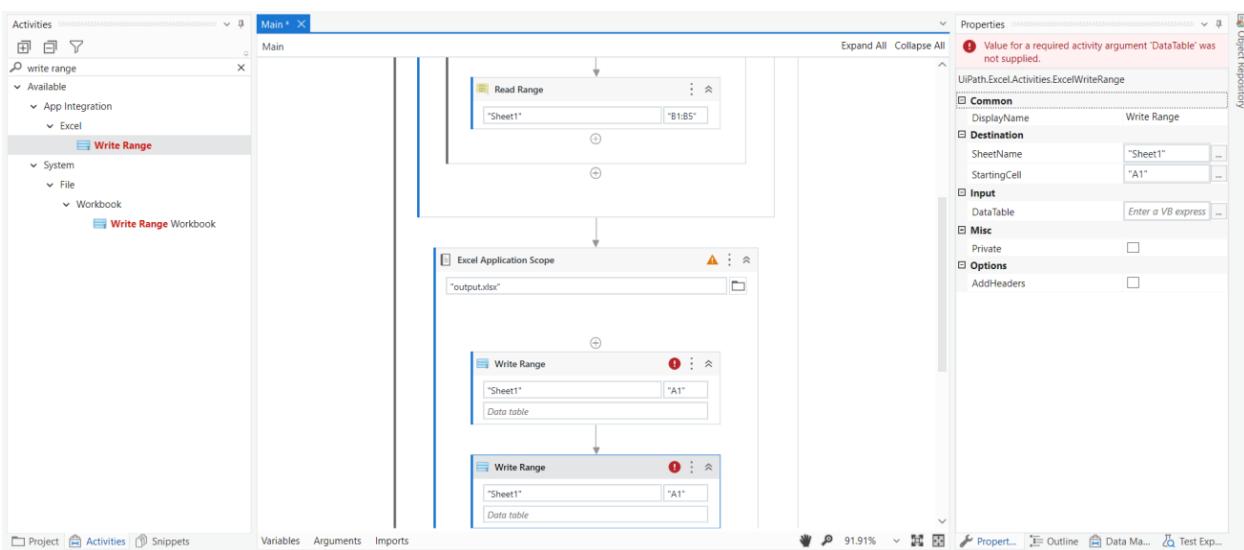




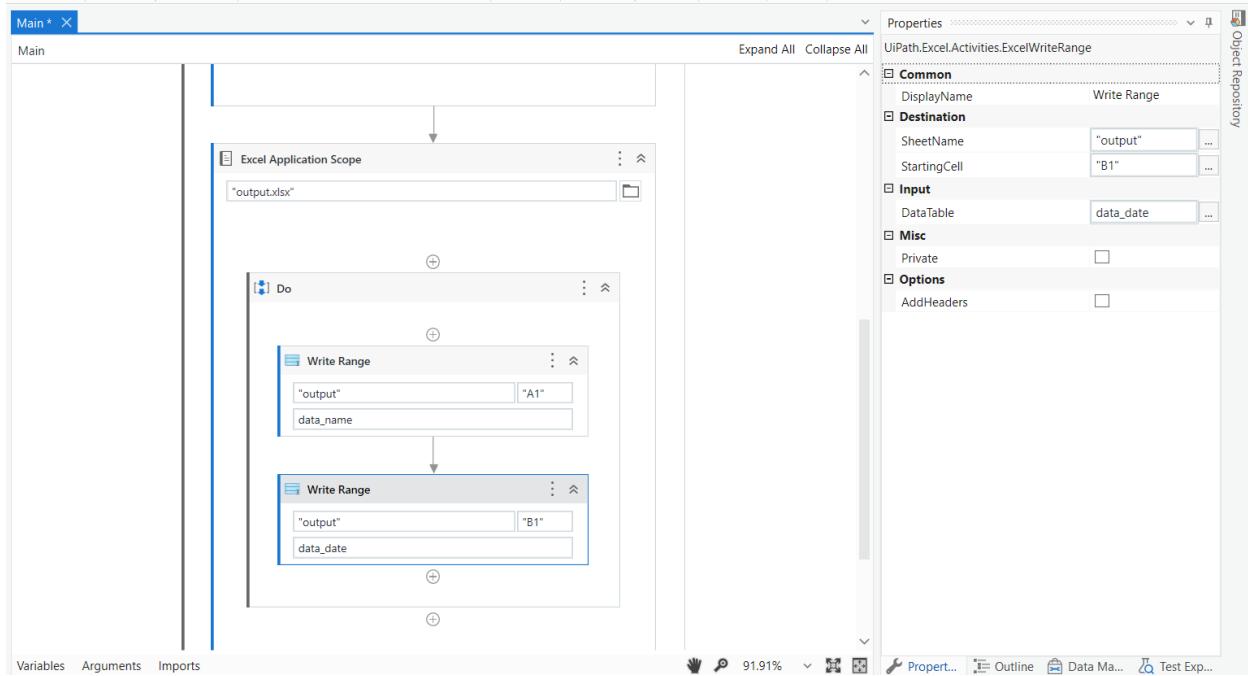
6. Now we added another excel application scope to work with another excel file in which we want to store the output.



7. Now take 2 Write range to write the data inside the excel.



8.Now instead of default name “sheet1” we created a sheet called “output”(This is not present already and its going to created by ui path, we can also provide an existing file to it), then we added range for the output sheet and assigned the data table variable to each write range.



8.Run the file.

9.After running the program t created the file Output and added the data inside it

Name	Date modified	Type	Size
.entities	05-12-2022 06:31 PM	File folder	
.local	05-12-2022 07:06 PM	File folder	
.project	05-12-2022 06:31 PM	File folder	
.settings	05-12-2022 06:31 PM	File folder	
.templates	05-12-2022 06:30 PM	File folder	
.tmh	05-12-2022 06:31 PM	File folder	
data	05-12-2022 07:13 PM	Microsoft Excel W...	9 KB
Ui Main	05-12-2022 07:22 PM	Windows.XamlDo...	10 KB
output	05-12-2022 07:22 PM	Microsoft Excel W...	10 KB
project	05-12-2022 06:31 PM	JSON Source File	2 KB

output - Excel

The screenshot shows a Microsoft Excel spreadsheet titled "output - Excel". The ribbon menu is visible at the top, with the "Home" tab selected. The table consists of two columns: "Name" and "date". The data is as follows:

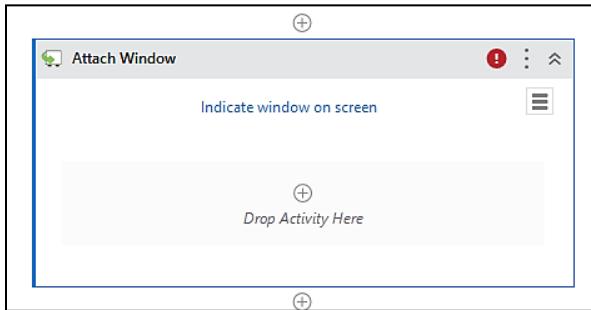
	Name	date
1	ritik	05-06-2021
2	surya	06-06-2021
3	omkar	07-06-2021
4	preet	08-06-2021
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		

Practical :7a

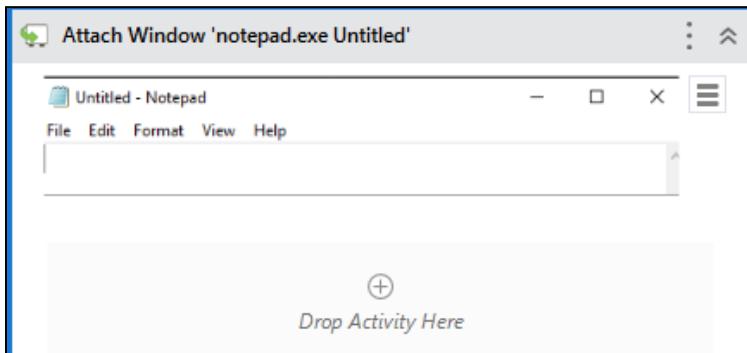
Aim: Implement the attach window activity.

Implementation:

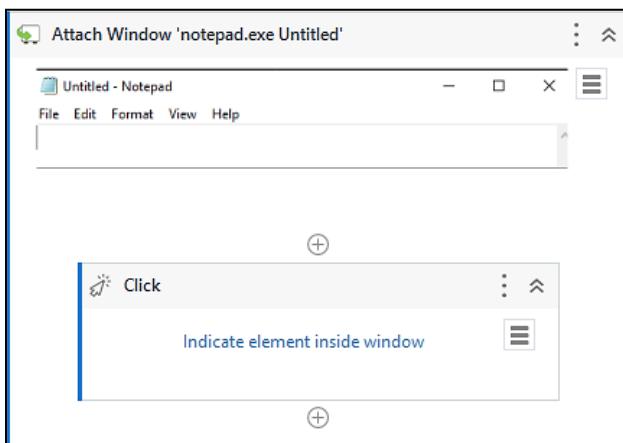
1. Start Ui Path Studio -> create a new blank process -> open main.xaml -> Add sequence activity -> Drop Attach Window Activity



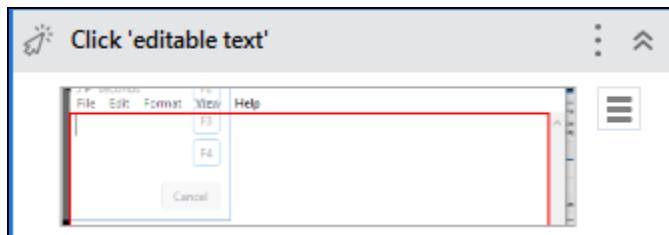
2. Keep an application already open e.g., Notepad
3. Click on Indicate Window on screen -> Select Notepad



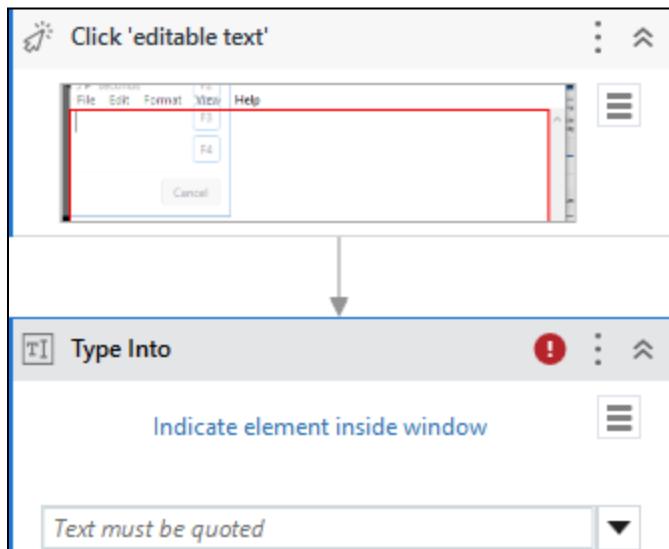
4. Add Click Activity to Attach Window



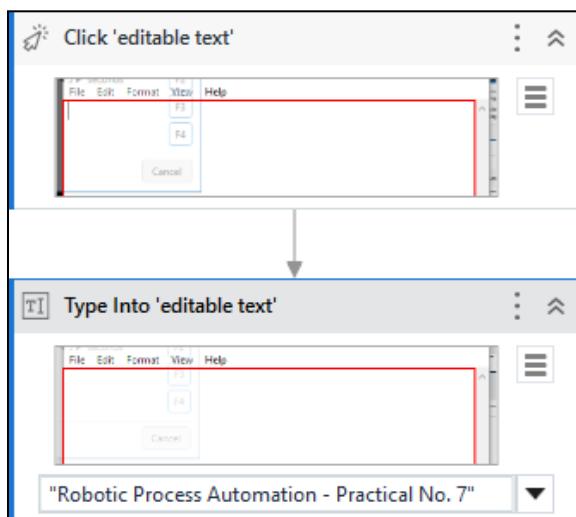
5. Click on Indicate element inside window -> Select Notepad Window,
It will look like follows –



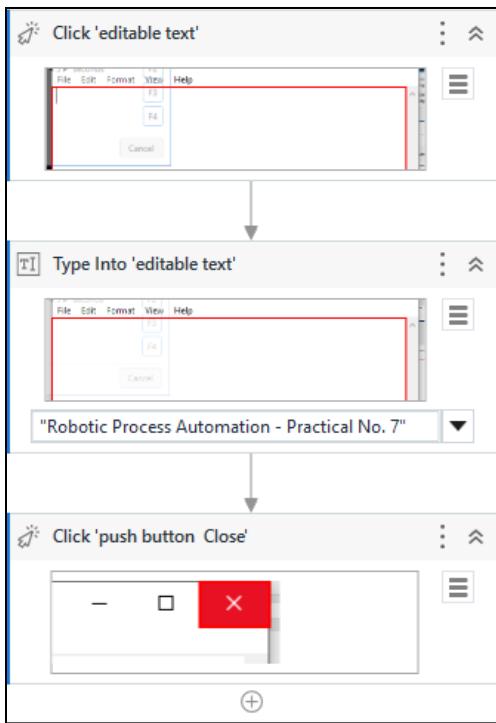
6. Then attach Type Into activity to the Click Activity



7. Click on Indicate element inside window & Select Notepad Window and add some text in double quotes -

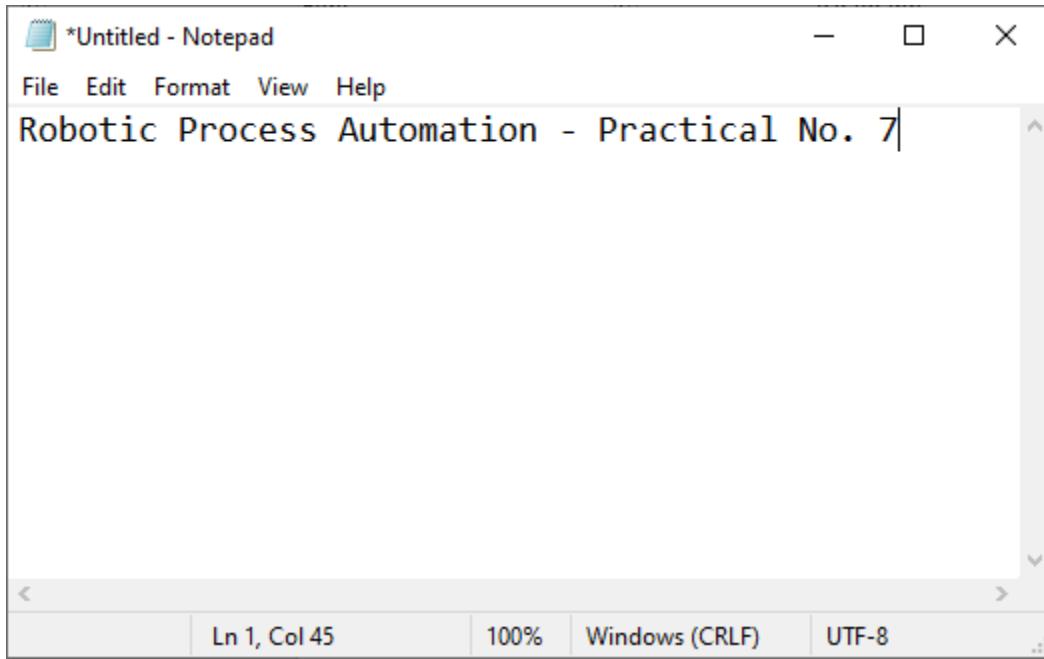


8. Then add another click window to Type Into and select window close button of Notepad



9. Debug & Run

10. It will write the text string in the Notepad as follows -



Practical :7b

Aim: Find different controls using UiPath.

Answer:

Controls Overview

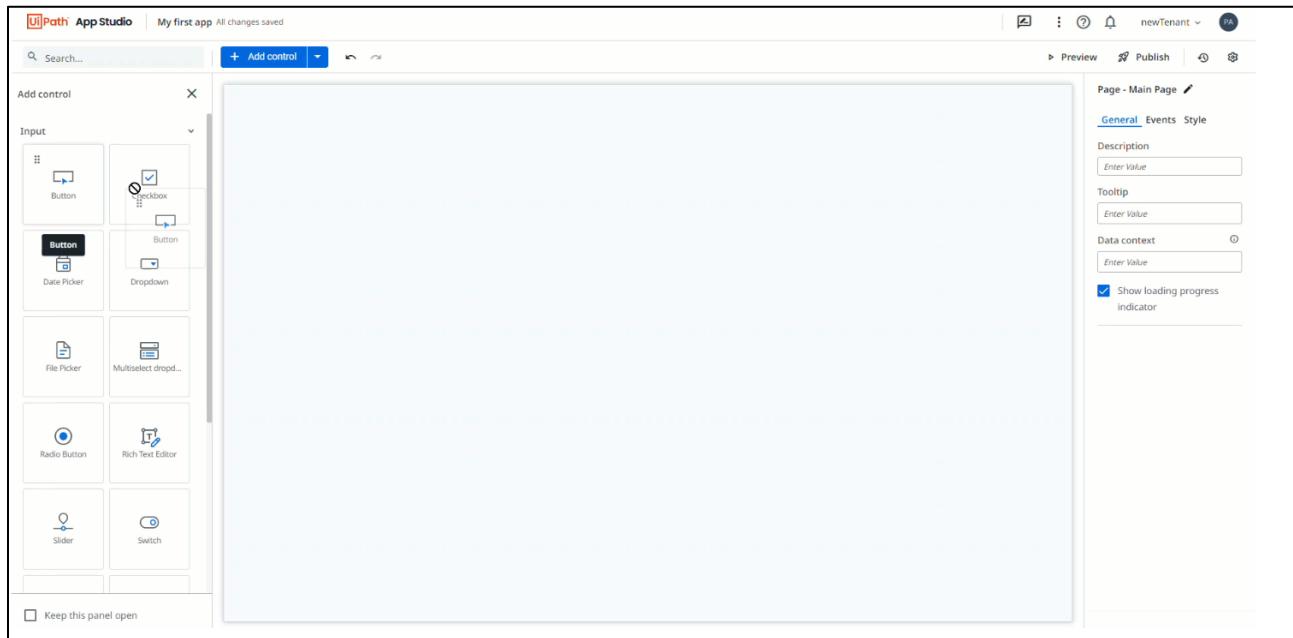
Controls form the basic building blocks of Apps and help build visually rich applications. There are three control categories:

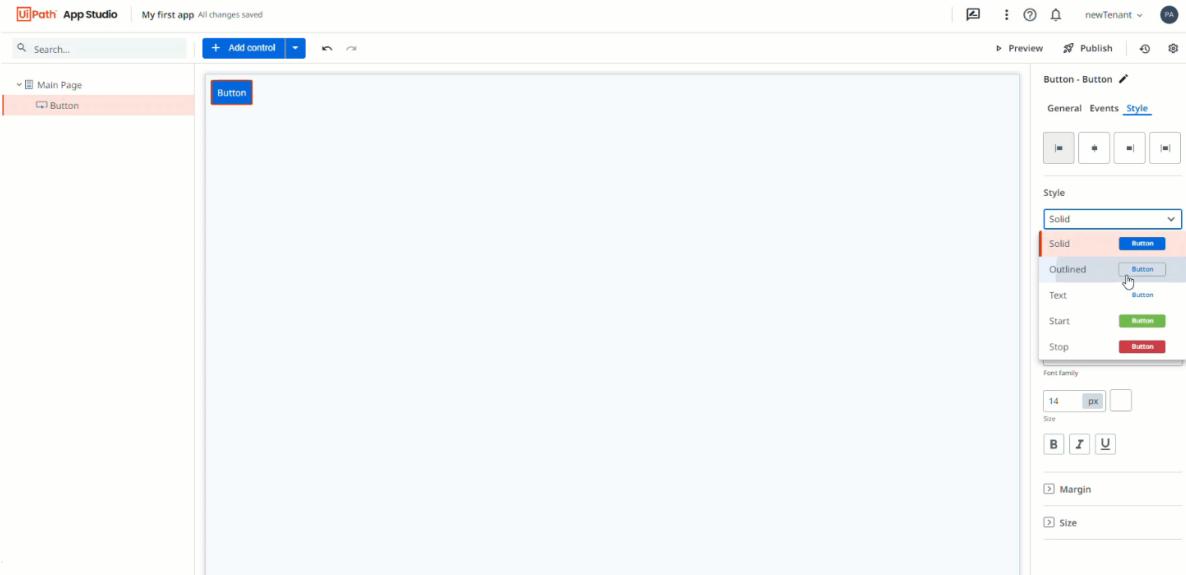
- Container Controls
- Input Controls
- Display Controls

Every Control has three property sections.

- General - Properties to configure the display, value binding etc.
- Events - Properties to configure the events of the control with rules builder.
- Style - Properties to configure the look and feel of the controls.

Adding a control is easy, just click and drag it from the Control Picker





The input controls comprise of the following:

- Button
- Checkbox
- Date Picker
- Dropdown
- Multiselect dropdown
- File Picker
- Radio Button
- Rich Text Editor
- Slider
- Switch
- Text Area
- Textbox
- Textbox (Email)
- Textbox (Number)

Container controls

Container controls help in defining the layout of an app and also aid in positioning of controls within an app. The Container controls comprise of the following:

- Container Layout
- Container
- Page Container
- Page

Display Controls

The display controls comprise of the following:

- Custom List
- Divider
- Document Viewer
- Header
- IFrame
- Image
- Label
- List
- Table
- Icons
- Tabs

Practical :7c

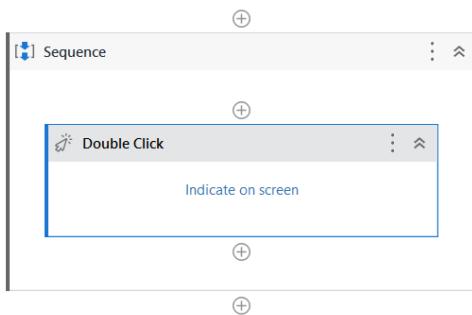
Aim: Demonstrate the following activities in UiPath:

- i. Mouse (click, double click and hover)
- ii. Type into
- iii. Type Secure text

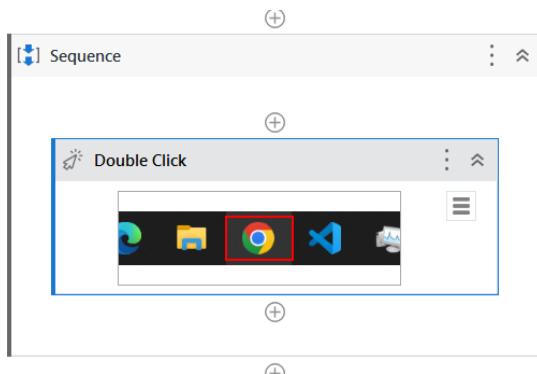
Implementation:

i. Mouse (click, double click and hover)

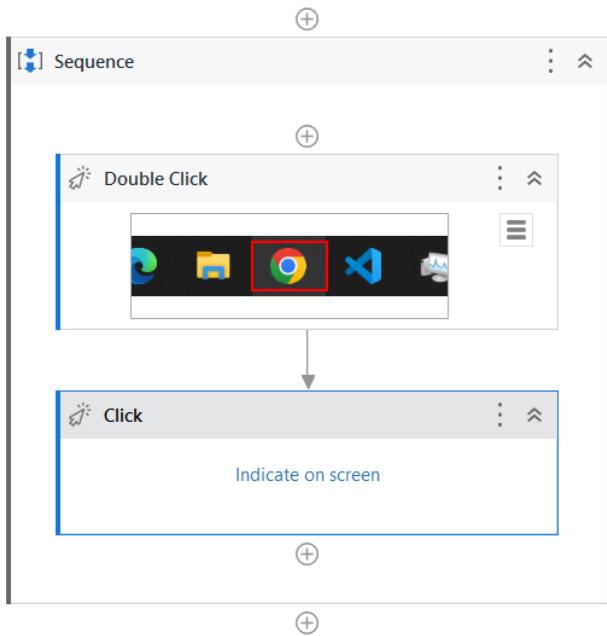
1. create a new blank process -> open main.xaml -> Add sequence activity -> add double click activity inside it.



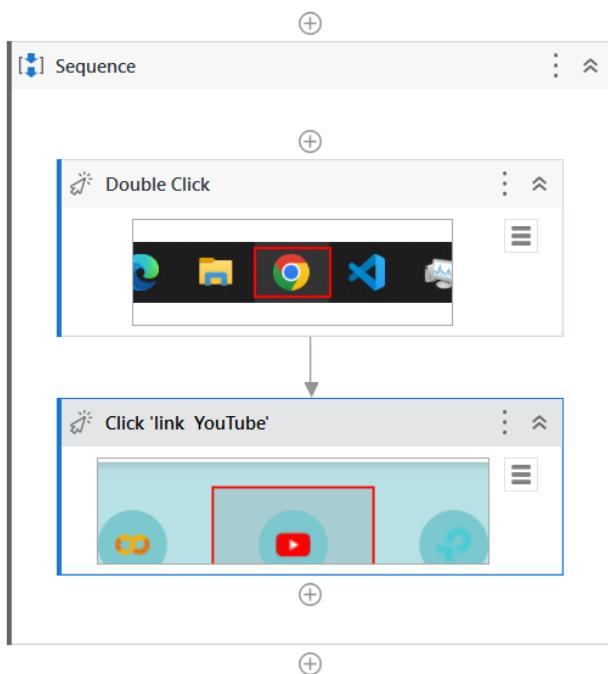
2. Indicate on any application you want.



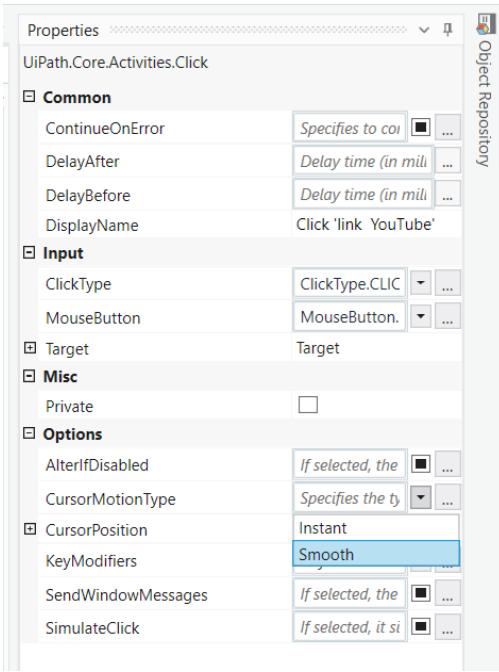
3. Add click activity



4.indiacate on website you want to open.



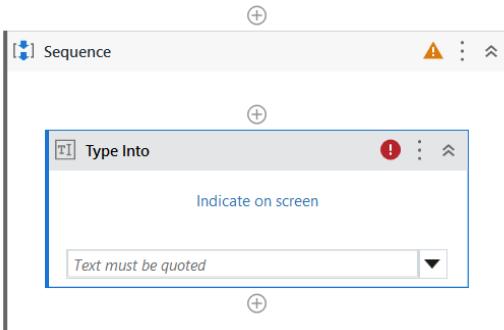
5.from properties panel of click activity , in CursorMotionType option select smooth option it will drag the cursor from its previous position to new click position.



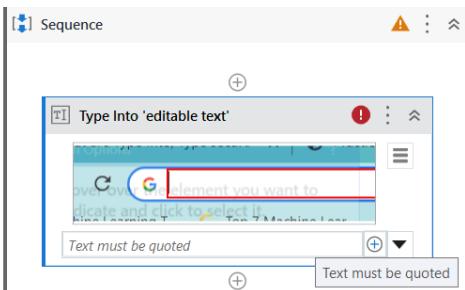
6. Run the program.

ii. Type into

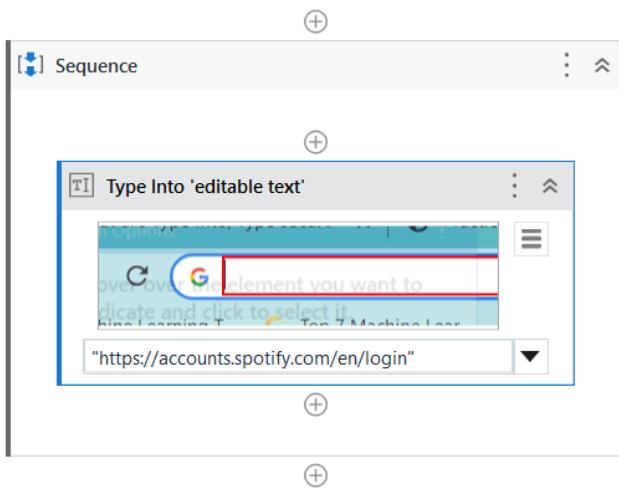
1. create a new blank process -> open main.xaml -> Add sequence activity -> add Type Into activity inside it.



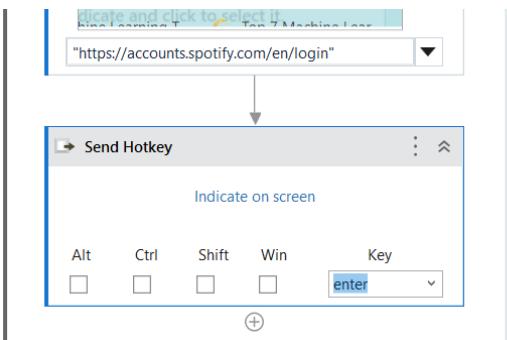
2.open a chrome tab in background and in Type Into click indicate on screen then select the search bar.



3.In text area Enter the website url .



5.dd send hotkeys and select enter key.

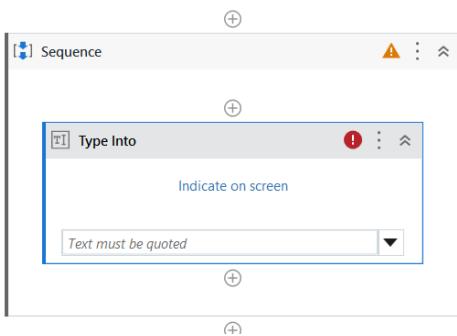


6.Run the file.

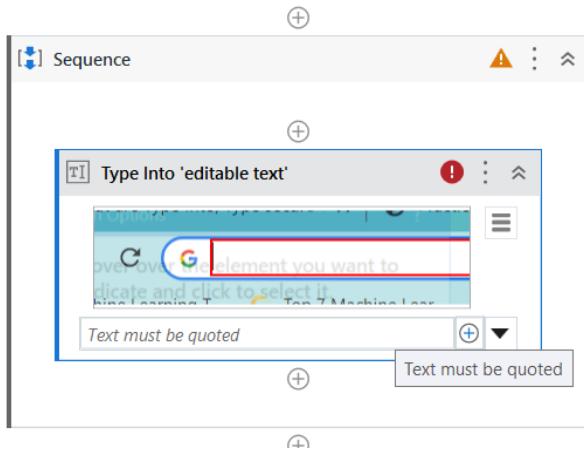
ii. Type Secure Text

1. create a new blank process -> open main.xaml -> Add sequence activity -> add Type Into activity inside it.

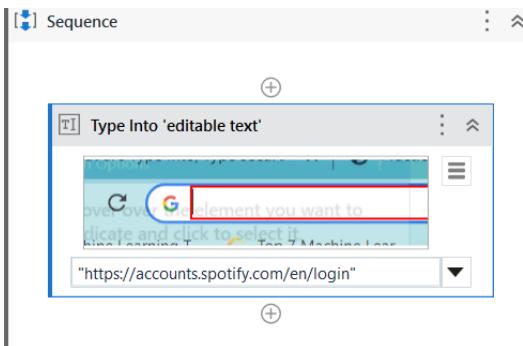
1. create a new blank process -> open main.xaml -> Add sequence activity -> add Type Into activity inside it.



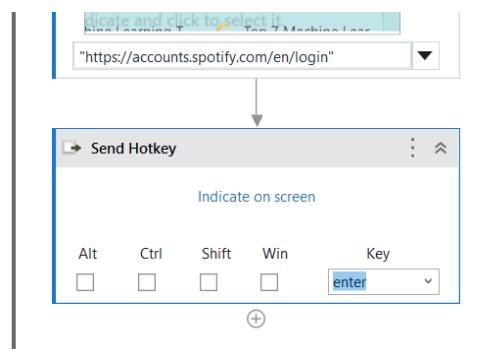
2.open a chrome tab in background and in Type Into click indicate on screen then select the search bar.



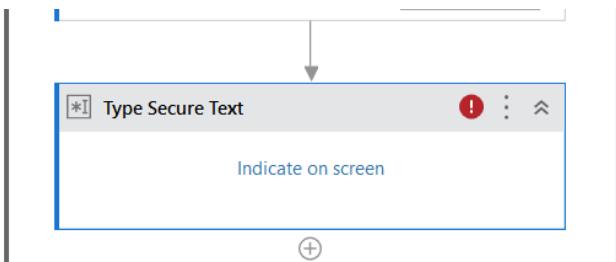
3.In text area Enter the website url .



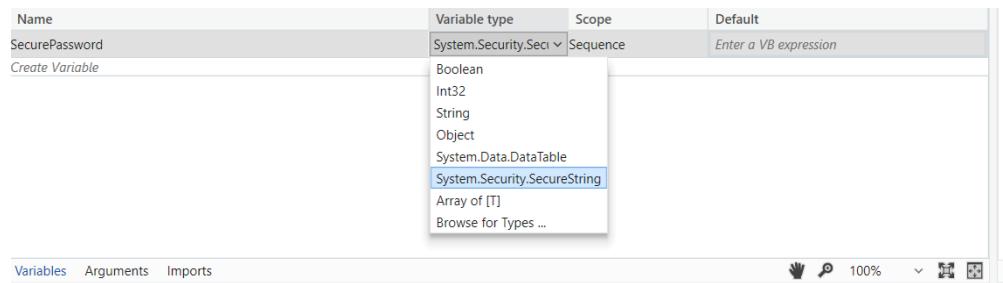
5.Add send hotkeys and select enter key.



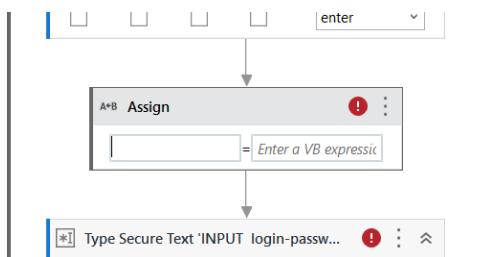
6.Add Type Secure Text activity .



7.Create a variable of “SecureString” type.

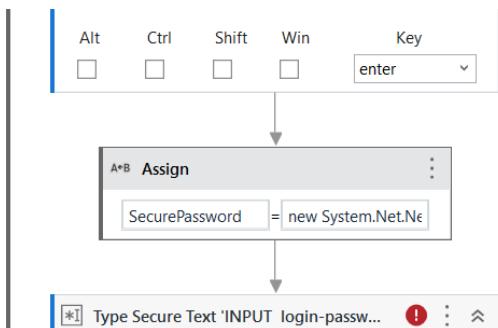


8.Add a assign activity before the Type secure text.



9.On the left side of the assign activity enter the variable name and on the vb expression area type ->

```
new System.Net.NetworkCredential(string.Empty, "password").SecurePassword
```

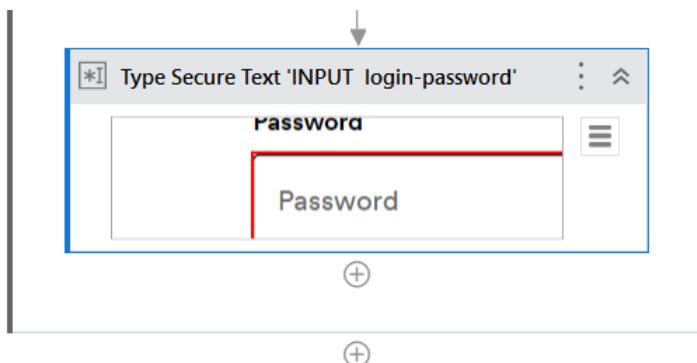


10.Now click On “Type secure text” activity, on the right side of the properties panel inside input area enter the variable name.

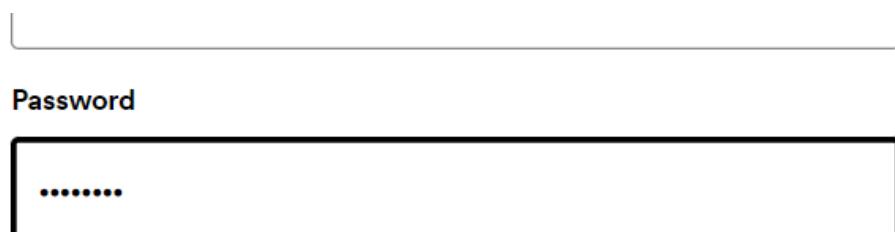


11. Open the website page manually in background that would have open by step 5, This is to indicate the next activity.

Now after that go back to ui path and inside “type secure text activity” and click on “indicate on screen”. And select the area you want to type.



12. Run the file.



Practical :8a

Aim: Demonstrate the following events in UiPath.

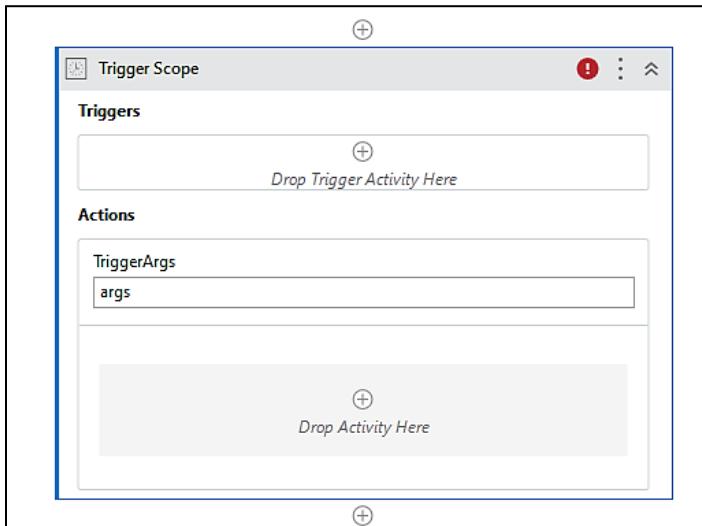
1)Element triggering event

2)Image triggering event

3)System Triggering Event

Implementation:

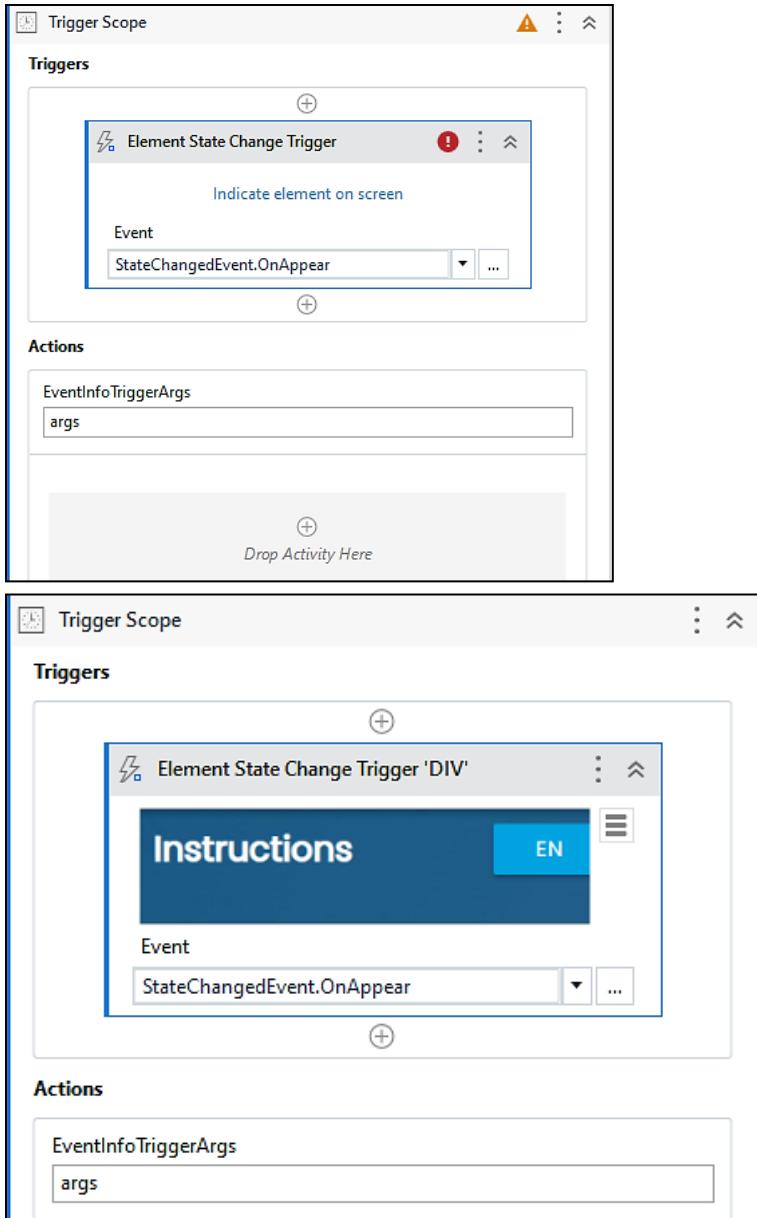
1. Start Ui Path->Create a Blank Process->Open Main Workflow->Add Trigger Scope from Activity Menu



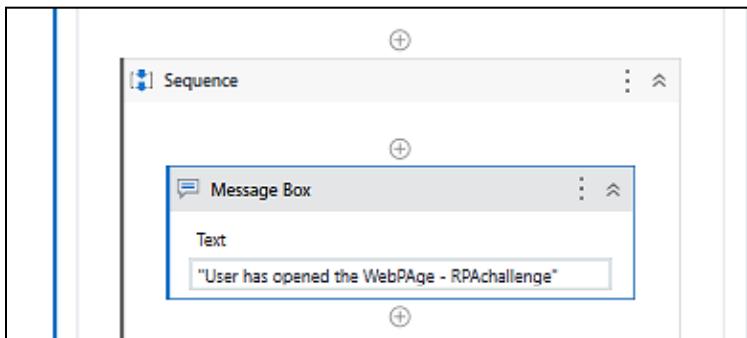
2. Open any website e.g., <https://www.rpachallenge.com/>

A screenshot of the RPA Challenge website. The left sidebar shows 'Instructions' with three numbered steps: 1. Goal to create a workflow from a spreadsheet. 2. Warning about field position changes after each submission. 3. Actual countdown begins after start. Below the instructions are buttons for 'Good luck!' and 'DOWNLOAD EXCEL'. The main right area has form fields for Email, Company Name, Role in Company, Last Name, Address, Phone Number, and First Name, all with placeholder text. A red 'SUBMIT' button is at the bottom.

3. Add Element State Change Trigger in Triggers -> Indicate Element on Screen -> Click anywhere on webpage

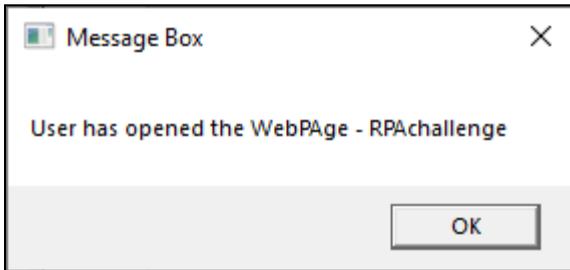


4. Then add a sequence under Actions and add a message box in the sequence -> add Text



5. Debug & Run

6. Open Webpage again by closing earlier one –



RPA Challenge

Input Forms Shortest Path Movie Search Invoice Extraction RPA Stock Market

Instructions EN

1. The goal of this challenge is to create a workflow that will input data from a spreadsheet into the form fields on the screen.

2. Beware! The fields will change position on the screen after every submission throughout 10 rounds thus the workflow must correctly identify where each spreadsheet record must be typed every time.

3. The actual countdown of the challenge will begin once you click the Start button until then you may submit the form as many times as you wish without receiving penalties.

Good luck!

DOWNLOAD EXCEL

Last Name _____ Email _____
Address _____ First Name _____
Role in Company _____ Company Name _____
Phone Number _____

SUBMIT

User has opened the WebPAge - RPChallenge

OK

Practical :8b

Aim: Automate the following screen scraping methods using UiPath

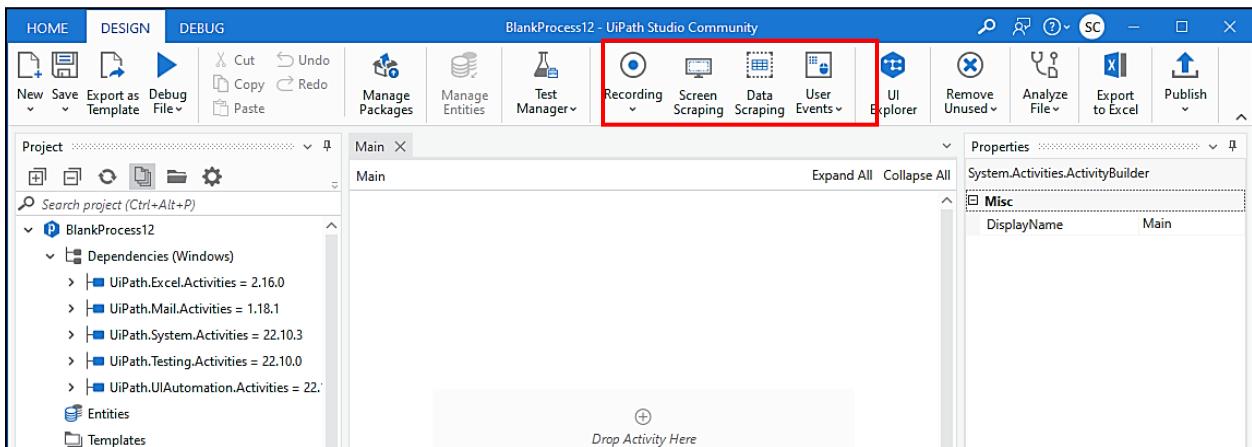
1)Full Test

2)Native

3)OCR

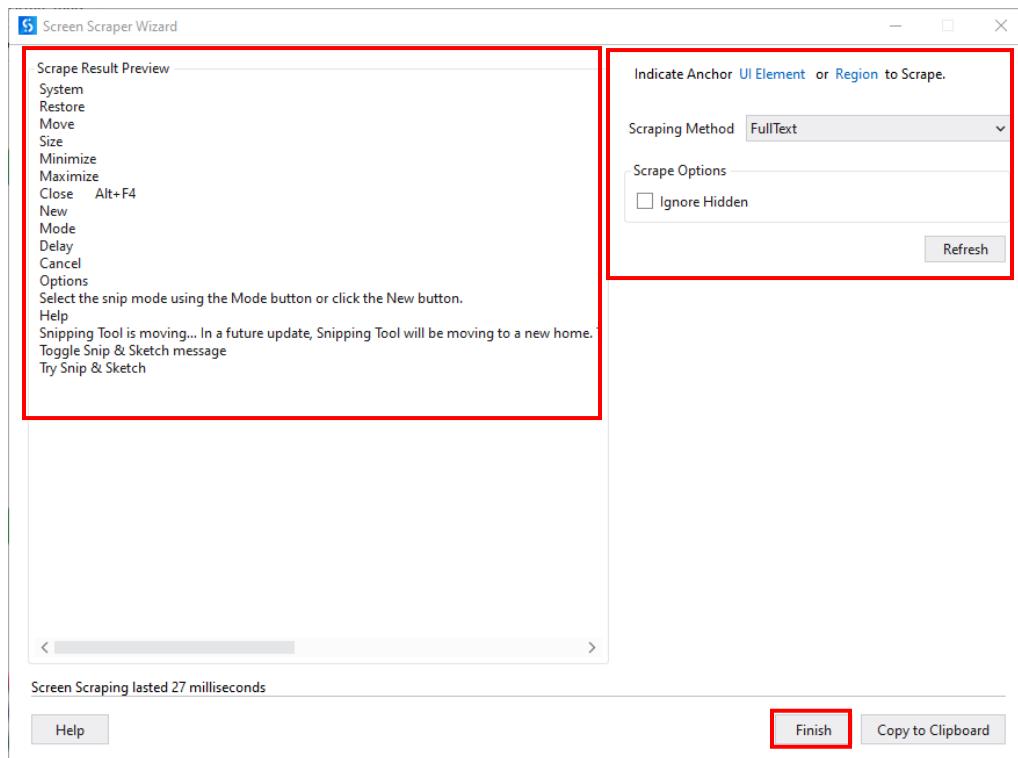
Implementation:

1. Start Ui Path & Create a Blank Process->Open Main Workflow->Keep any application window open e.g., Snipping Tool
2. Project -> Settings -> Disable Modern Experience -> Reload

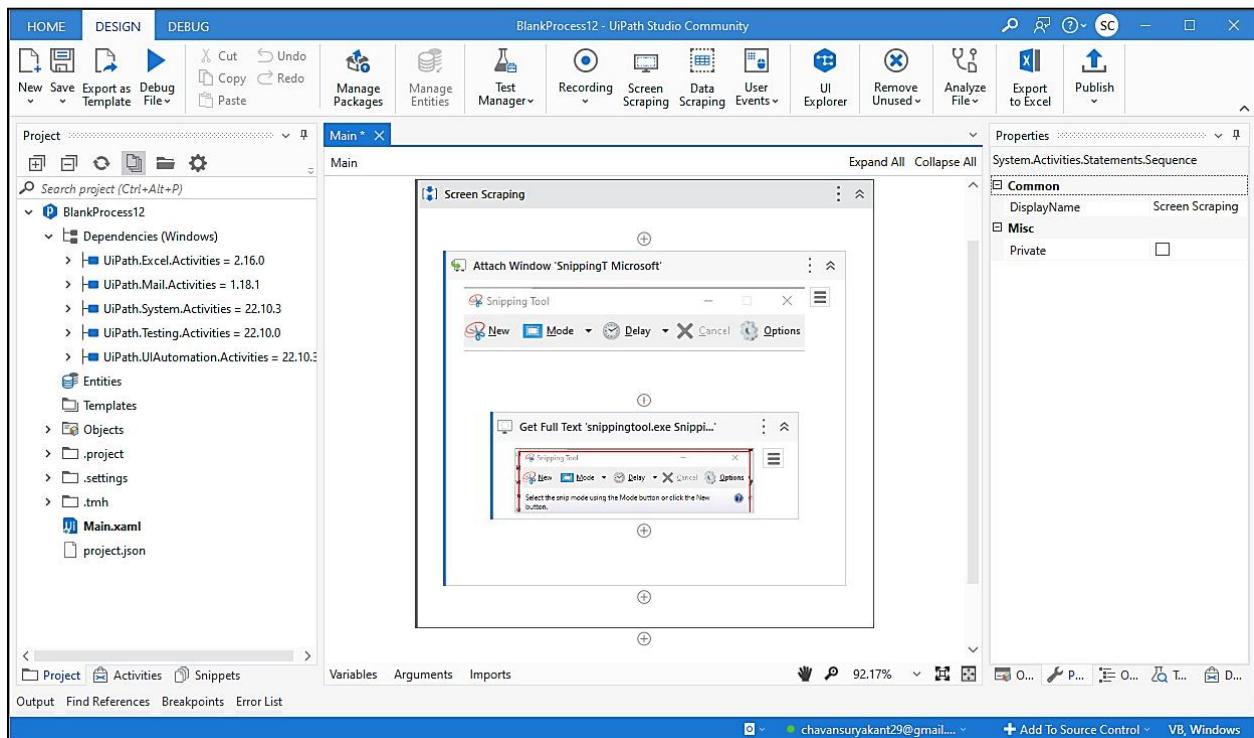


3. Click on Screen Scraping option in the Top Ribbon->Select any particular part of Application Window i.e., Snipping Tool ->Screen Scraping Wizard will appear->Select Full Test in Scraping Method

Full Text Scraping Method will show all the text Present on the selected part of Application Window



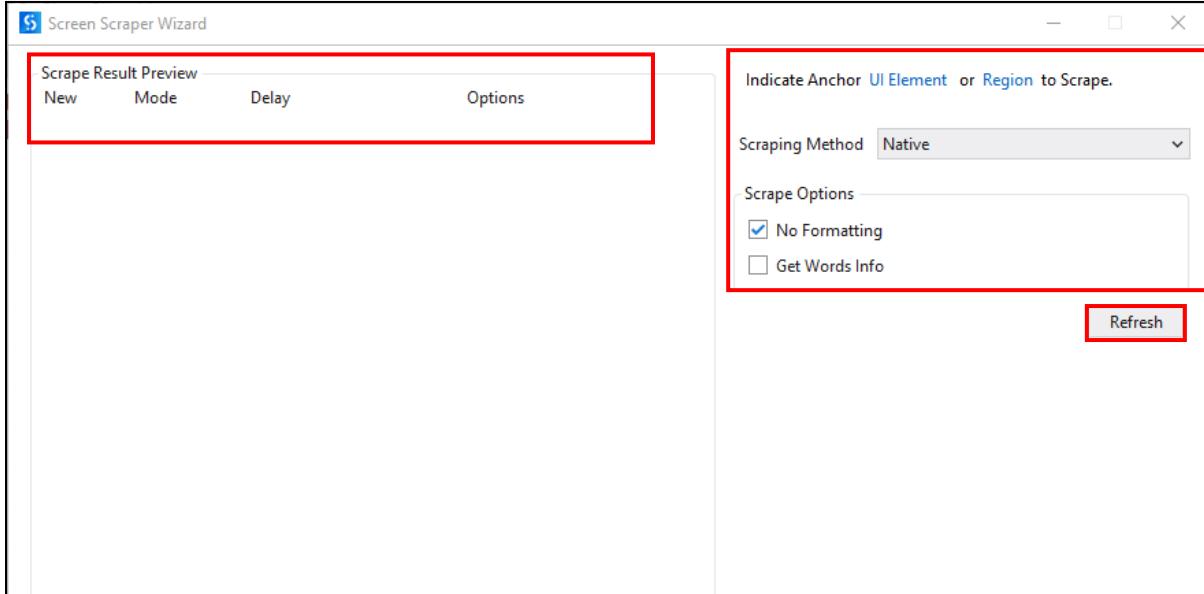
4. Click On Finish



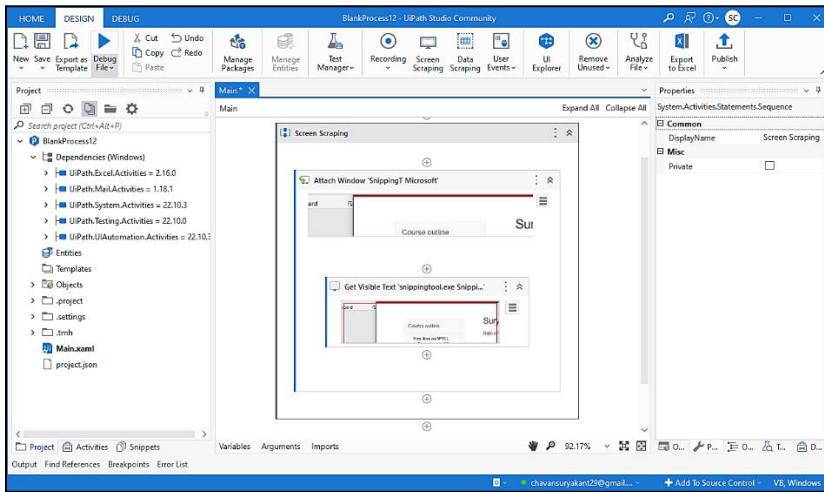
❖ For Native Screen Scraping –

5. Screen Scraping Wizard -> Select Native option from Scraping Method dropdown -> Refresh

Native method extracts the text with its position on the screen, as well as retrieve the exact position of each word

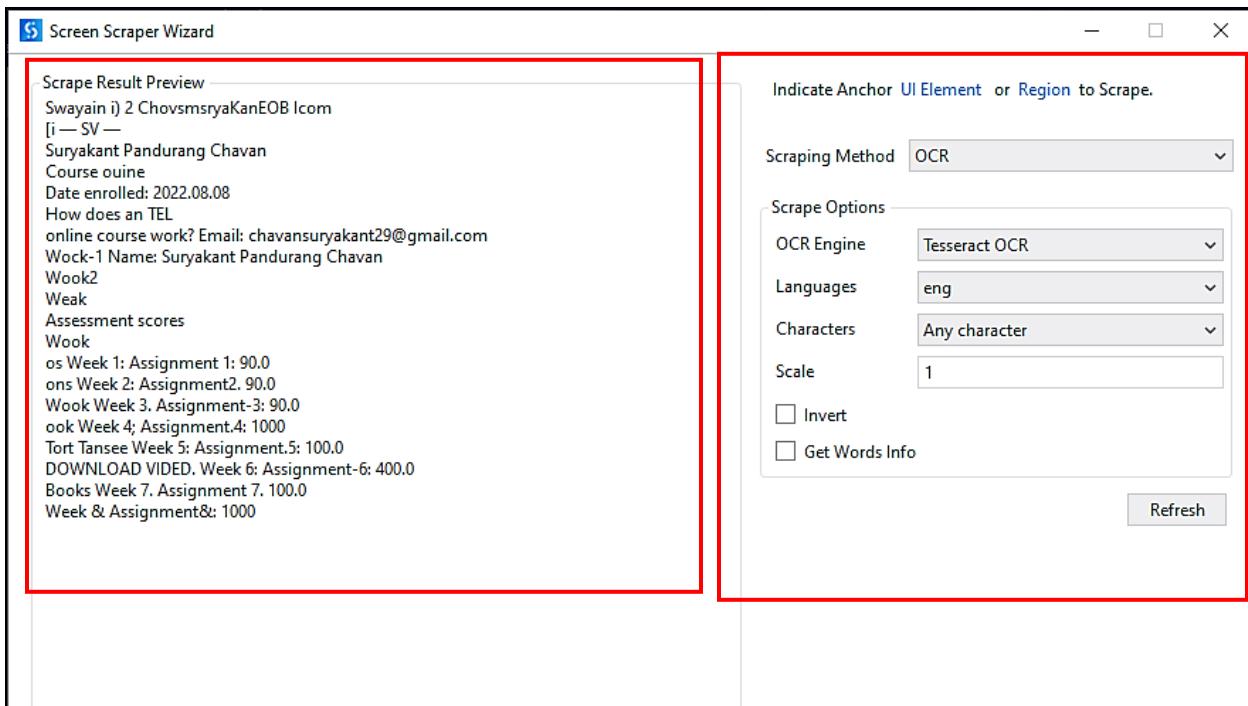


6. Click On Finish

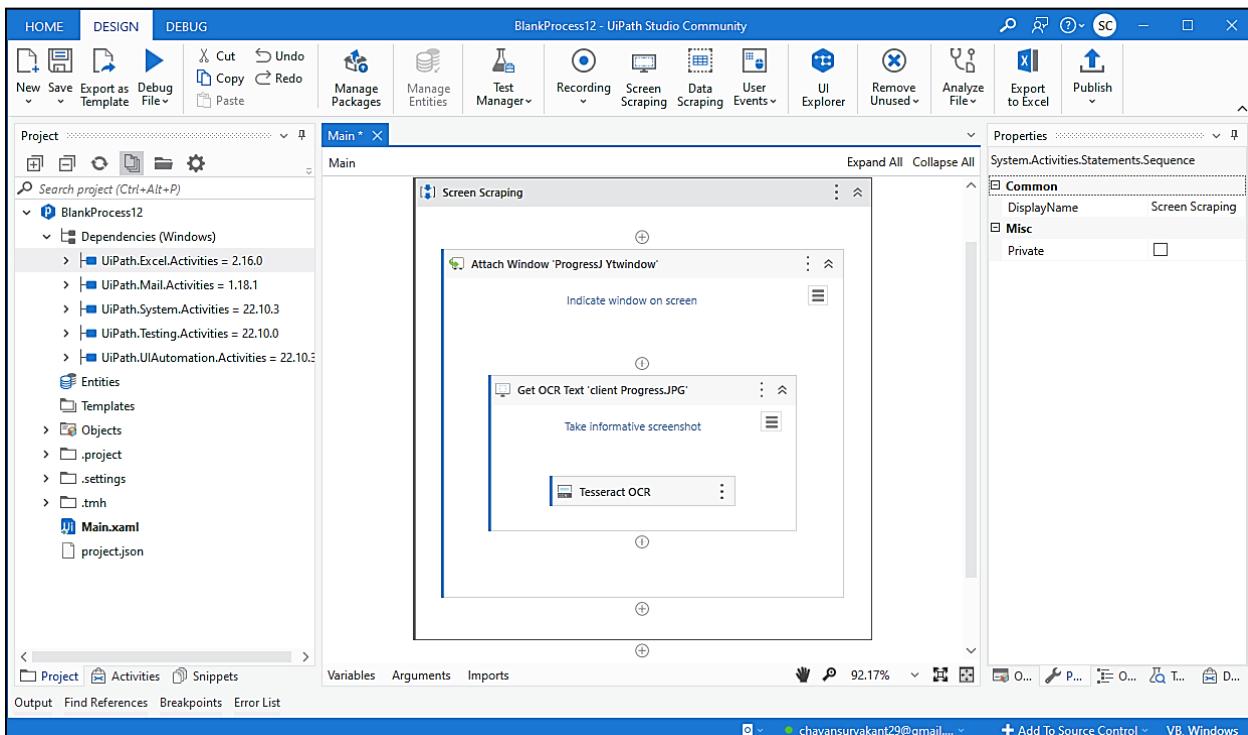


❖ For OCR Screen Scraping –

7. Screen Scraping Wizard -> Select OCR option from Scraping Method dropdown -> Refresh
OCR software singles out letters on the image, puts them into words and then puts the words into sentences, thus enabling access to and editing of the original content.



8. Click On Finish



Practical :8c

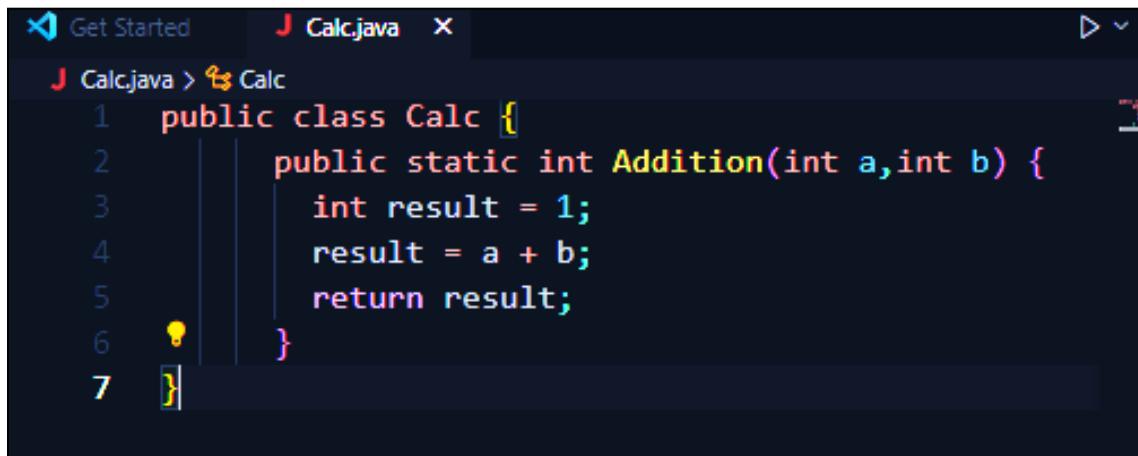
Aim: Install and automate any process using UiPath with the following plug-ins:

- 1)Java Plugin
- 2)Web Integration
- 3)Excel Plugin

Implementation:

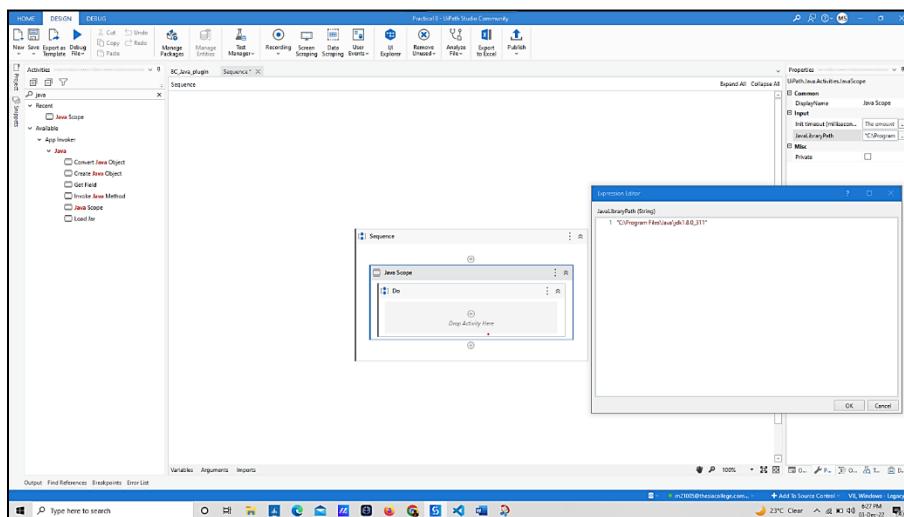
❖ JAVA PLUGIN -

1. Create a jar file of java program

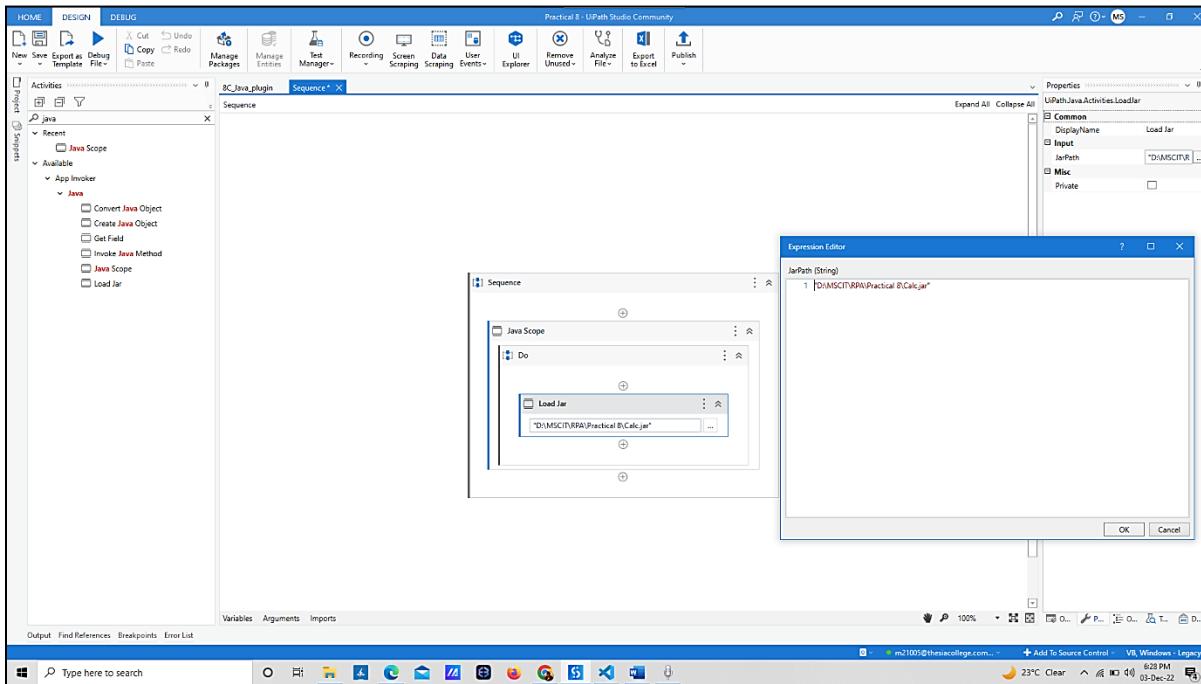


```
Get Started J Calc.java X
J Calc.java > Calc
public class Calc {
    public static int Addition(int a,int b) {
        int result = 1;
        result = a + b;
        return result;
    }
}
```

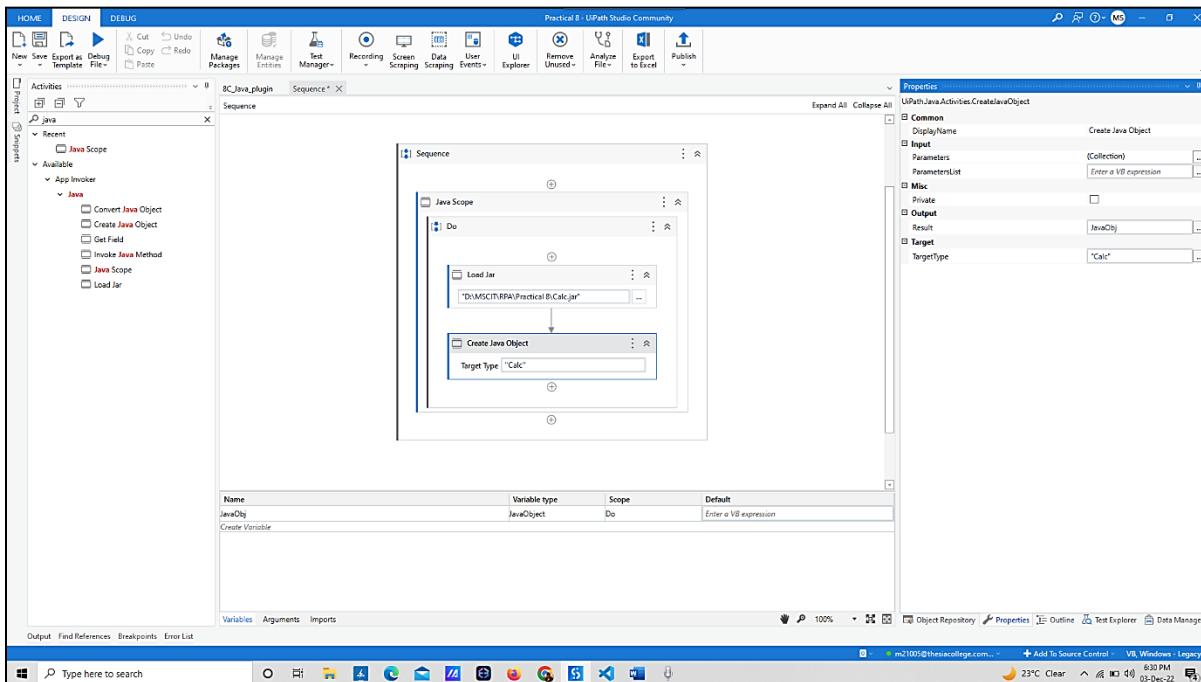
2. Insert java scope → add JavaLibraryPath "C:\Program Files\Java\jdk1.8.0_311"



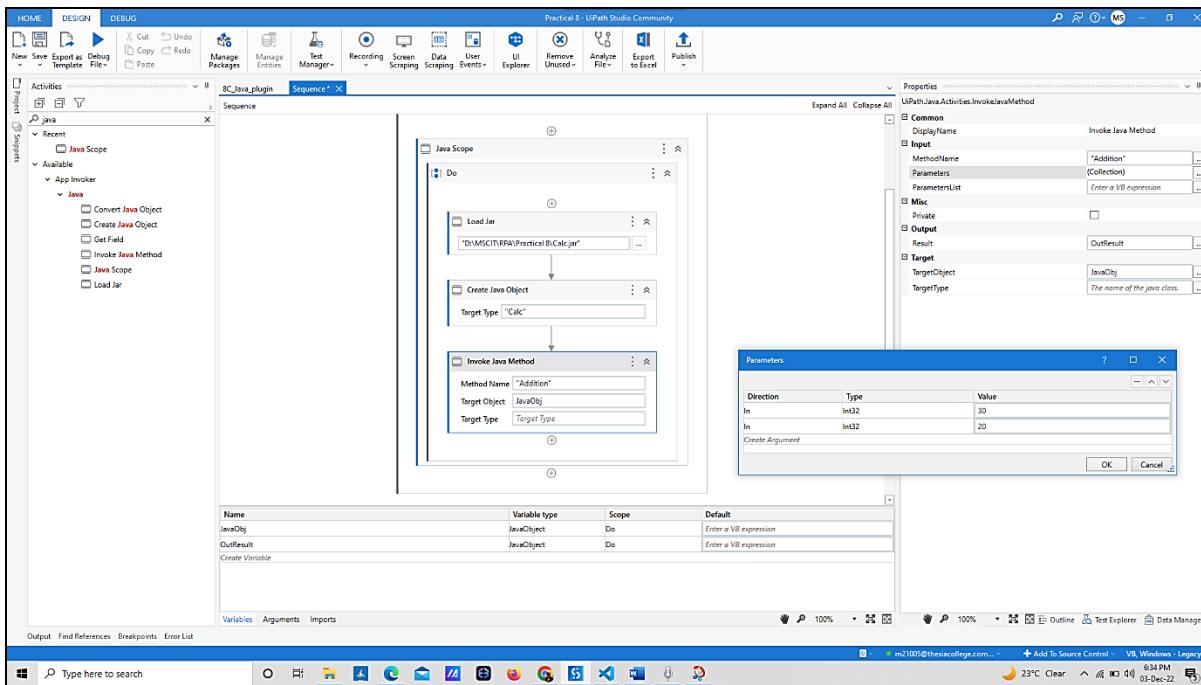
3. Insert Load Jar → add JarPath "D:\MSCIT\RPA\Practical 8\Calc.jar"



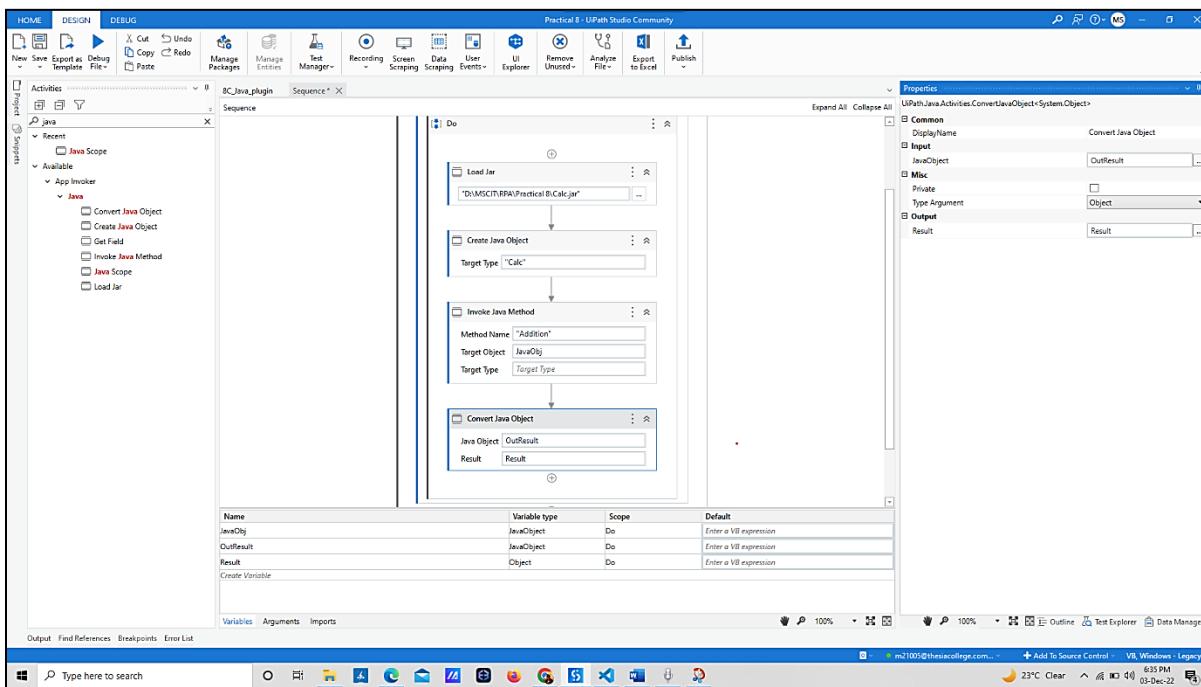
4. Insert Create Java Object → in Target type name of the class “Calc” → in Result type the name of the object you want to create “JavaObj”



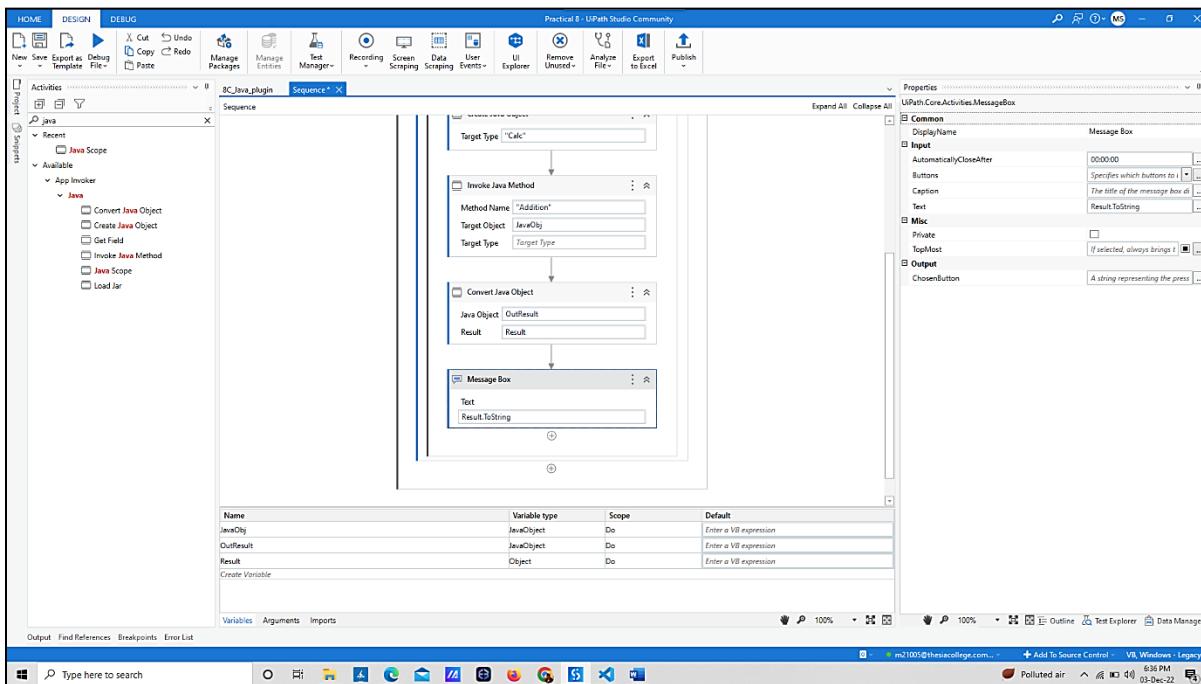
5. Insert Invoke Java Method → in MethodName add “Addition” → in Result add variable OutResult → in TargetObject add “JavaObj” → in parameters add the 2 variables (a,b) i.e.(50,20)



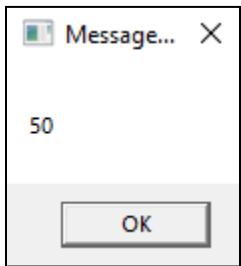
6. Insert Convert Java Object → in javaObject add OutResult → in Result add variable Result



7. Insert Message Box → add Result.ToString

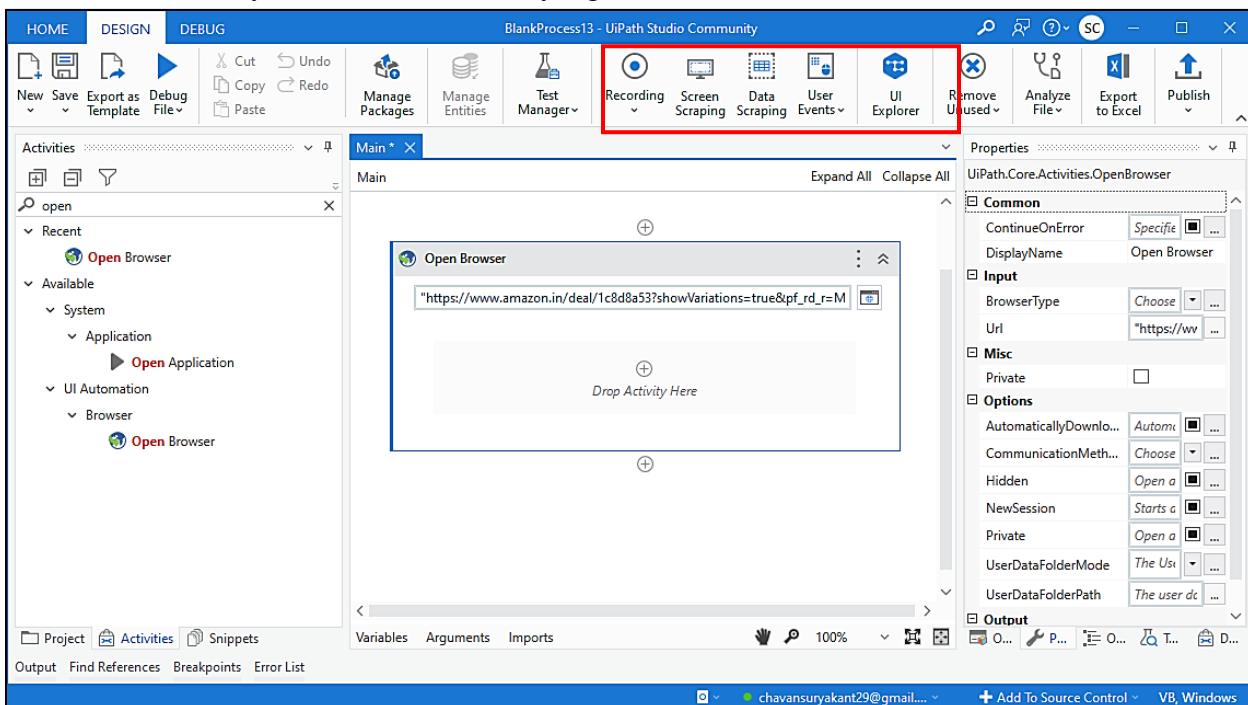


Output

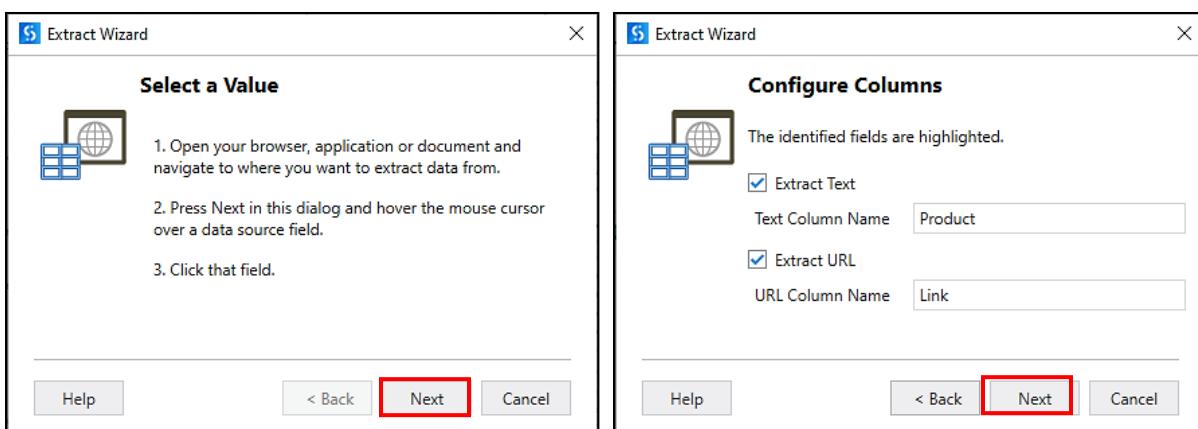


❖ Excel & Web Plugin –

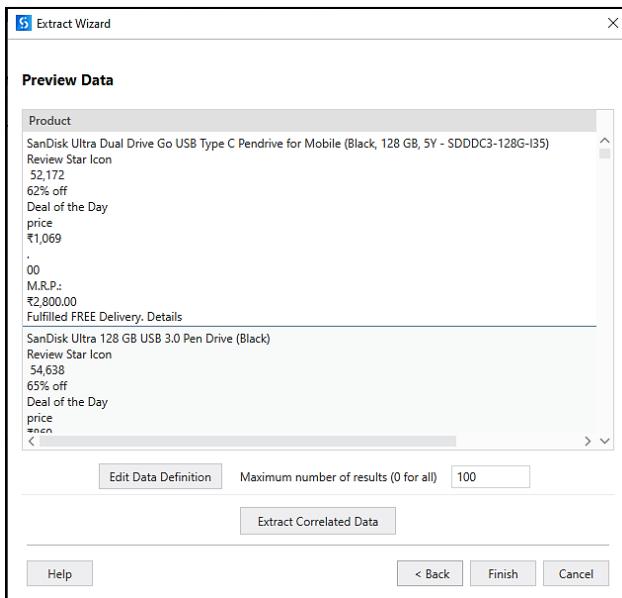
1. Start **Ui Path** & Create a **Blank Process**
2. Open Main Workflow
3. Disable **Modern Design Experience**
4. Drag and Drop **Open Browser** Activity
5. Add URL of any website in the activity e.g., **Amazon**



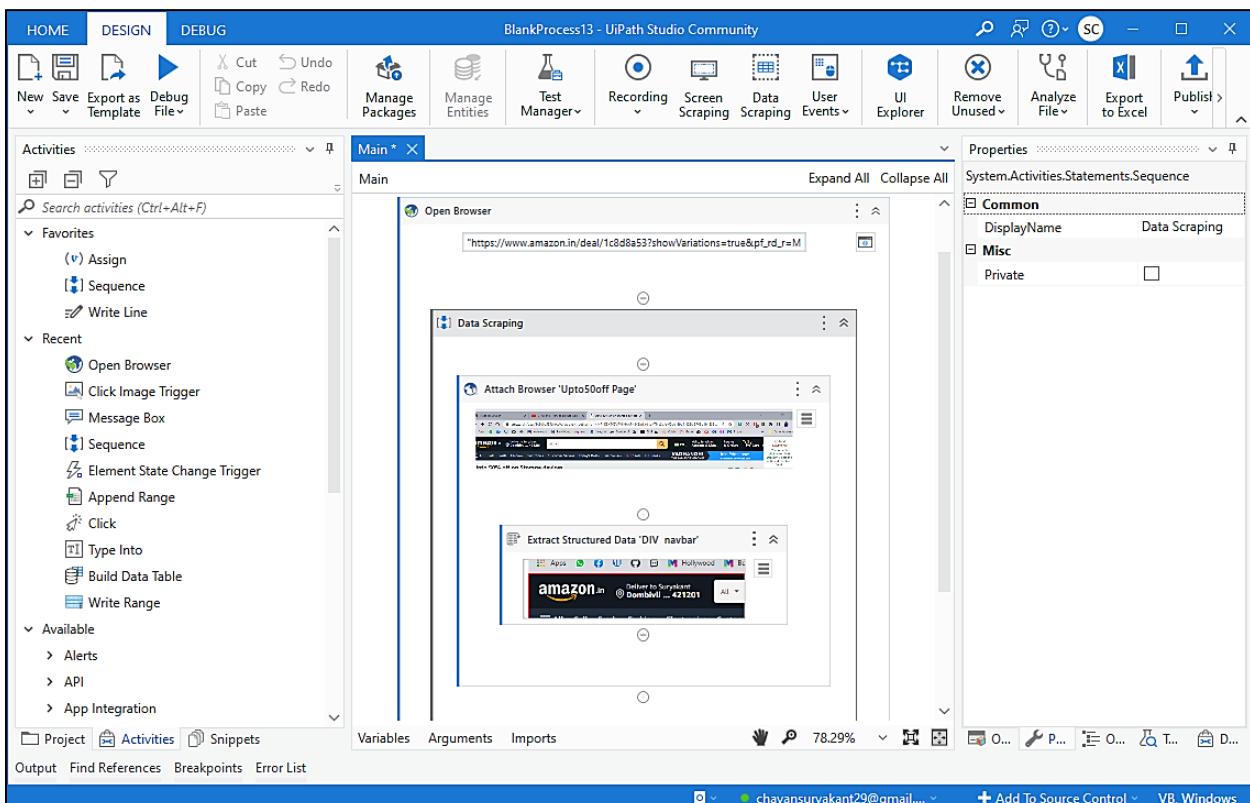
6. Click on Data Scraping in top ribbon
7. Extract Wizard will Open -> Click on Next
8. Select Any Part of webpage whose URL has been added to open browser activity
9. Again, Extract Wizard will appear -> click on Next -> Select Another Part on webpage
10. Then Wizard will ask for configuring The columns
11. Name the Columns
12. Select Extract URL -> Next



13. It will Preview the Data from selected parts

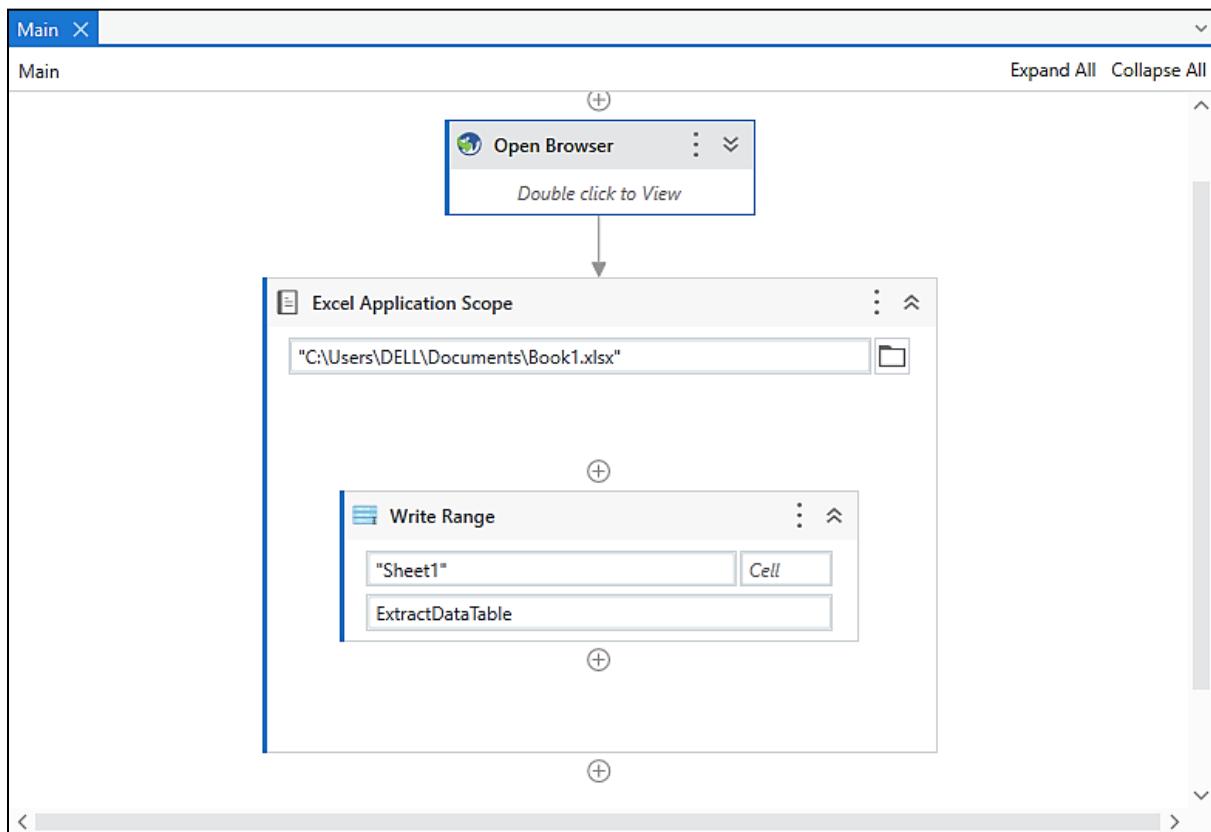


14. Click on Finish



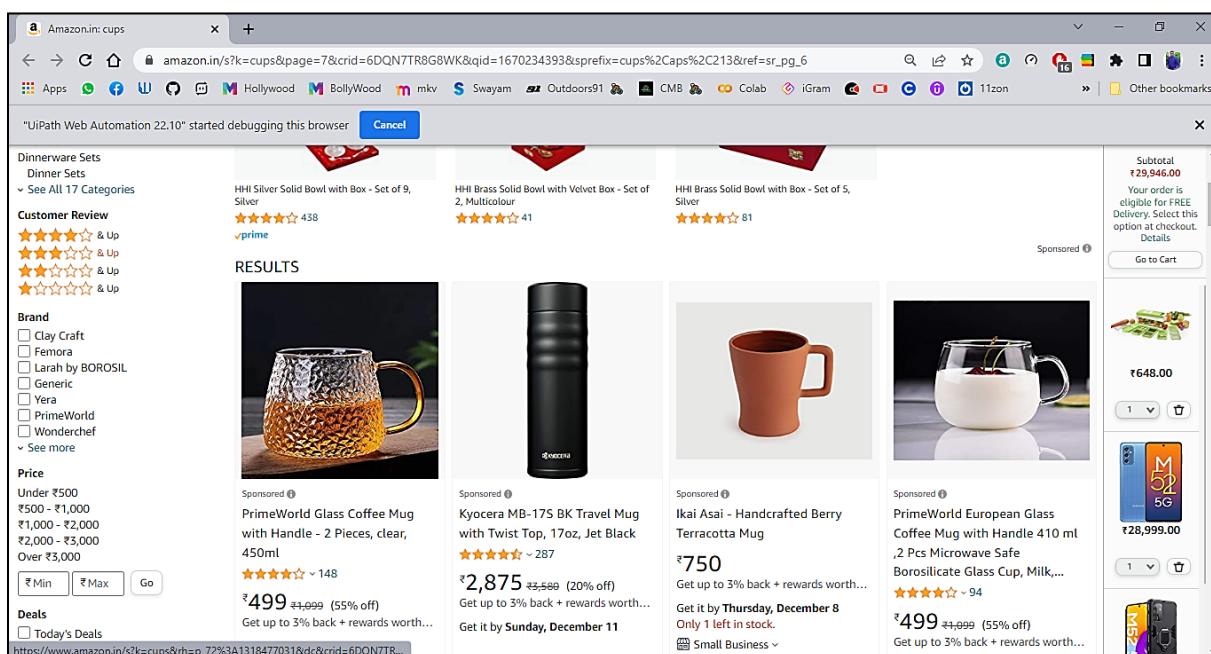
15. Minimize the Browser Activity -> Attach Excel Application Scope to the Browser Activity

16. Add path to a Blank Excel Sheet



17. Debug & Run

18. It will Open that particular Amazon Webpage



19. Also, it will write the Data into Excel File

The screenshot shows a Microsoft Excel spreadsheet titled "Book1 - Excel". The ribbon at the top has tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, View, and Help. The "Home" tab is selected. The status bar at the bottom indicates "Ready" and "Accessibility: Good to go".

The table in the spreadsheet consists of two columns:

	A	B
1	Product	Link
2	Red Lemon Polyester Bang Series 15.6inch Laptop Bag for Men 35 LTR Capacity Daily Office Bag for Men and Women Black (1903)	shorturl.at/bRTV6
3	SanDisk Ultra Flair 128GB USB 3.0 Pen Drive, Silver Black	shorturl.at/hCMSY
4	Samsung Galaxy S22 5G (Green, 8GB, 128GB Storage) with No Cost EMI/Additional Exchange Offers	shorturl.at/jswOX
5	Campus Mens Ignite Pro Running Shoes	shorturl.at/vEKTX
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Practical :9a

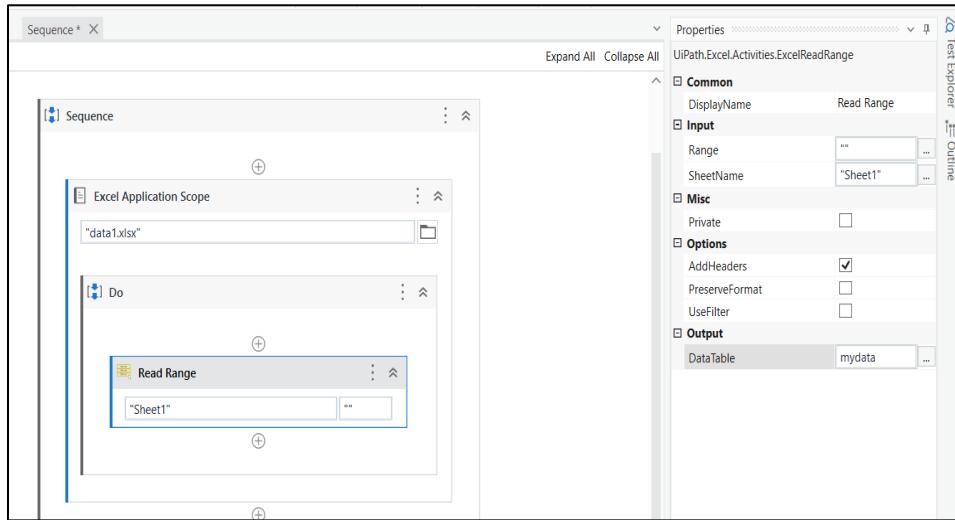
Aim: Automate the process of send mail event (on any email).

Implementation:

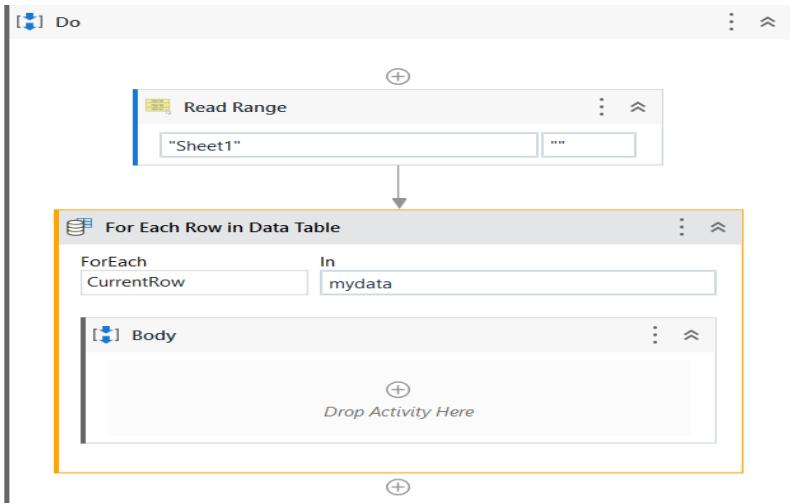
1 Create data table in excel

	A	B	C	D	E
1	email	subject	body		
2	snehakada hiii		mail from uipath		
3	kadamarvi hello		just testing		
4	shwetakac test mail		test		
5					

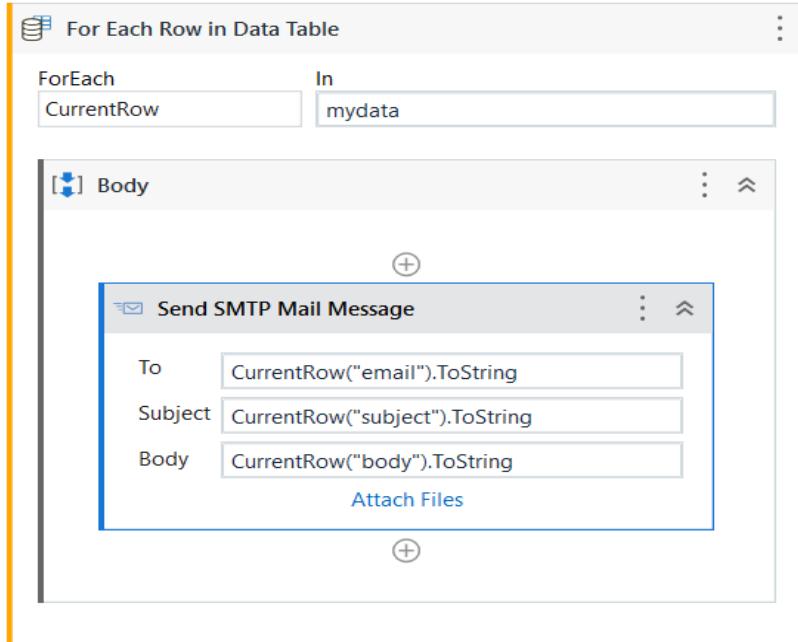
2. Create a new blank process -> open main.xaml ->Add sequence activity -> Add Excel application scope inside sequence and upload the data file-> Add read range and create variable .



3 Add For each row in data table after Read Range and enter the variable we created earlier



4 Inside body Of For Each Row in Data Table add send smtp mail message



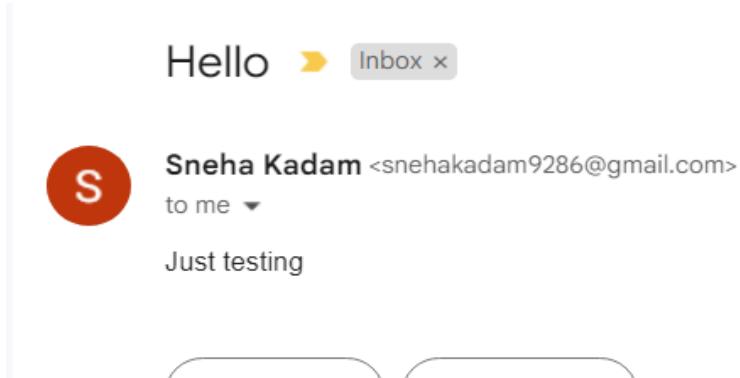
5 In the property of smtp mail message add port number,server name, email and password

Properties

UiPath.Mail.SMTP.Activities.SendMail

- **Attachments**
 - Attachments (Collection)
 - AttachmentsCollection
- **Common**
 - DisplayName Send SMTP Mail Message
 - TimeoutMS
- **Email**
 - Body CurrentRow("body")
 - Subject CurrentRow("subject")
- **Forward**
 - MailMessage
- **Host**
 - Port 587
 - Server "smtp.gmail.com"
- **Logon**
 - Email "snehakadam92"
 - Password
 - SecurePassword
 - UseOAuth
- **Misc**
 - Private
- **Options**
 - Ignore CRL
 - IsBodyHtml
 - ReplyTo

6 Run the program and check the mail in your email account.

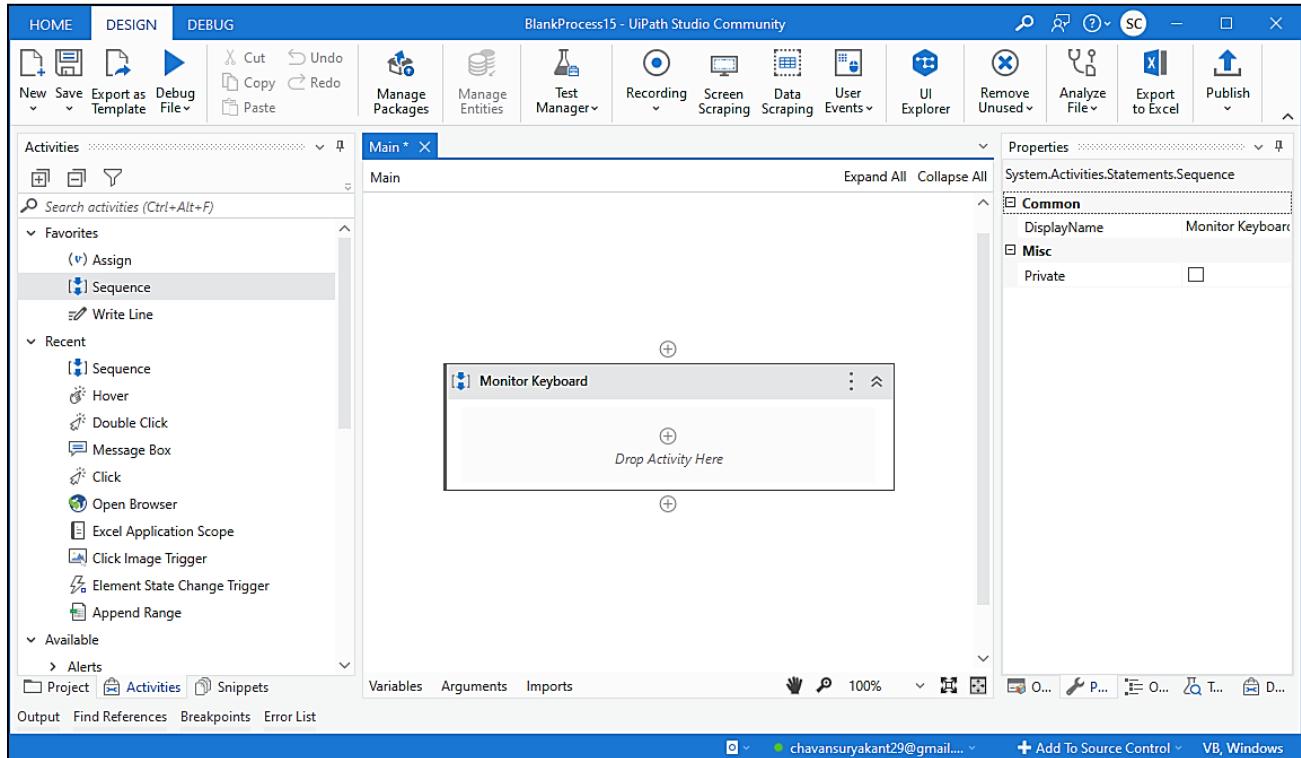


Practical :9b

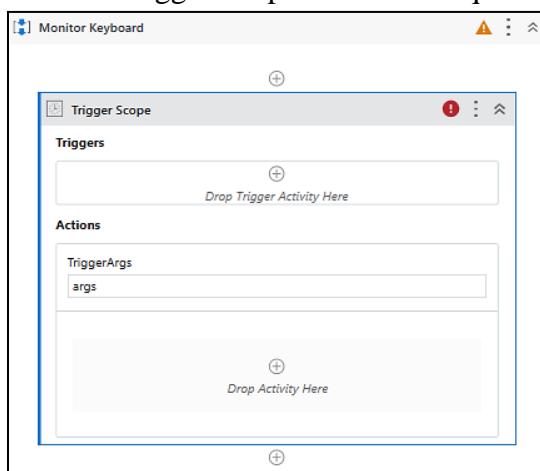
Aim: Automate the process of launching an assistant bot on a keyboard event.

Implementation:

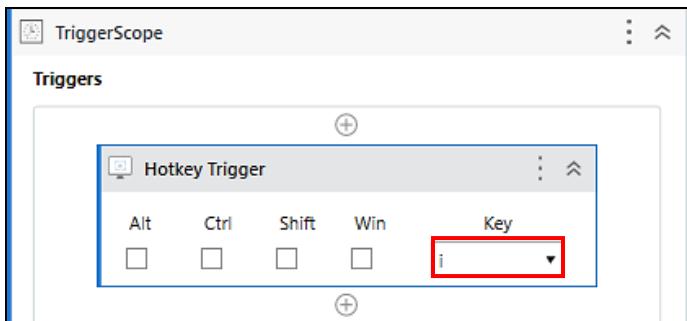
1. Start Ui Path & Create a Blank Process->Open Main Workflow->Disable Modern Design Experience ->Add a Sequence and name it as Monitor Keyboard



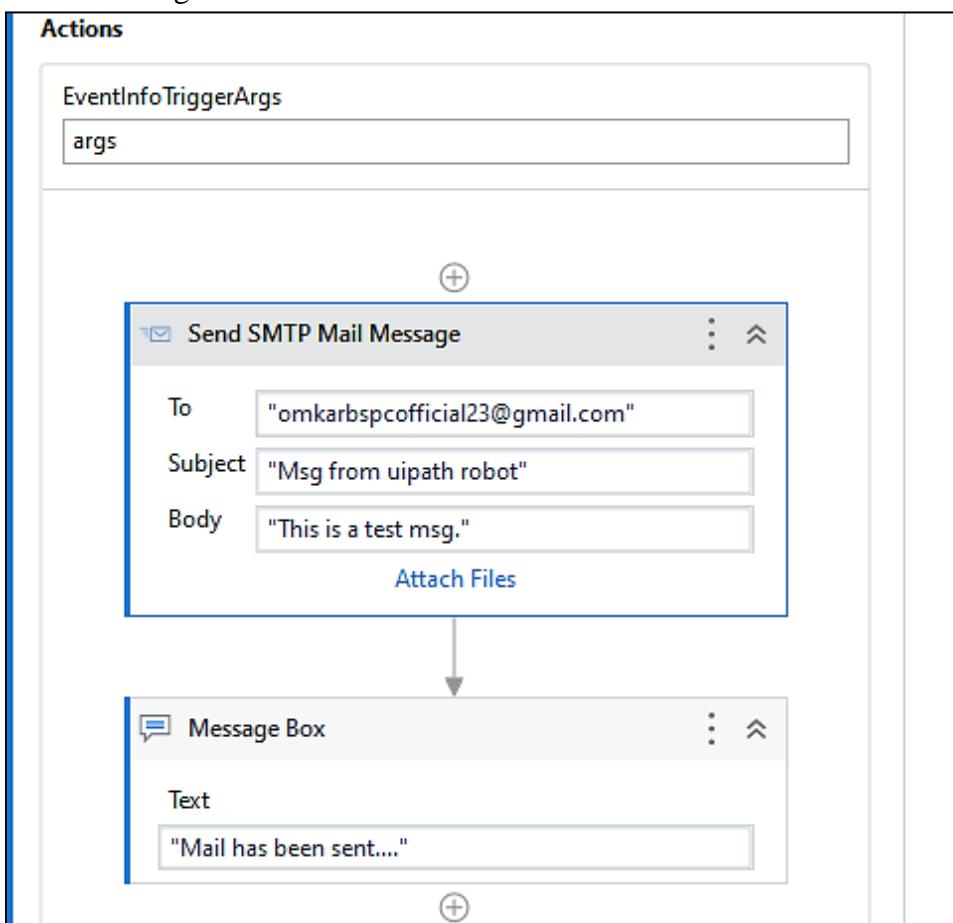
2. Add Trigger Scope inside the sequence



3. Inside Triggers add Hotkey Trigger activity & select any key e.g., i



4. Add Send SMTP Mail Message Activity Under Actions and attach a Message Box to it
5. Enter Receivers Mail Address, Subject etc.,
6. In Properties for Mail Activity add –
Under Host section add Port no., Server &
Under Logon section add Receivers E-mail and Password



Host	
Port	587
Server	"smtp.gmail.com"
Logon	
Email	"omkarbspcofficial23@gmail.com"
Password	"babgoetsoftragfk"

7. Debug & Run



8. Check Mailbox also -

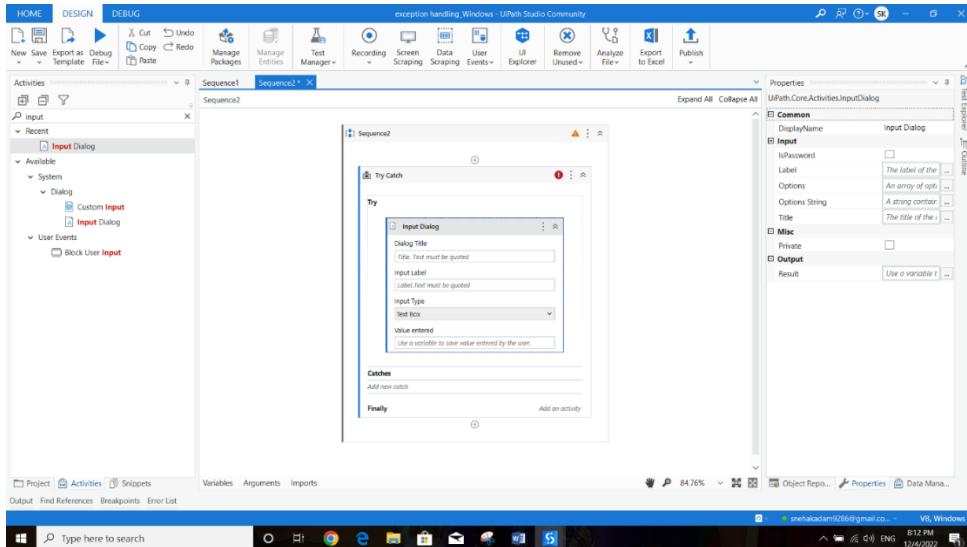


Practical 9c

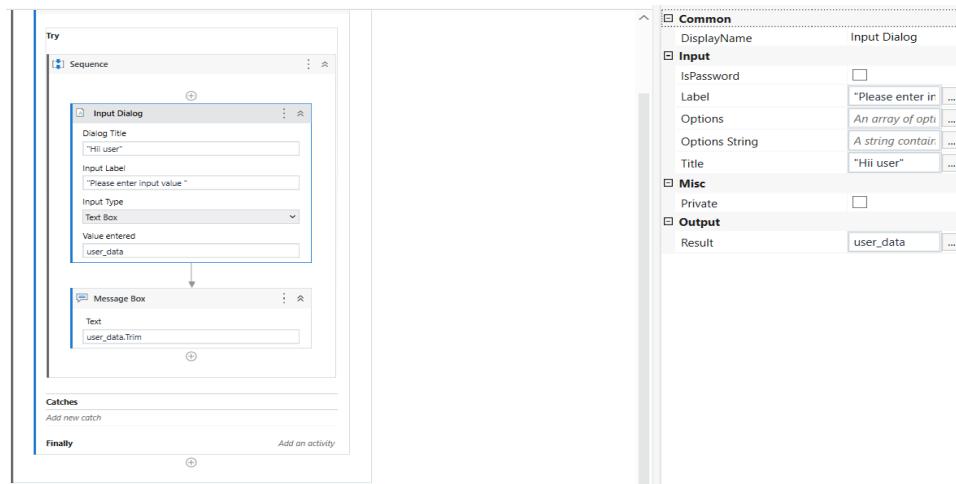
Aim : Demonstrate the Exception handing in UiPath.

Implementation:

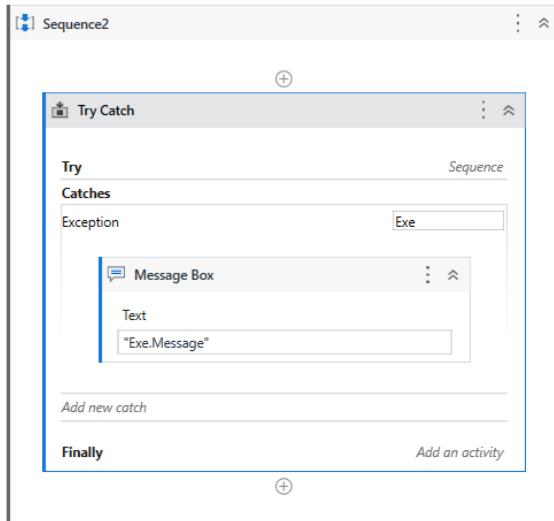
- 1.create a new blank process -> open main.xaml -> Add sequence activity -> Add try – catch block inside sequence <- add input dialog inside try-catch block



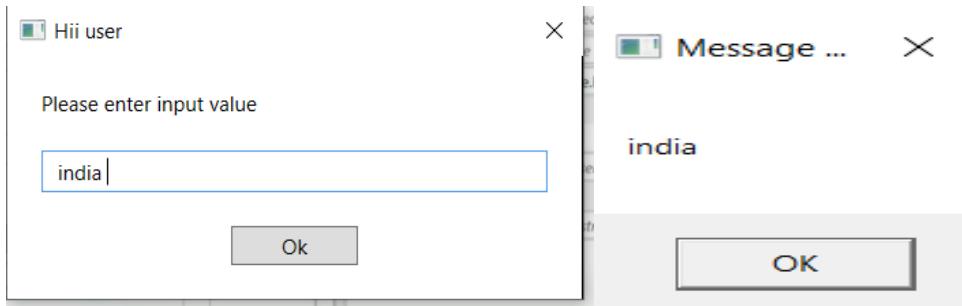
- 2 . In input Dialog Enter title , label for input, in “Value entered” textbox right click to create variable to store the entered value , then type the desired variable name and press enter. Add the message box after input dialog and type “user_data.Trim”.



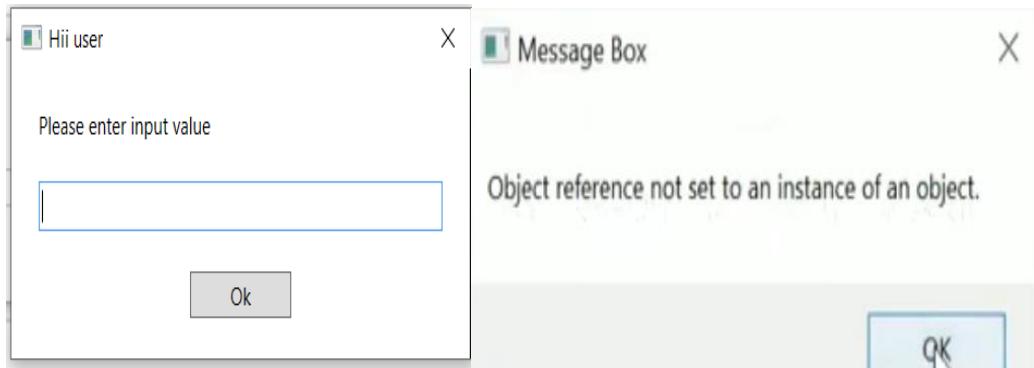
- 3 In the catch put variable name as Exe and add message box and enter “Exe.message”.



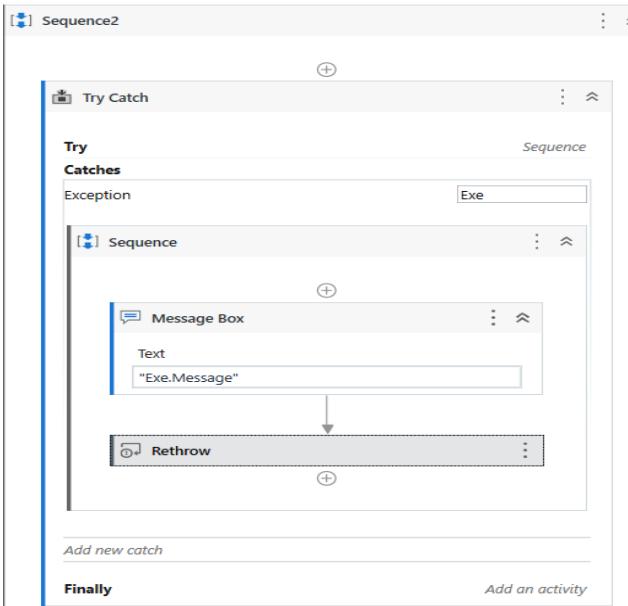
4 after that run the program



5 After that again run the program but don't enter the value



6 Repeat the step 4 for Throw,Rethrow and Terminated workflow and run the program after each activity (Throw,Rethrow,Terminated workflow) respectively.



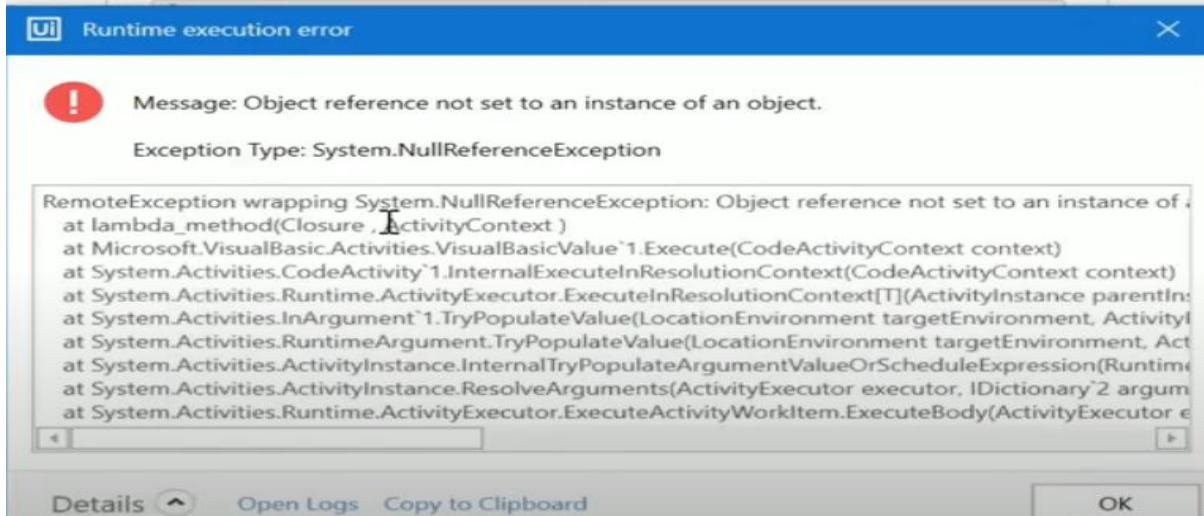
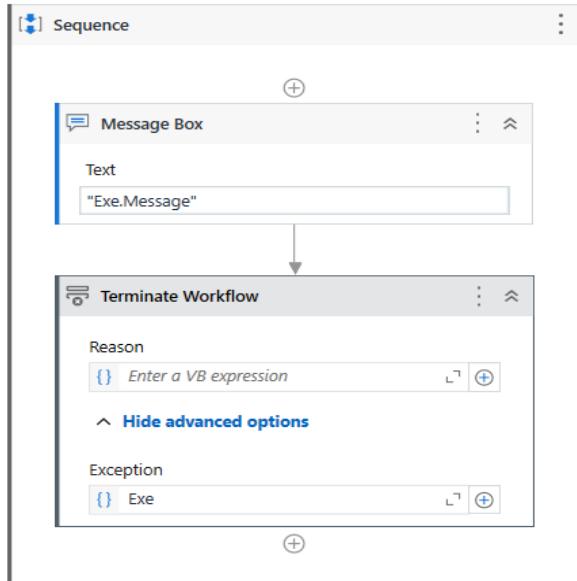
7 run Throw block

The screenshot shows the workflow after adding a Throw block. The Throw block is configured to throw an exception with the message "Input value is not provided.please provide it". A runtime execution error dialog box is displayed, showing the exception details:

- Source:** Throw
- Message:** Input Value is not Provided. Please Provide It
- Exception Type:** System.Exception

At the bottom of the dialog, there are buttons for Details, Open Logs, Copy to Clipboard, and OK.

8 Run terminated workflow



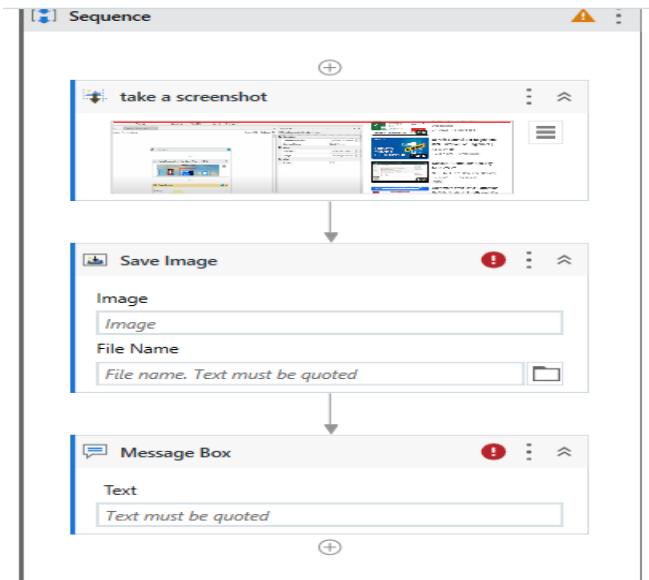
Practical 10 A

Aim: Automate the process of logging and taking screenshots in UiPath

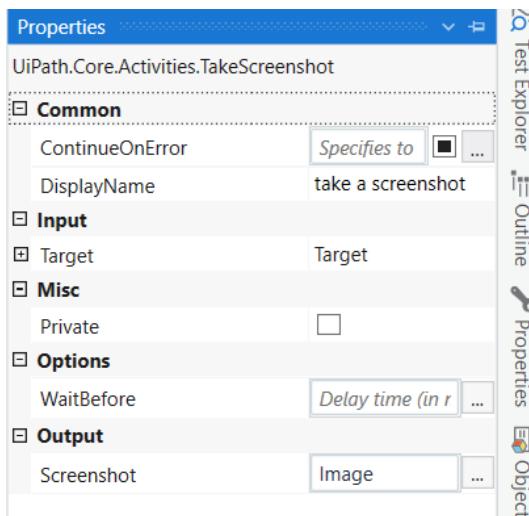
Implementation:

1.create blank process->open main-xml->add sequence->inside the sequence add take screenshot->after that below take screenshot add save image->

Then add message box.

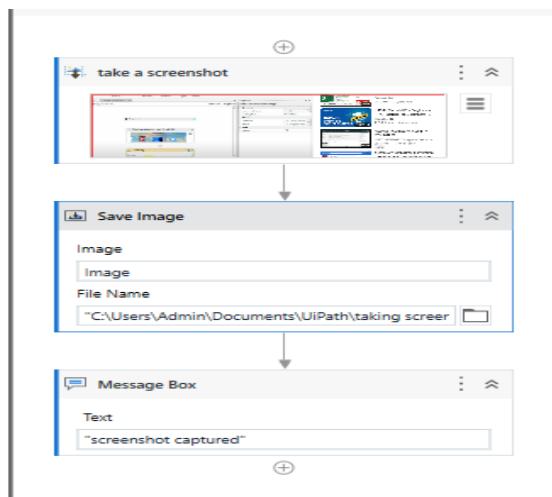


2.Go to take a screenshot property -> create variable as Image



3.Inside save image Give image name -> add folder->

And enter message into message box



Run the program



Go to the file where captured image are saved

This PC > Local Disk (C:) > Users > Admin > Documents > UiPath > taking screenshot > image

Name	Date modified	Type	Size
image11	12/4/2022 7:31 PM	File	35 KB
image29	12/4/2022 5:31 PM	File	151 KB

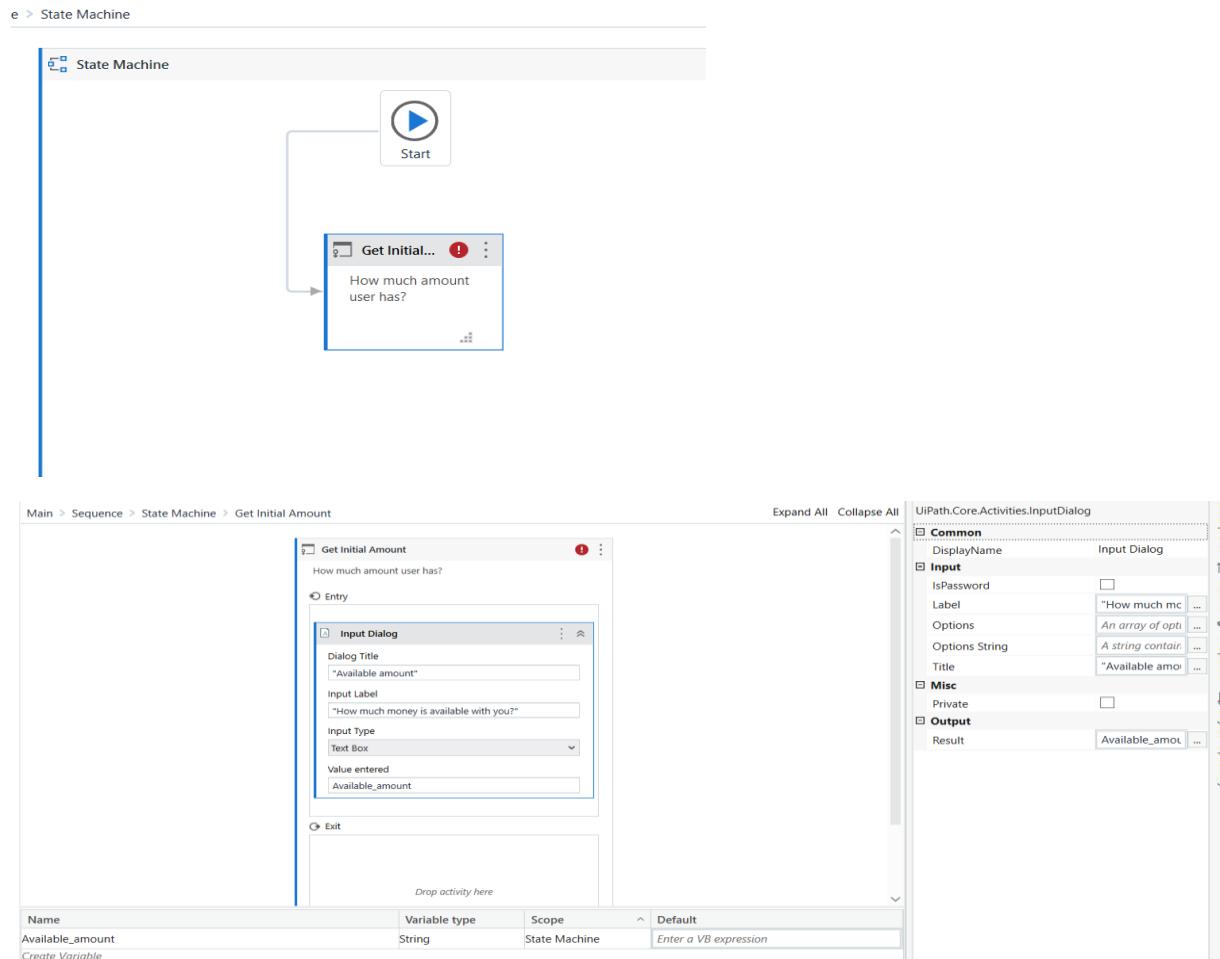
Practical 10b

Aim: Automate any process using State Machine in UiPath.

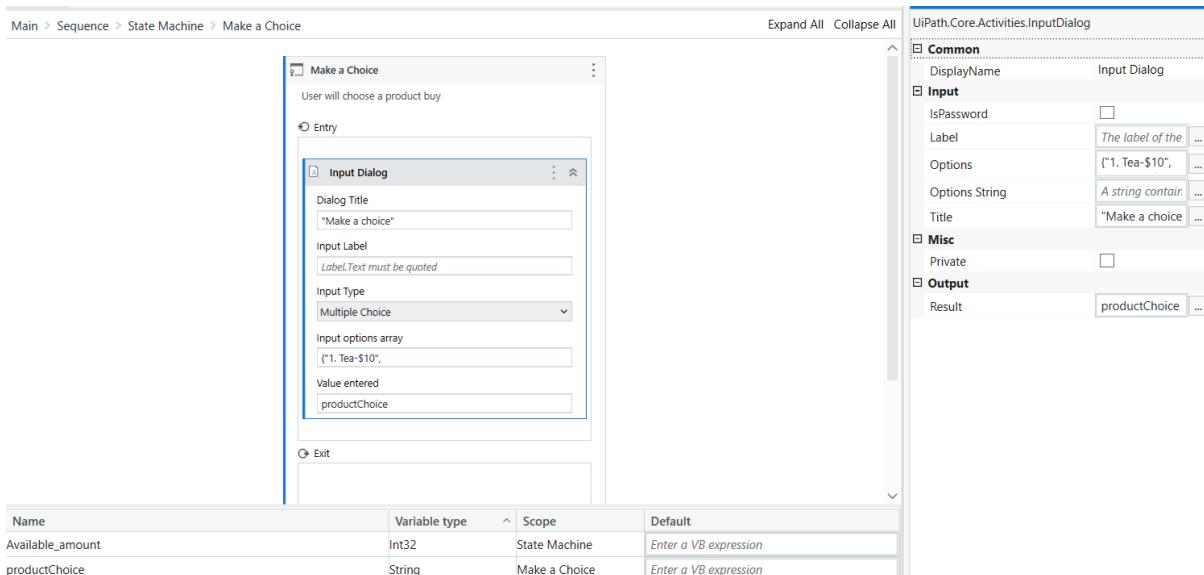
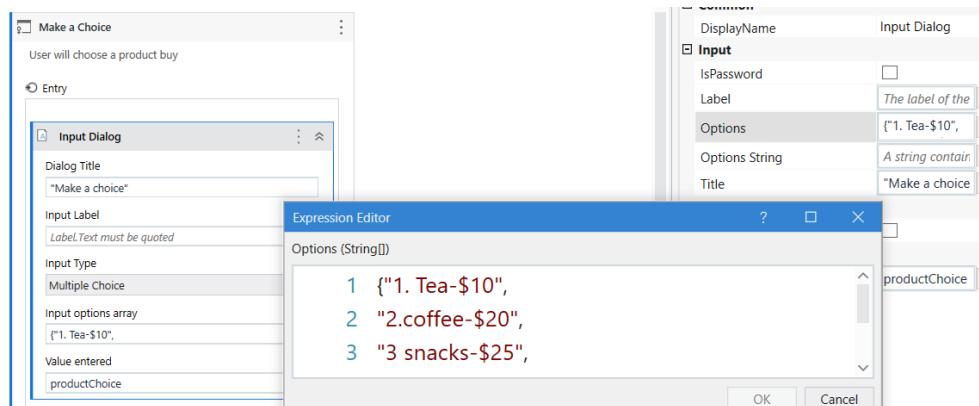
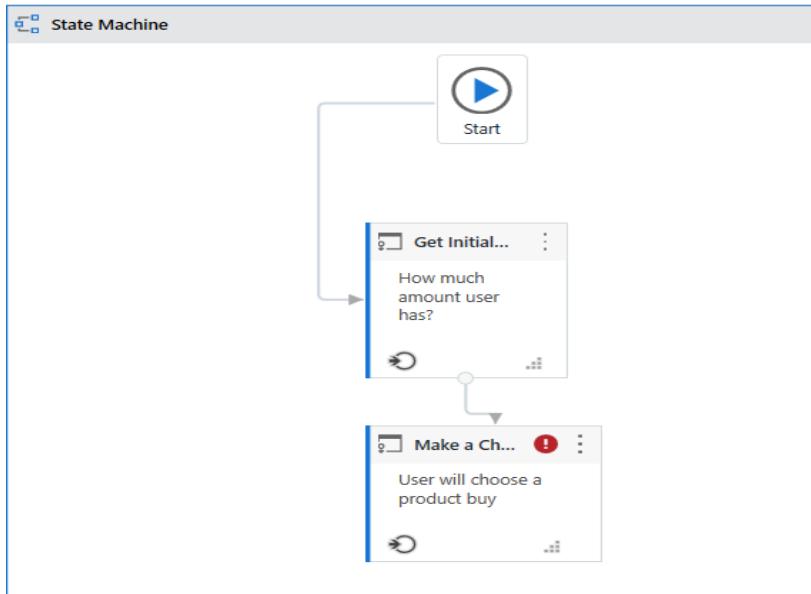
Implementation:

1. create new blank process-> open main xml->Add state machine->

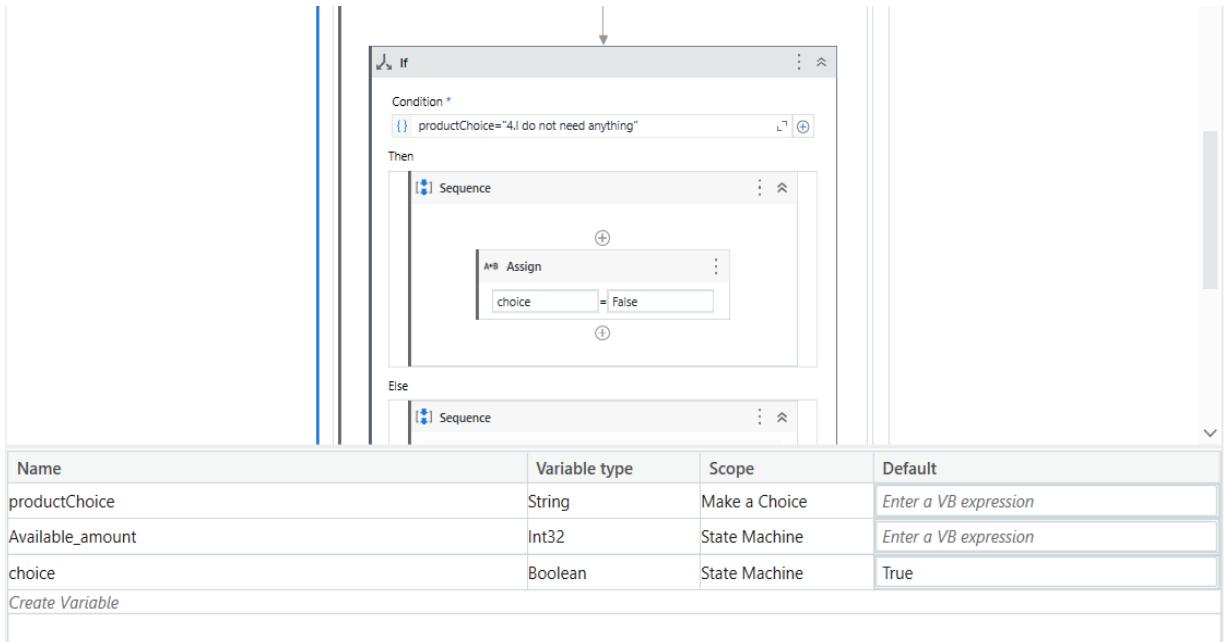
Below start button add state->change state name into another->inside state add input dialog ->give label ,title for input->create variable



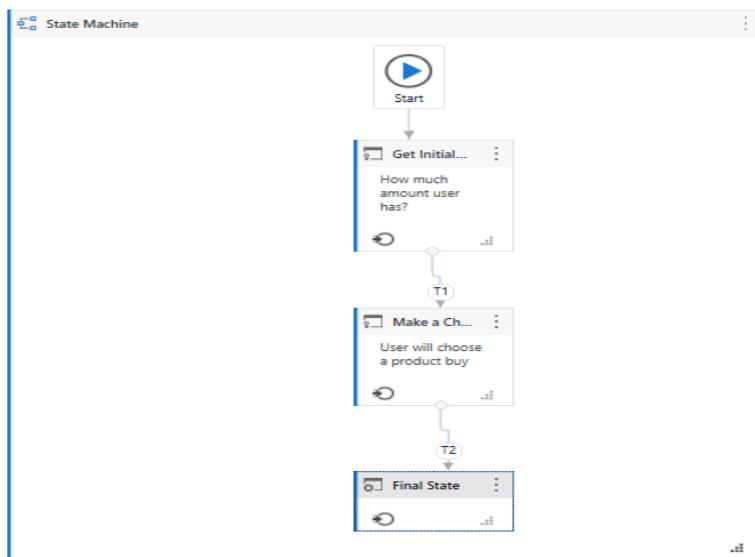
- 2 Again go to the state machine and add second state-> give name to the state->inside the state add input dialog -> give label,title for input ->create variable->go to the property click option and put choices.

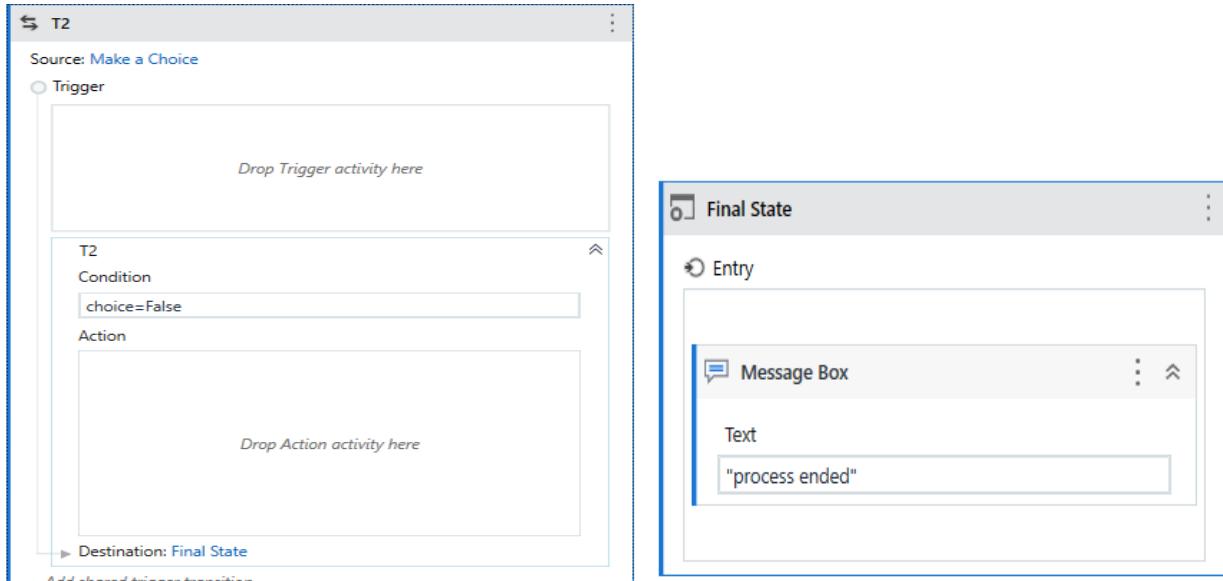


3. Inside second state(make a choice)add if condition->give variable to the condition->there will be two condition if and else->inside the if condition add Assign -> create variable.

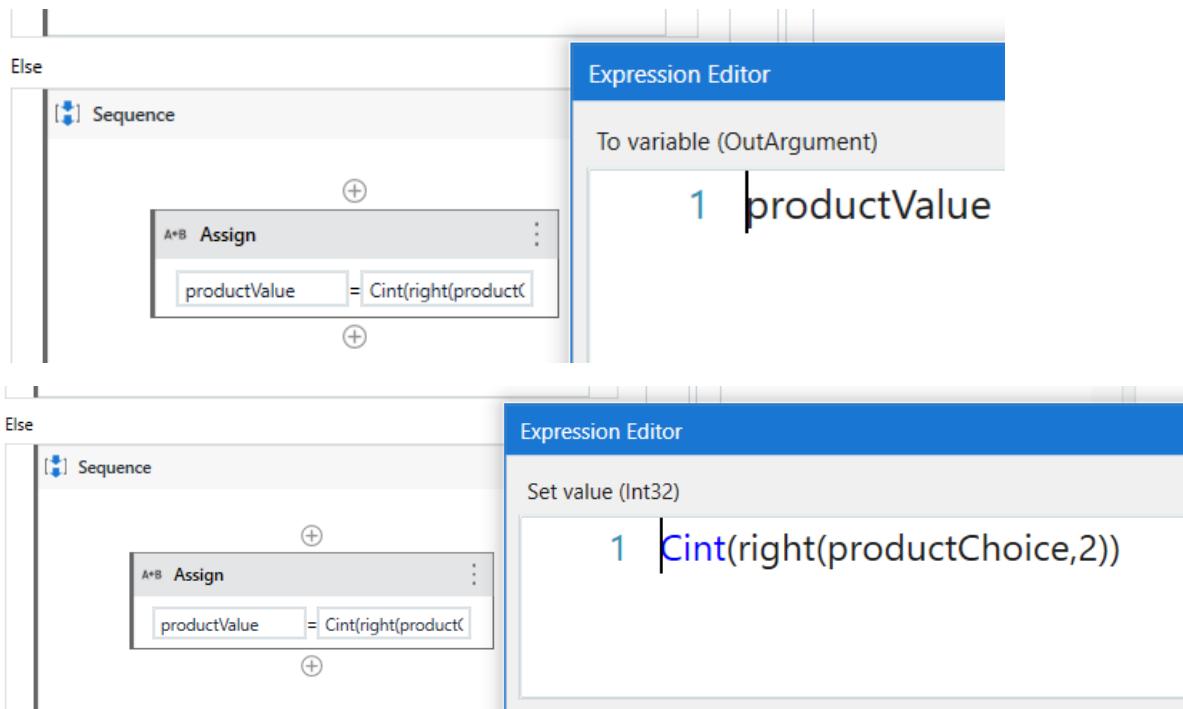


4. Again go to the state machine add final state and connect them together-> there will be transition t1 and t2->click to the t2 transition that means final state ->give name to the condition->click final state and add message box enter message.



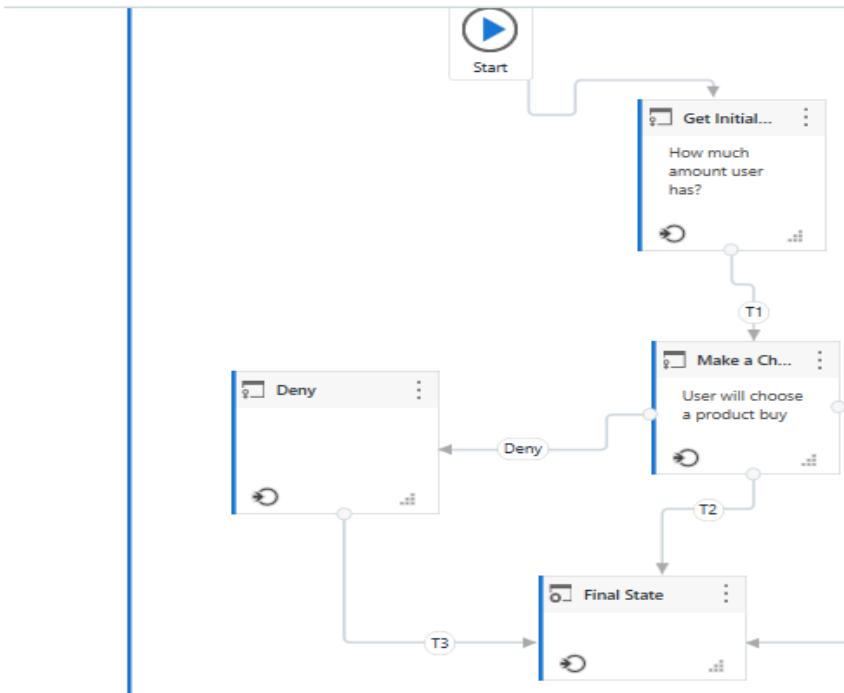


5.Go to the second state(make a choice)->else condition->add Assign activity->create variable and give expression

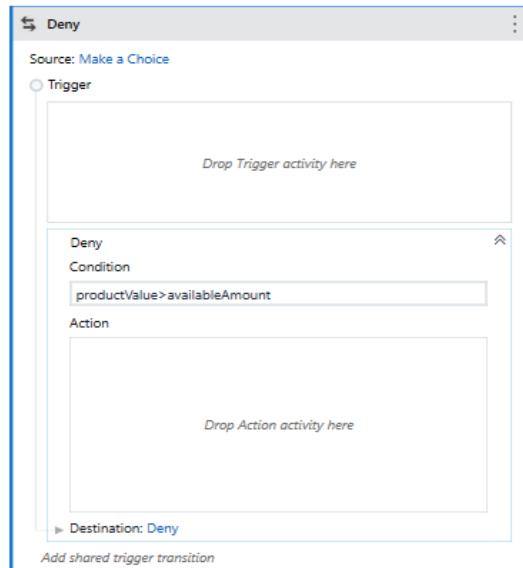


6.again go the state machine and add another state ->changed name into Deny->connect second state(make a choice)and Deny state together->give transition name as Deny->go to the Deny transition and make a condition->after that go to the Deny entry box and add message box->enter message->connect Deny State to the final state.

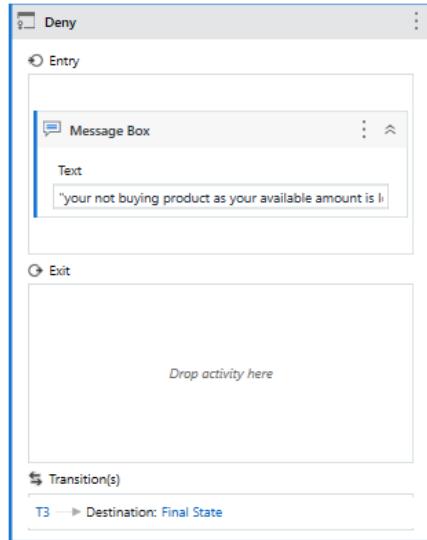
State Machine



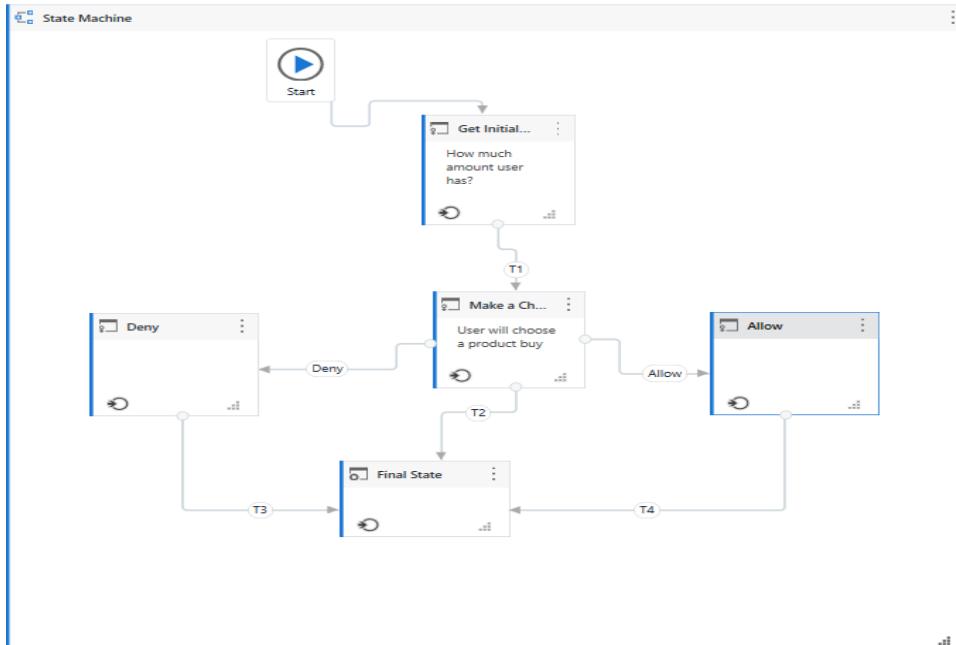
Make a Choice > Deny

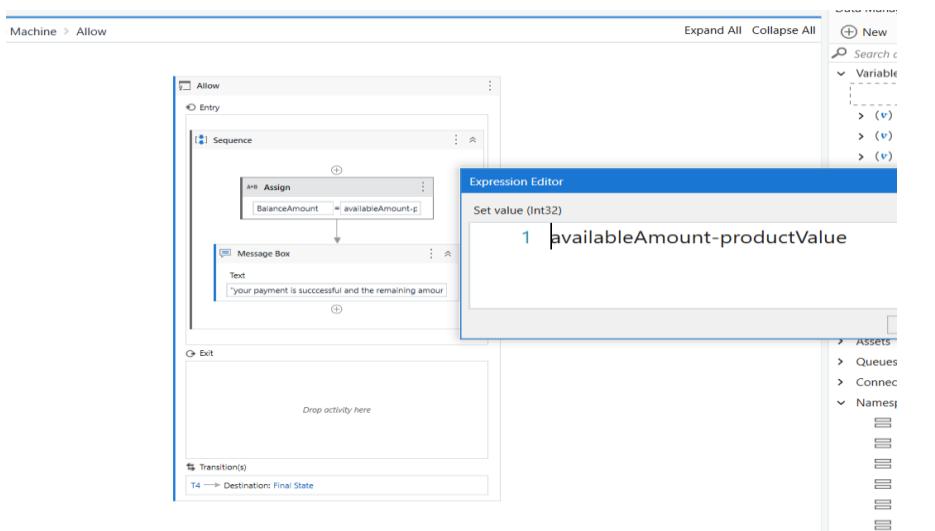
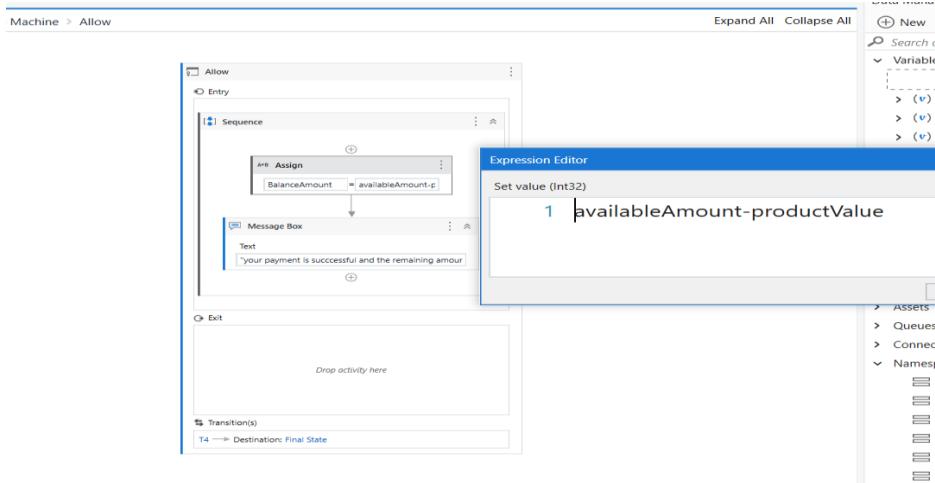


Deny



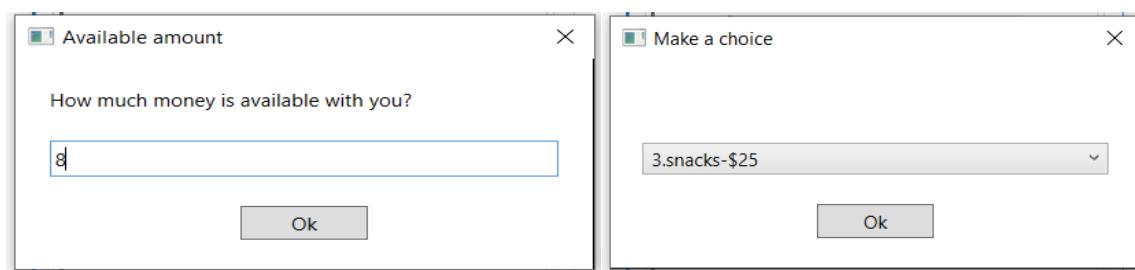
7. Now Again go to the state machine and add another state-> give name as Allow->connect second state(make a choice a)and Allow state together->give transition name as Allow->In transition (Allow)state make a condition ->after that go the entry box of Allow state ->add message box and Assign activity->connect to the final state.

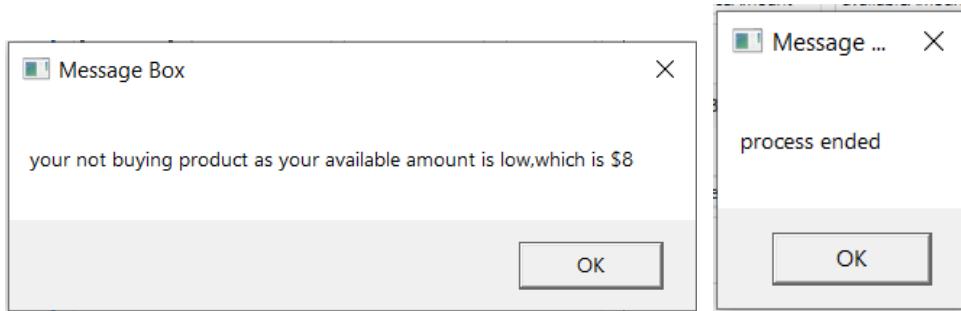




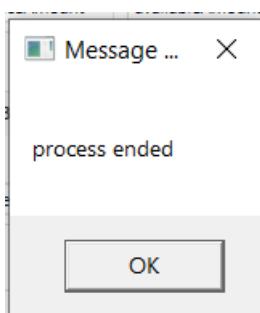
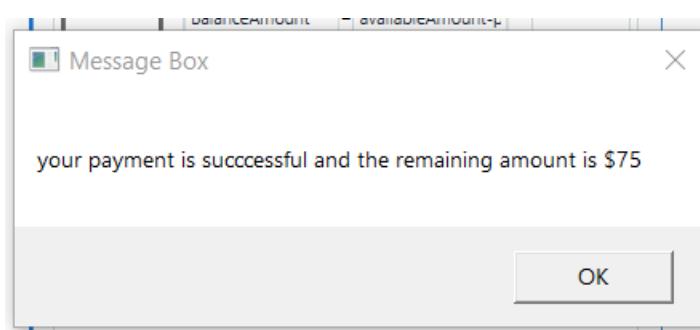
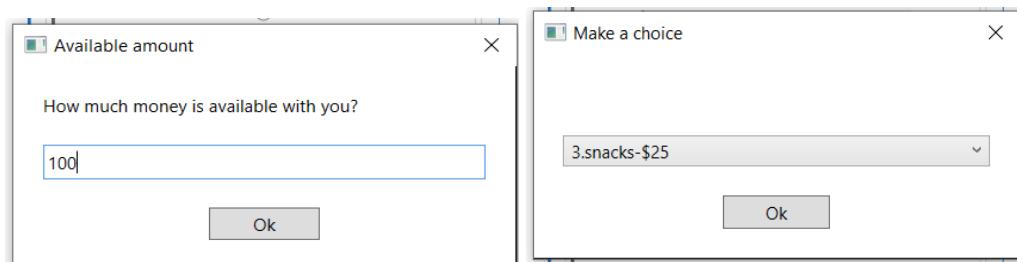
8.Run the program

For Deny state





For Allow state

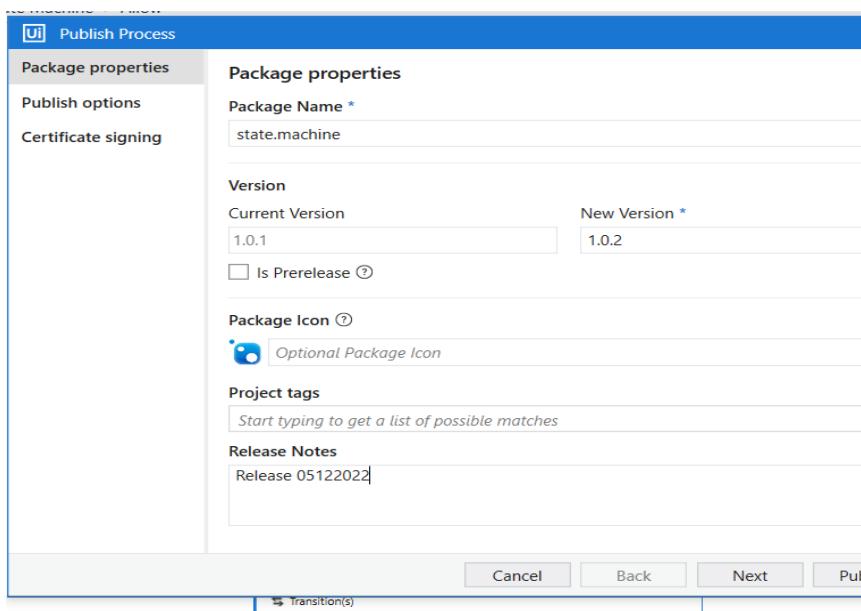


Practical 10c

Aim: Demonstrate the use of publish utility.

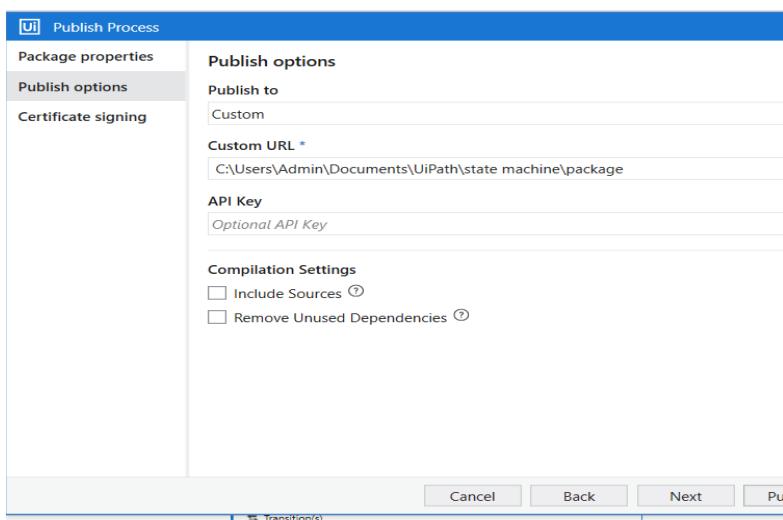
Implementation:

- 1.Create any program in Uipath studio->Go to the Publish->package properties-> release notes (type date)

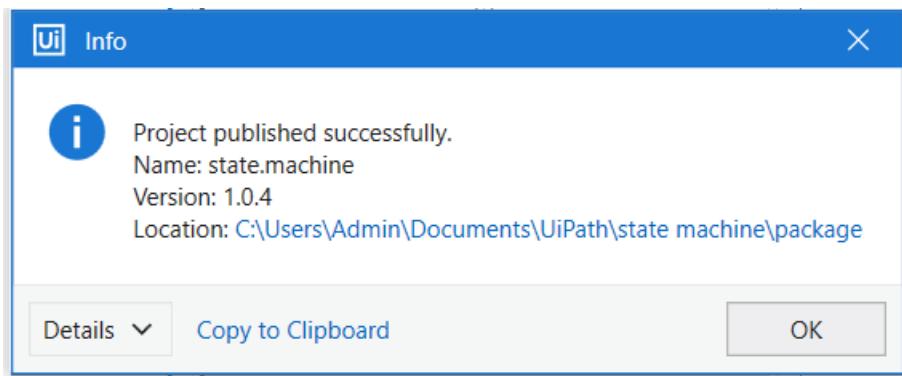


- 2.go to the public option->select custom->select folder from custom url

Then click to the publish.



- 3 After that message will appear



4 Go to the location where your package is published

This PC > Documents > UiPath > state machine > package			
Name	Date modified	Type	Size
state.machine.1.0.4.nupkg	12/5/2022 10:19 AM	NUPKG File	47 KB