



Hindi Vidya Prachar Samiti's  
Ramniranjan Jhunjhunwala College of Arts,  
Science & Commerce (Autonomous),  
Ghatkopar(W) MUMBAI - 400 086

DEPARTMENT OF INFORMATION TECHNOLOGY  
2022 - 2023

M.Sc. (I.T.) SEM III  
**Robotic Process Automation - RPA**

Name: Pavan Ashok Yadav

Roll No.: 620

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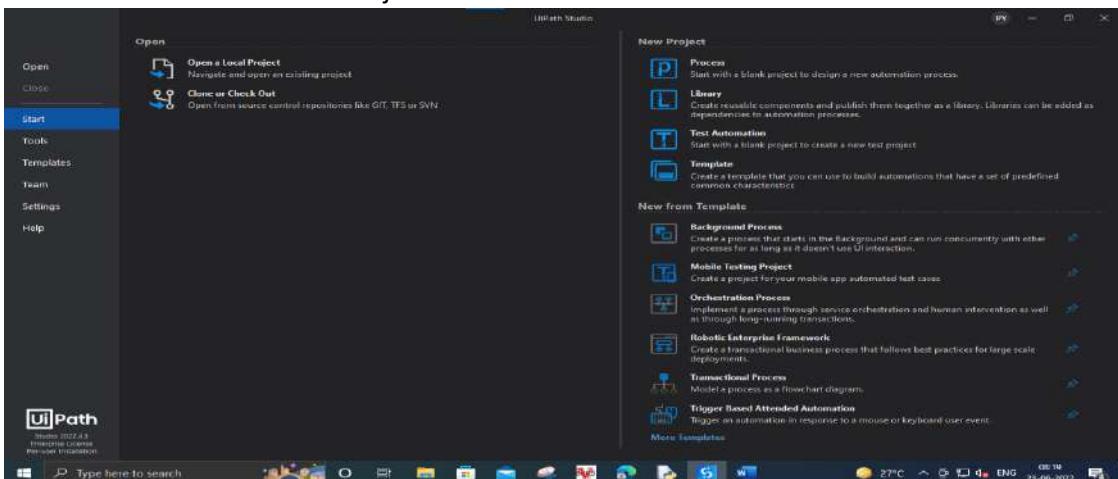
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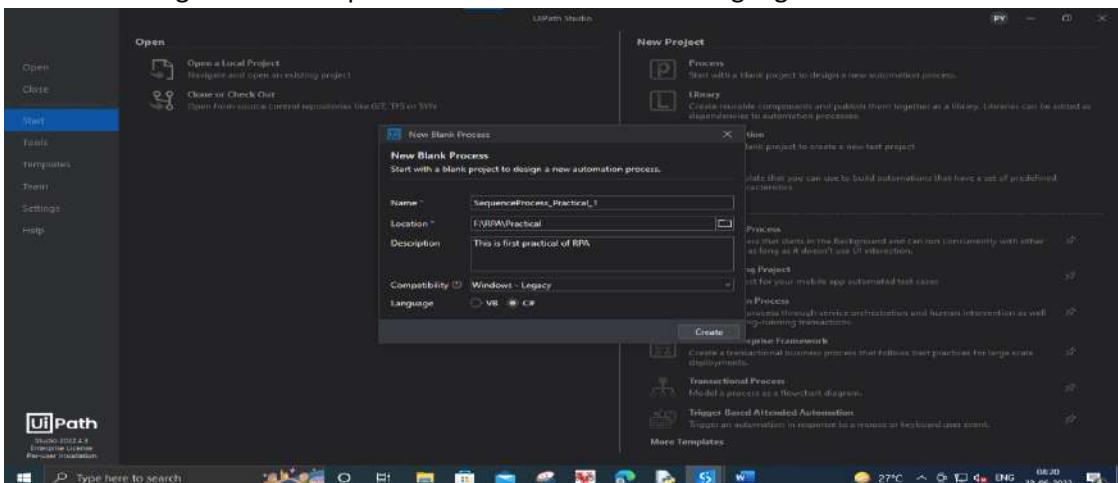
## Practical 1:

### A] Create a simple sequence based project

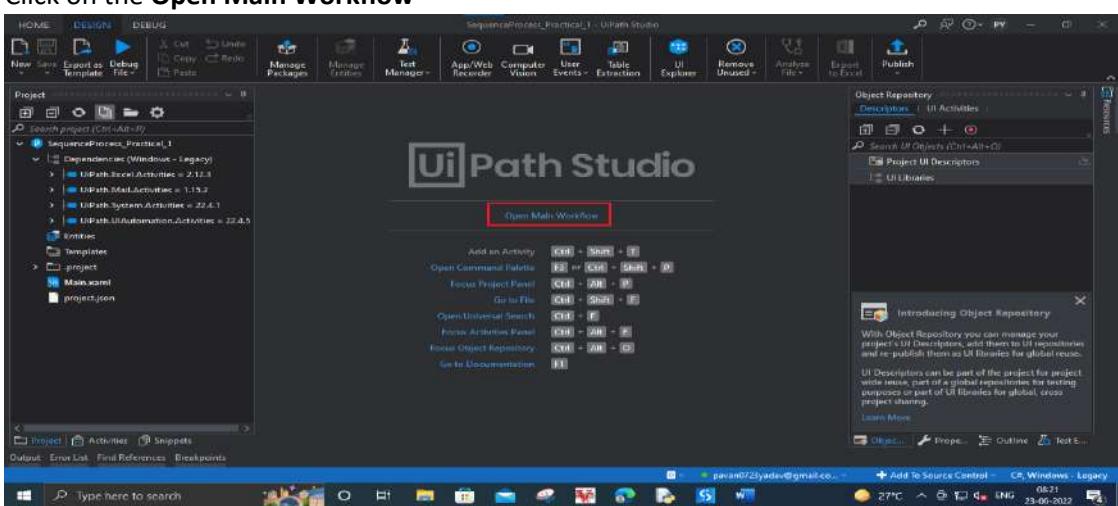
- Click on the **Process** to New Project



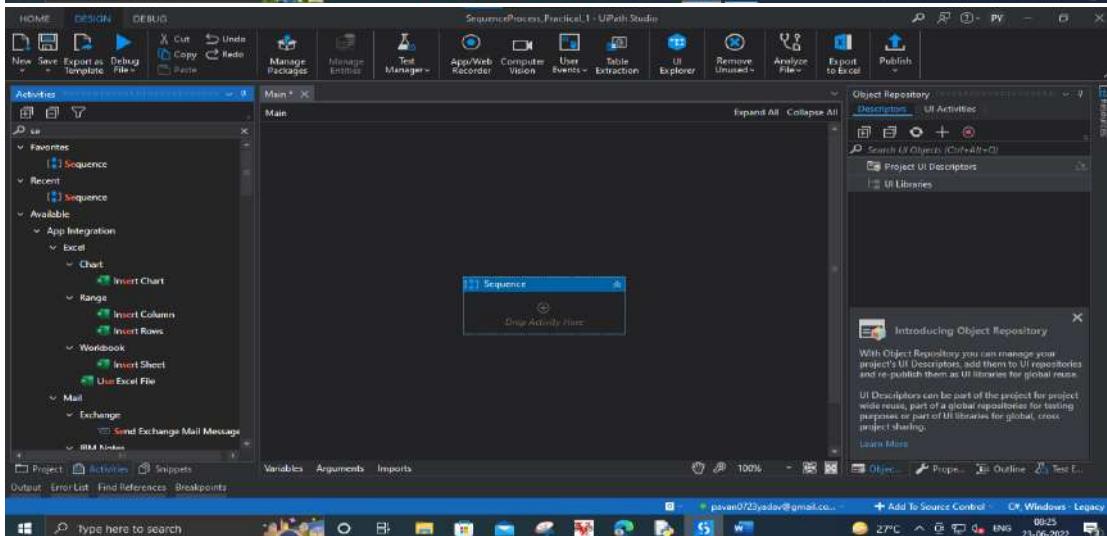
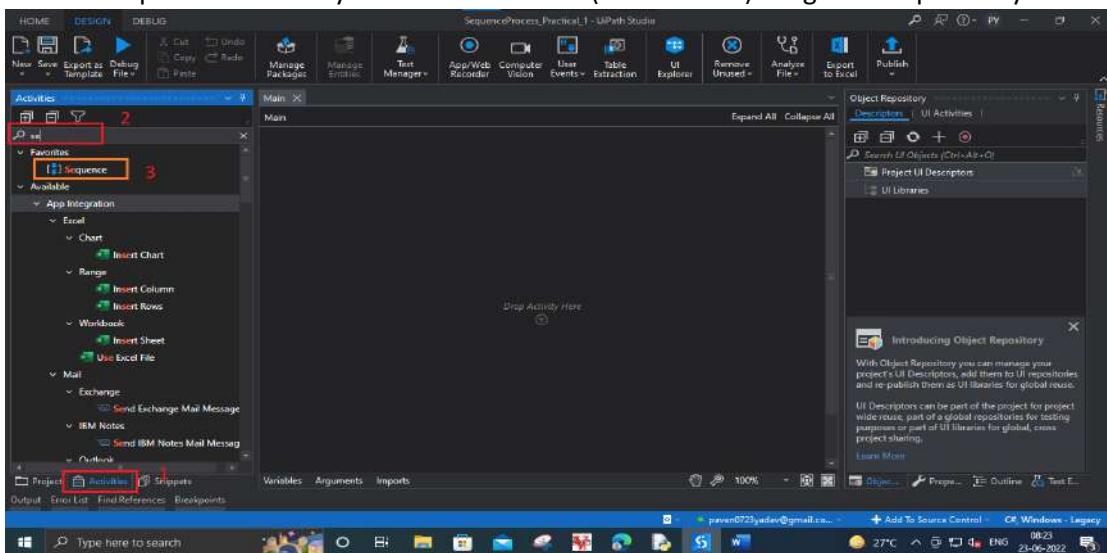
- Write following detail of the process. **Note:** Select the C# Language



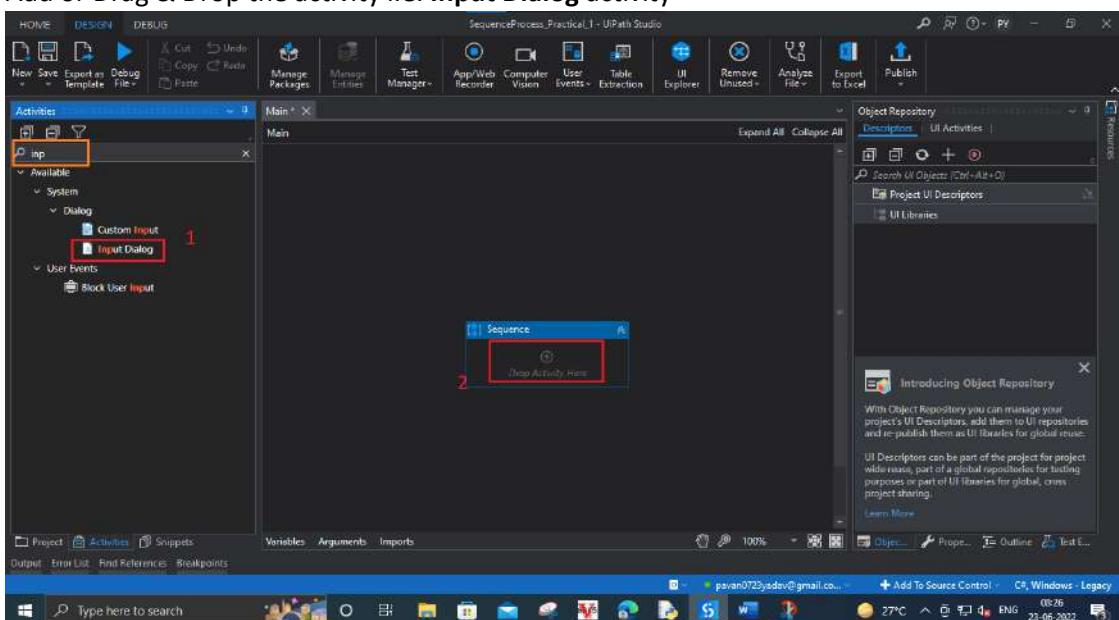
- Click on the **Open Main Workflow**

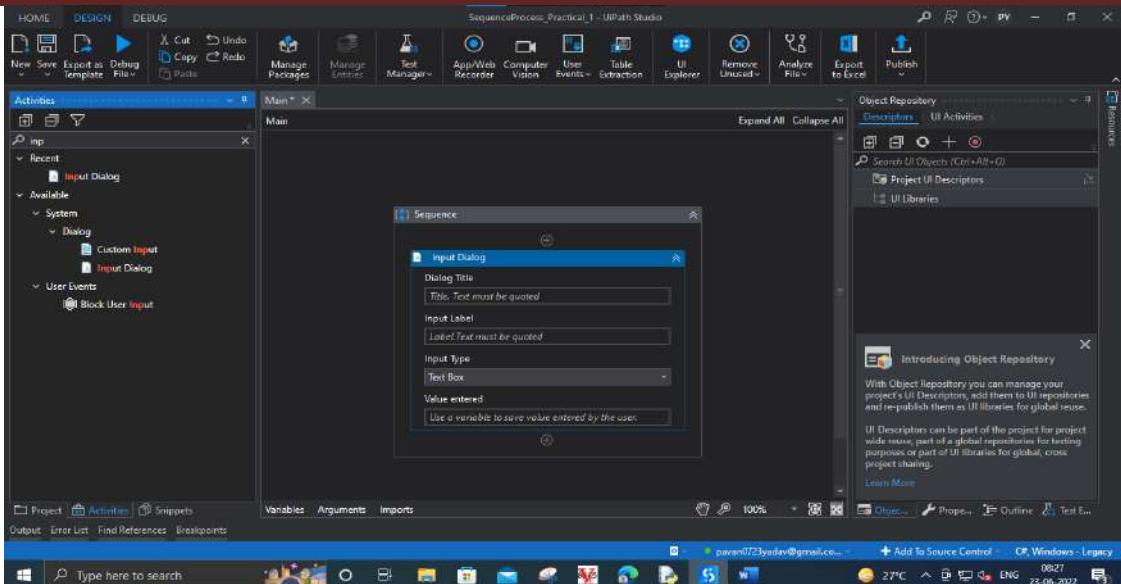


4. Search the particular activity on Search activities (Ctrl + Alt + F). Drag and drop activity i.e. Sequence Activity

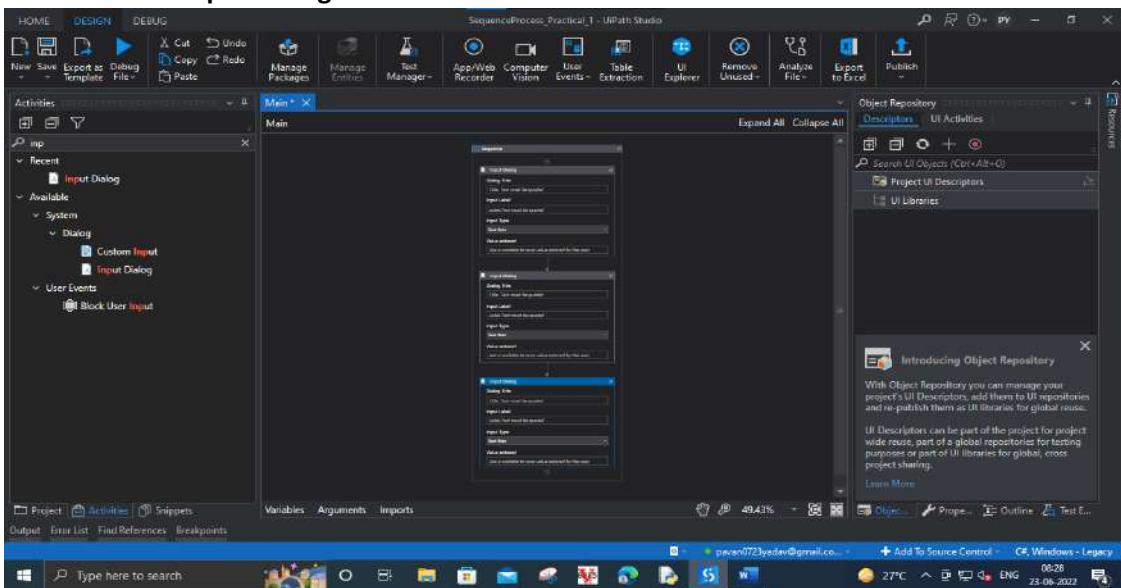


5. Add or Drag & Drop the activity i.e. Input Dialog activity

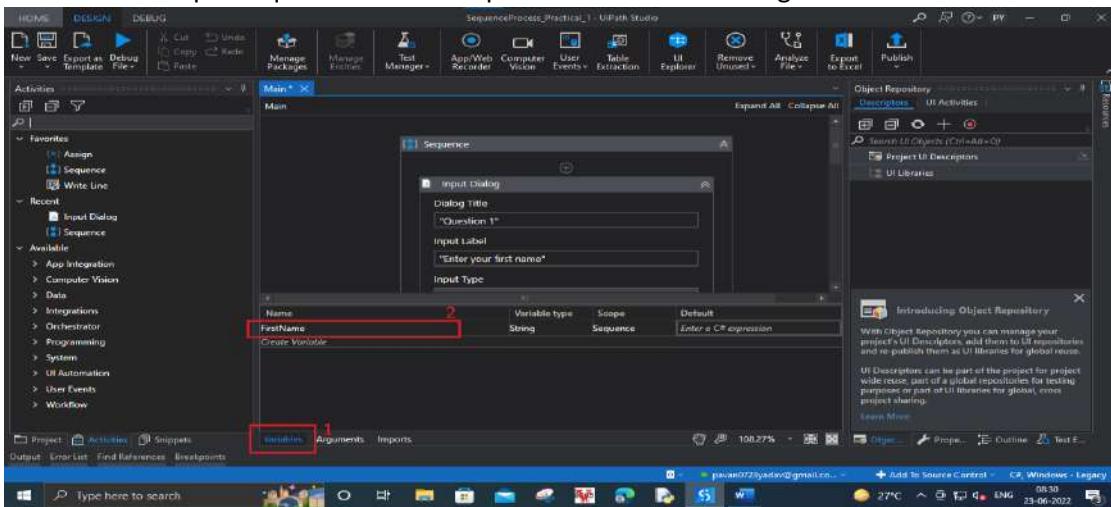




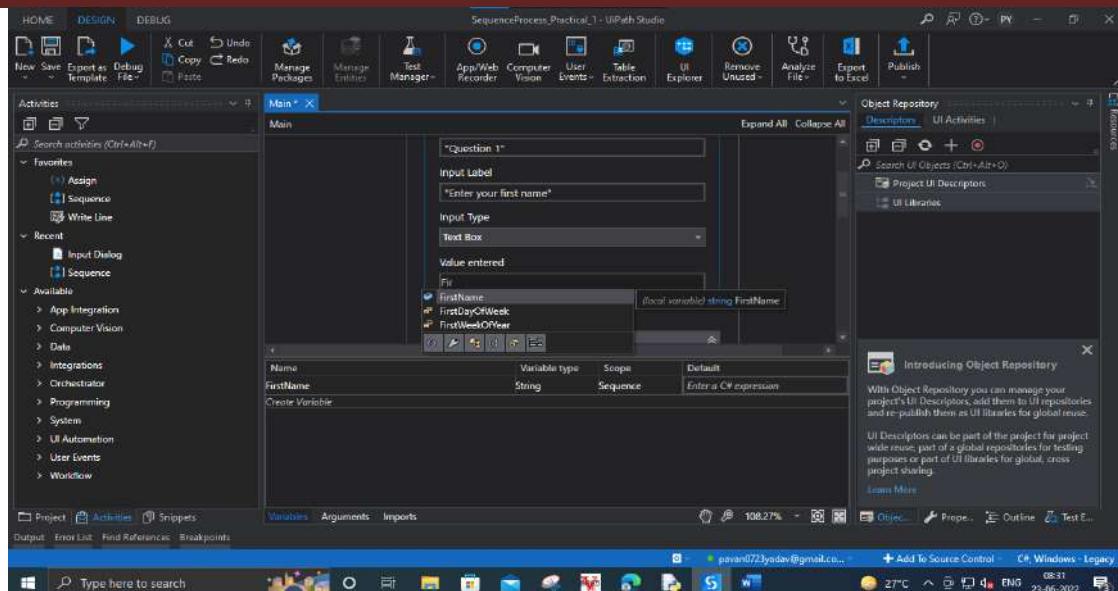
## 6. Add two more Input Dialog



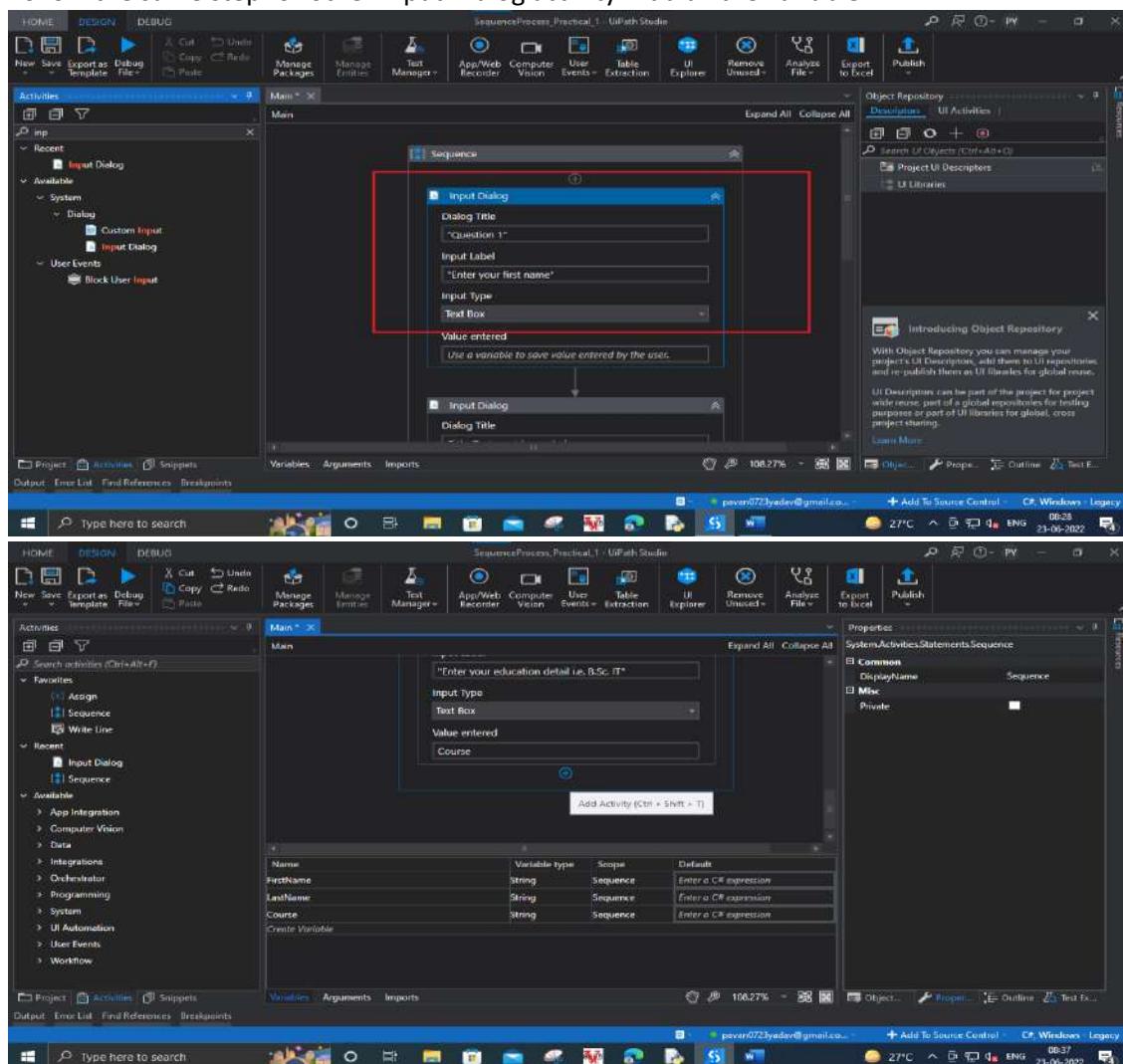
## 7. Add variable as per require & Enter a require field like below image

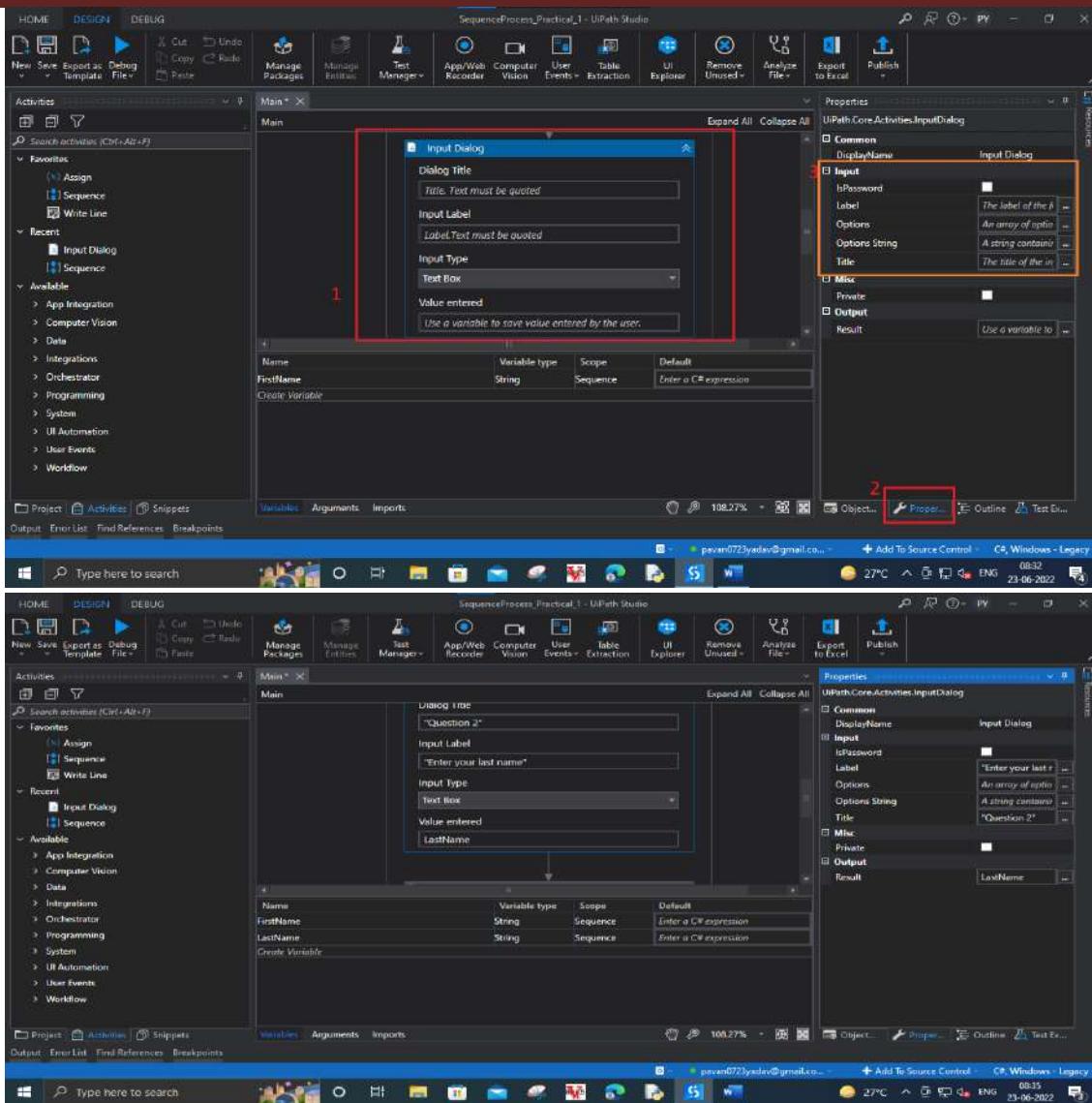


## 8. Give the variable to hold the data. Inside the Value entered

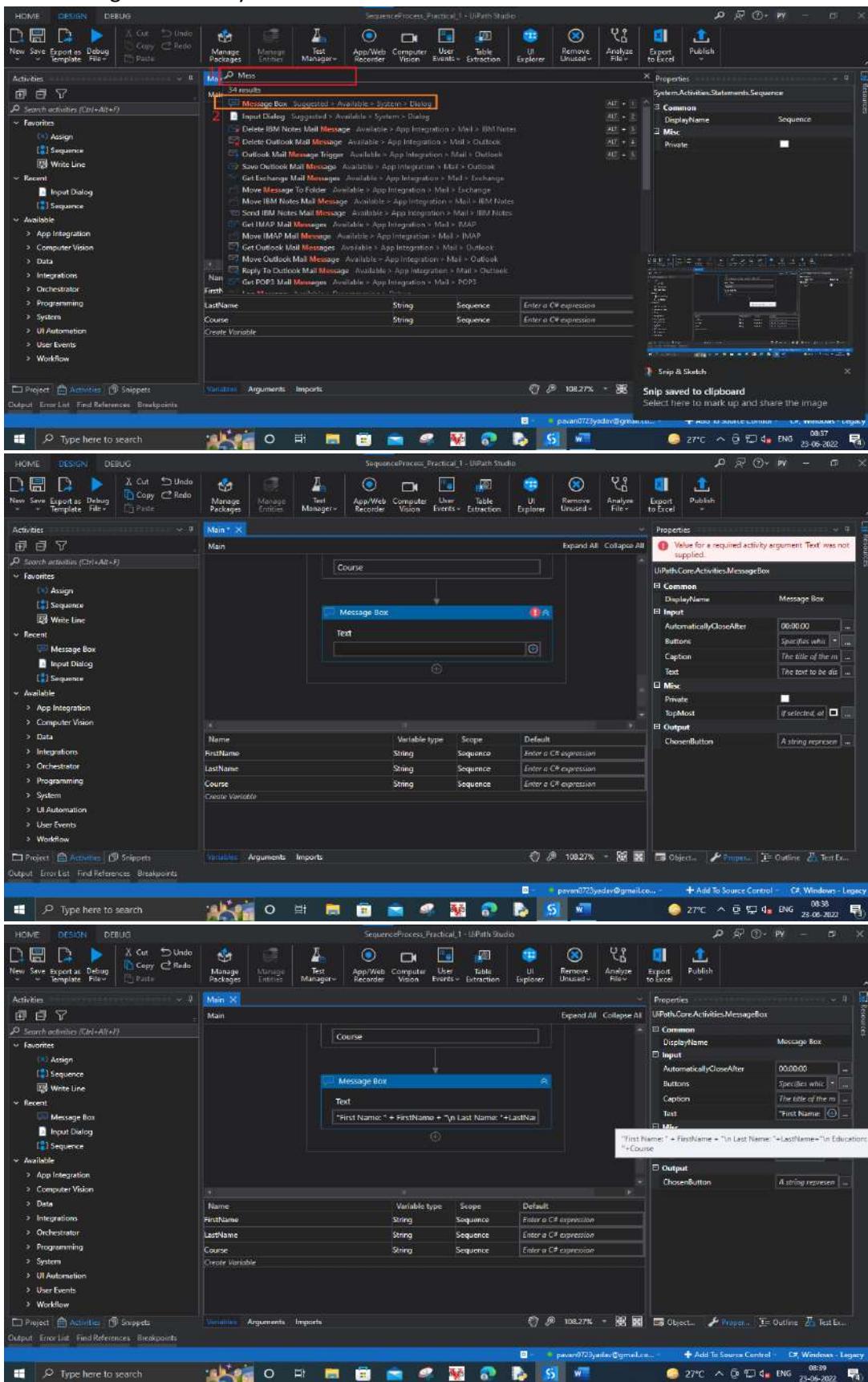


## 9. Follow the same step for other Input Dialog activity. Add all the variable

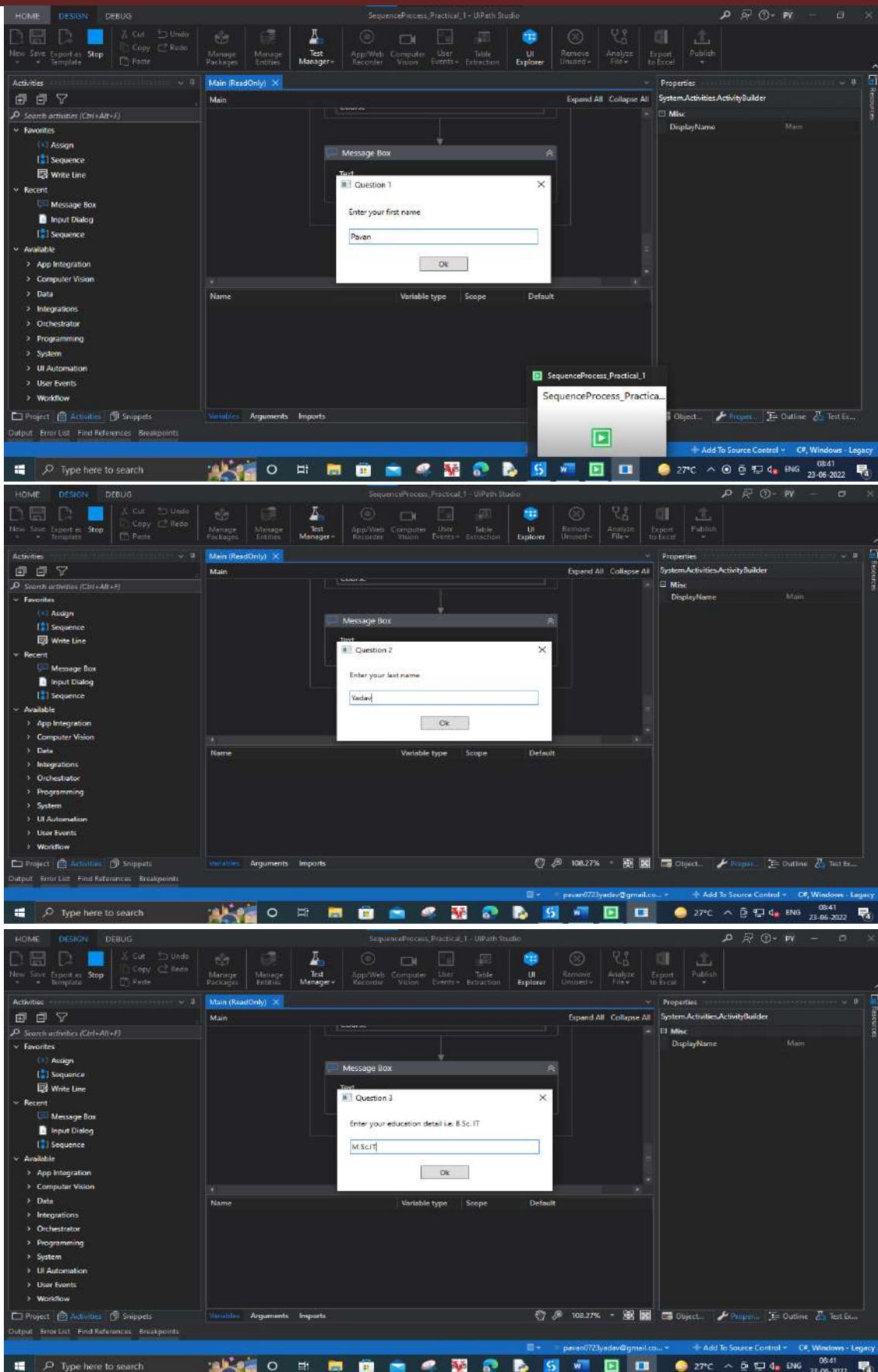


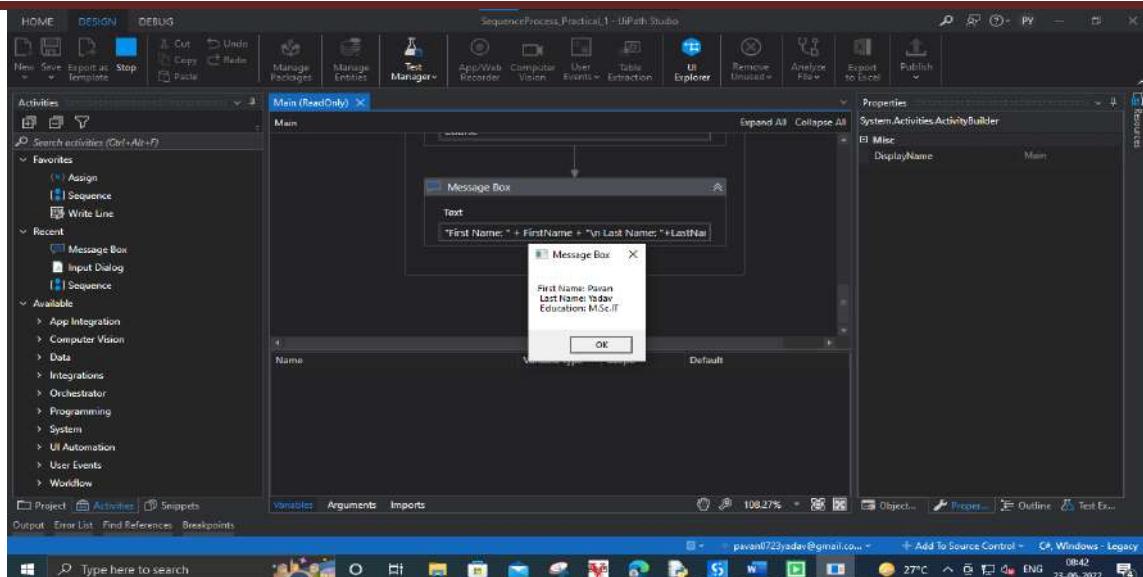


## 10. Add Message Box activity



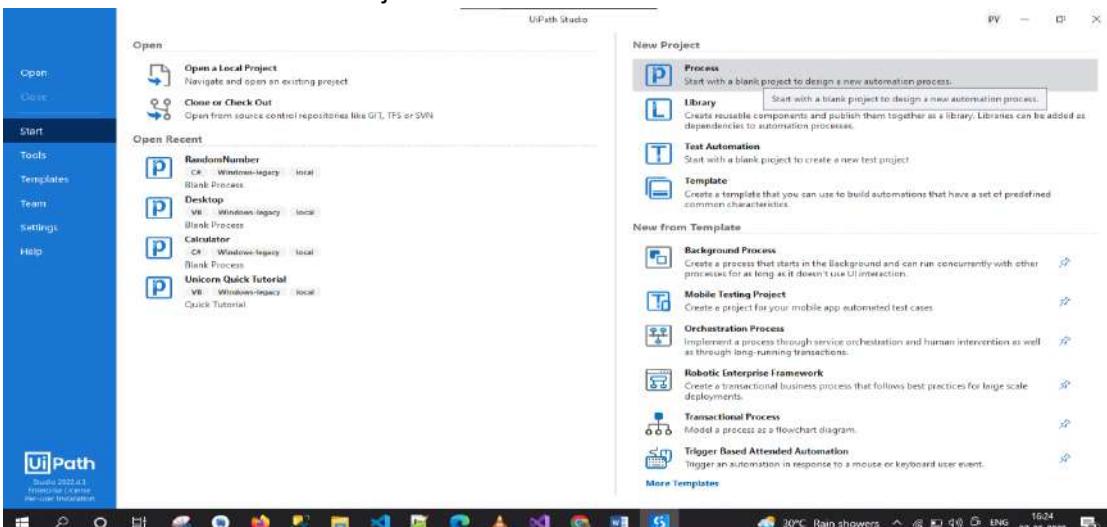
## 11. Output



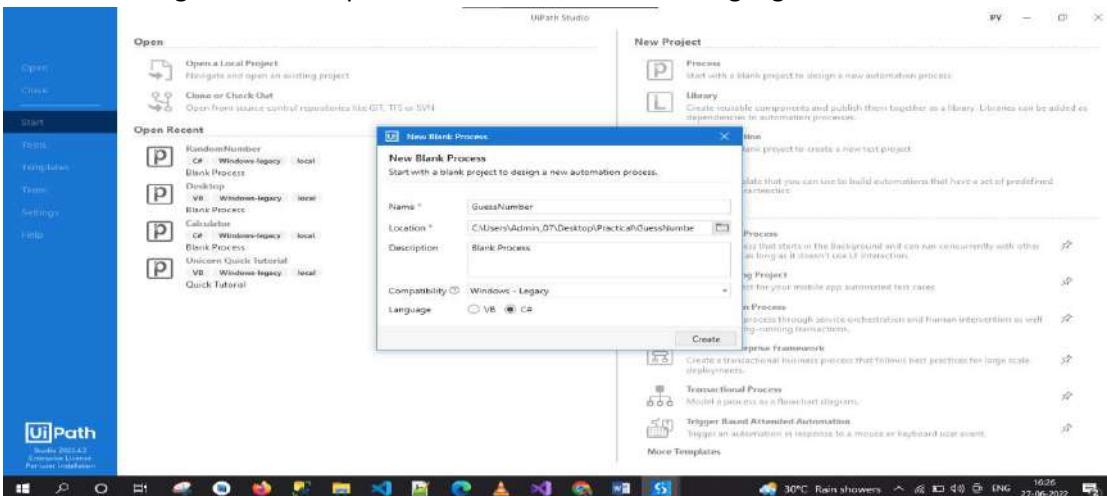


## B] Create a flowchart-based project

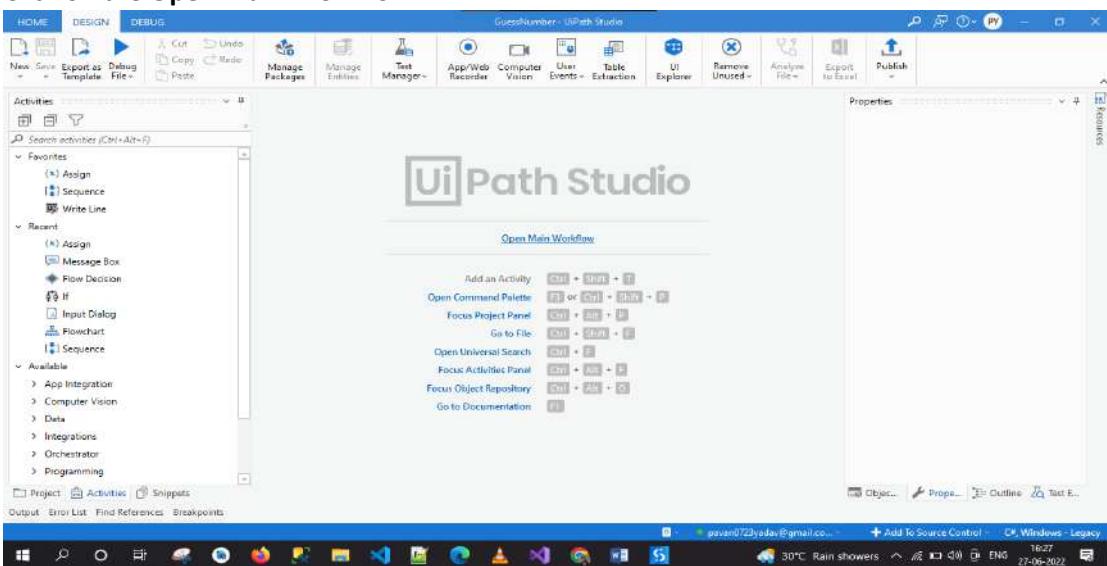
- Click on the **Process** to New Project



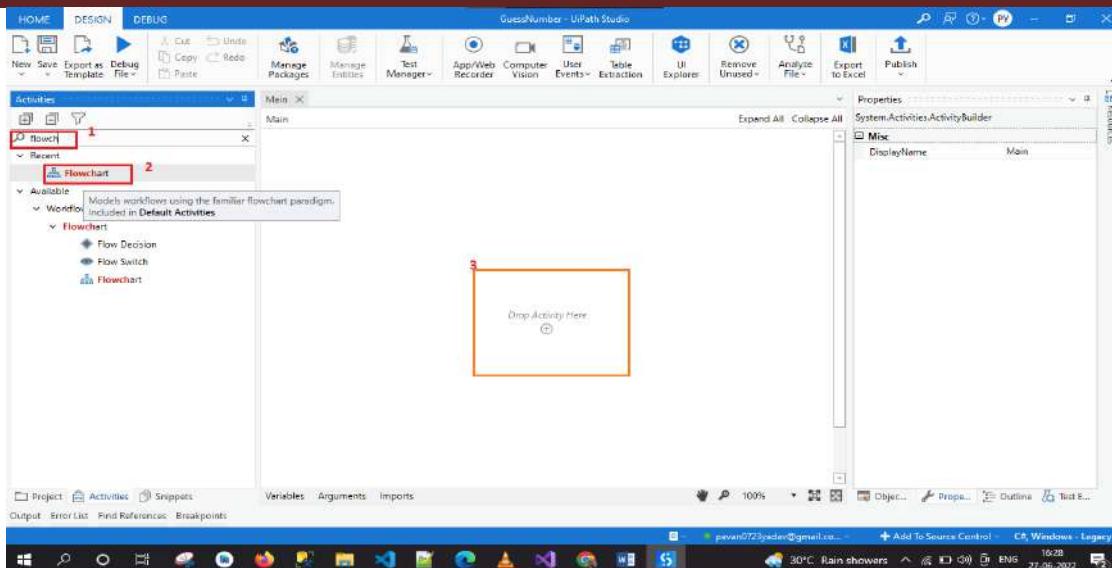
- Write following detail of the process. Note: Select the C# Language



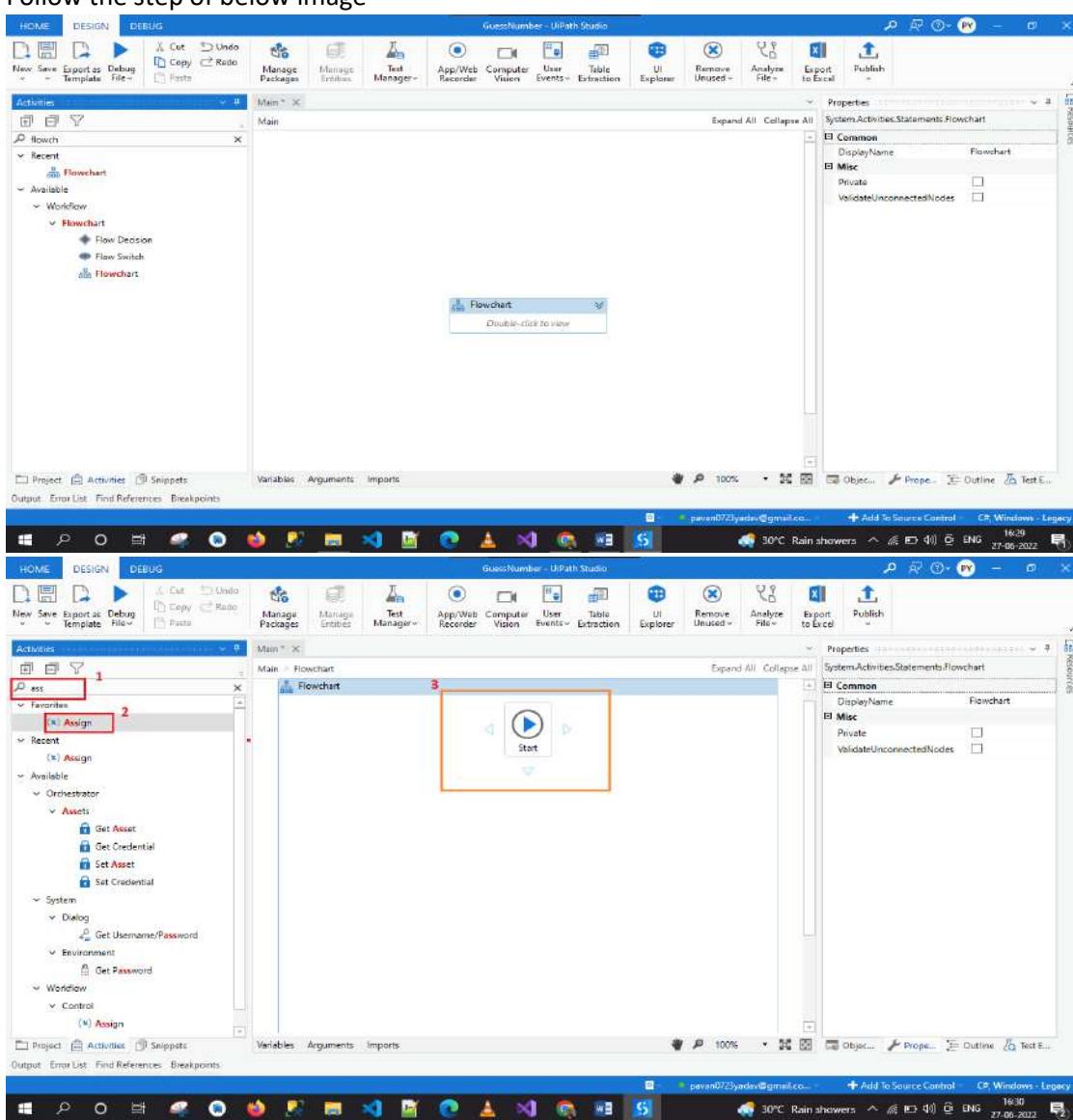
- Click on the **Open Main Workflow**

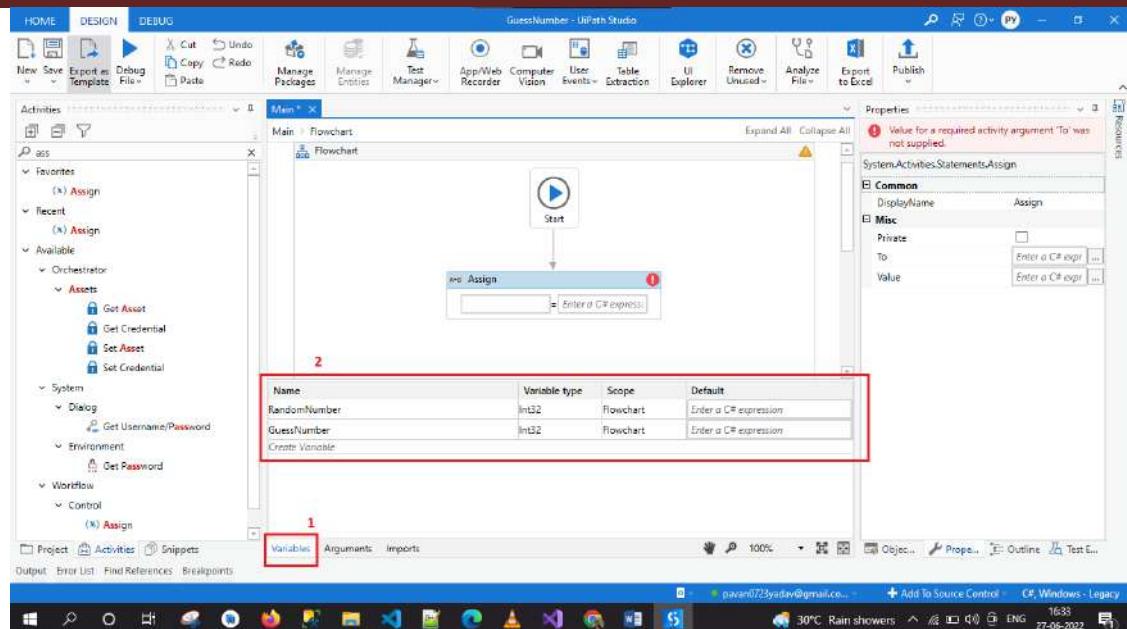


- Follow the step of below image

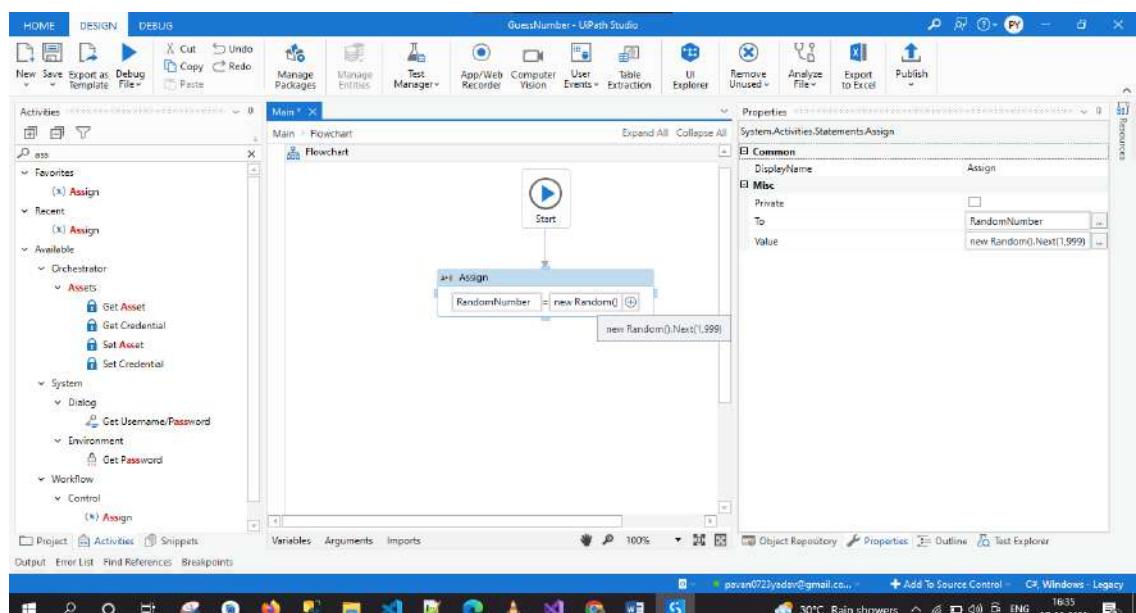


### 5. Follow the step of below image

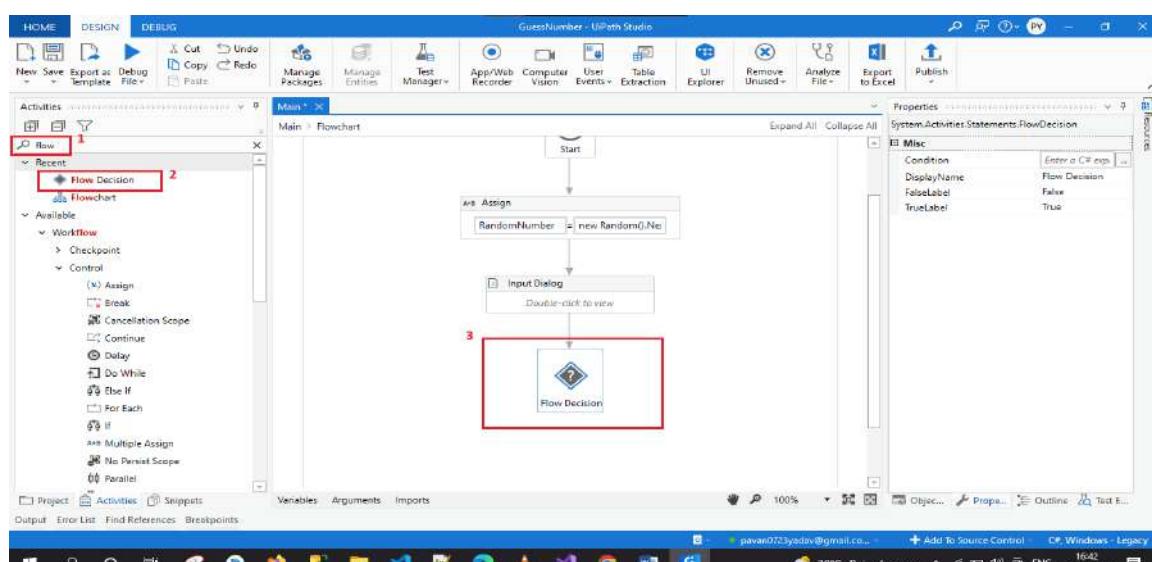
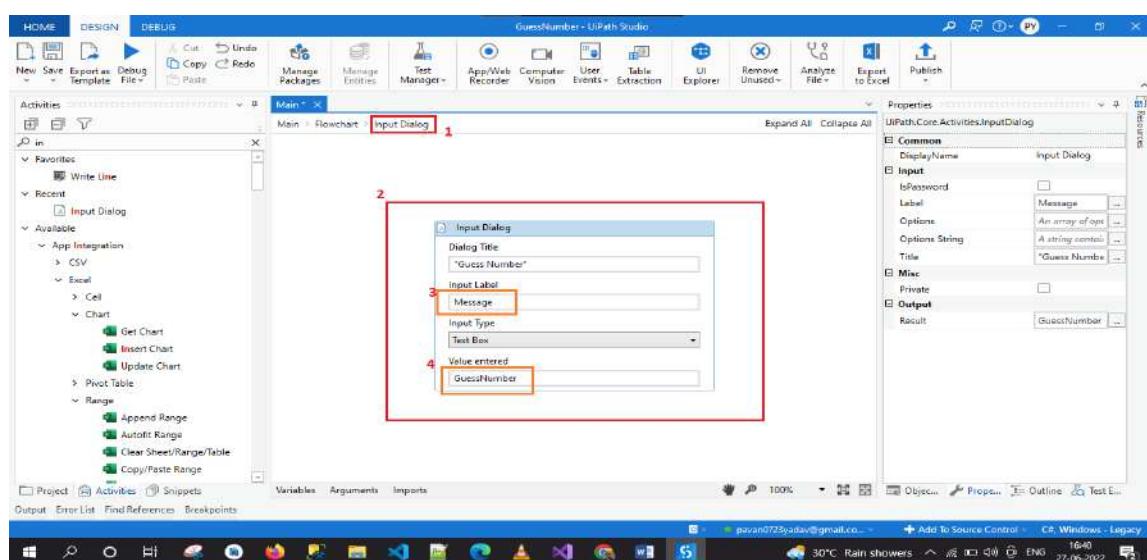
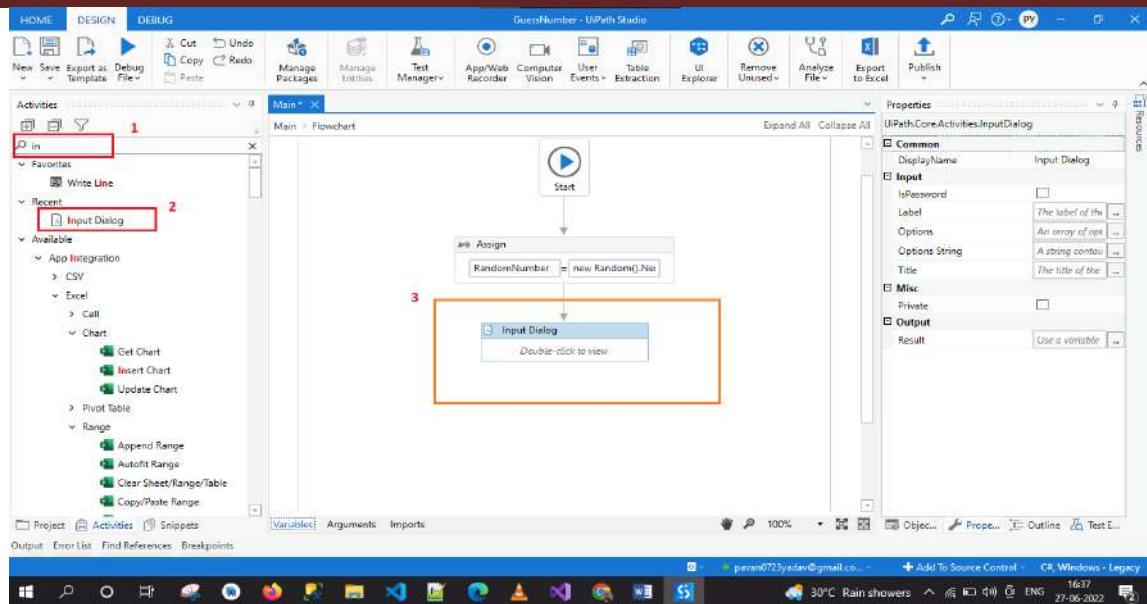




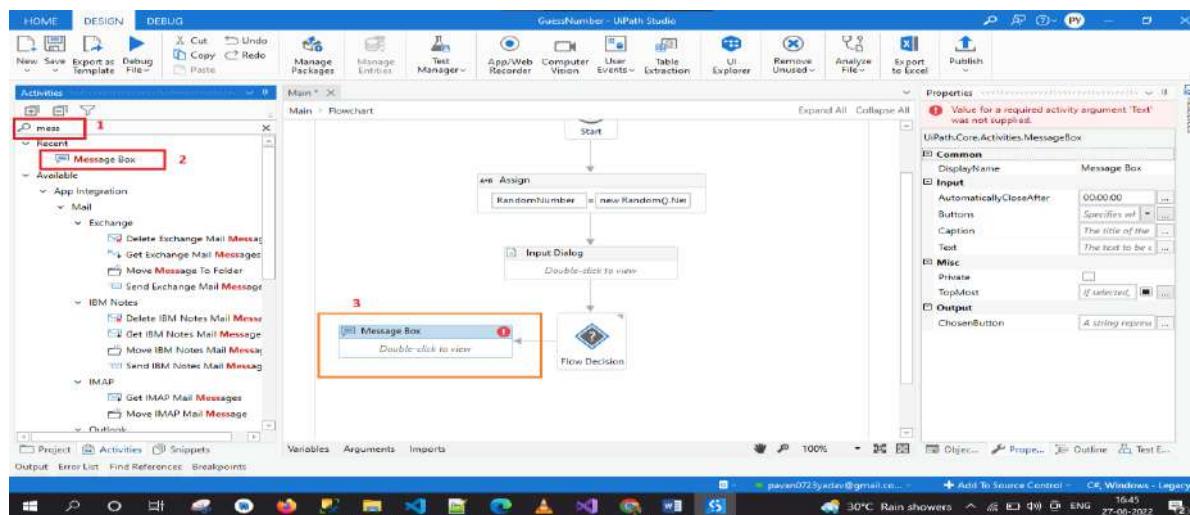
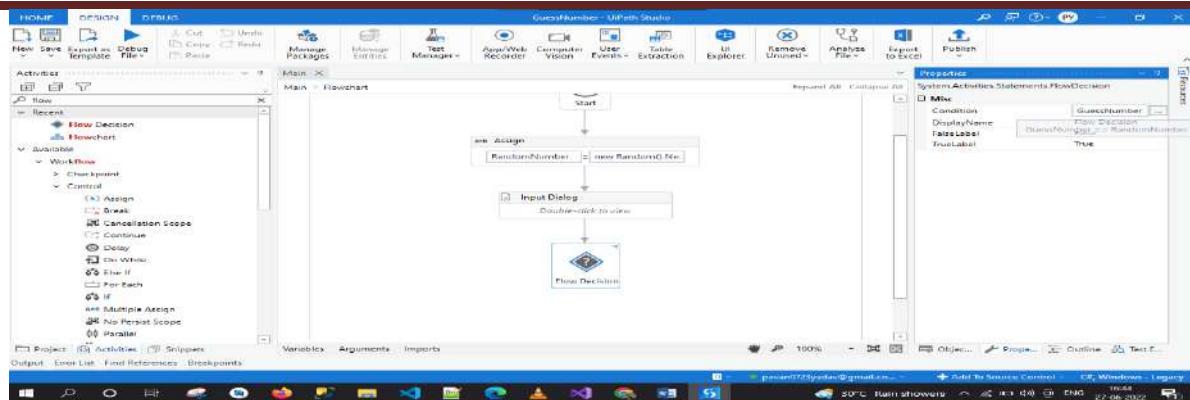
**RandomNumber = new Random().Next(1,999)**



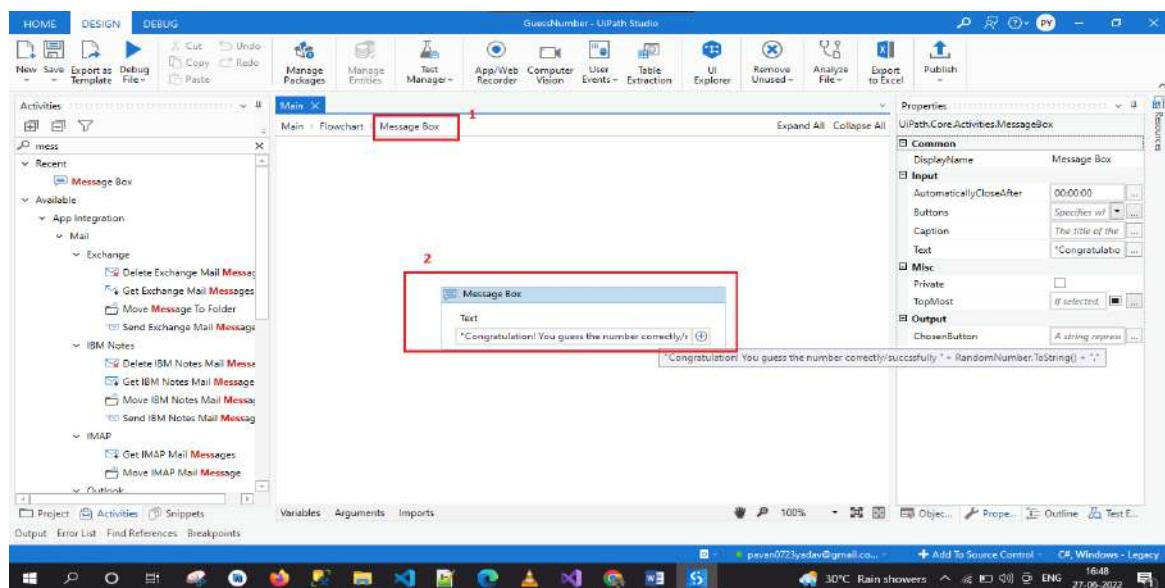
Name	Variable type	Scope	Default
RandomNumber	Int32	Flowchart	Enter a C# expression
GuessNumber	Int32	Flowchart	Enter a C# expression
Message	String	Flowchart	"Guess the number between 1 to 99!"
<i>Create Variable</i>			
<b>Variables   Arguments   Imports</b>			

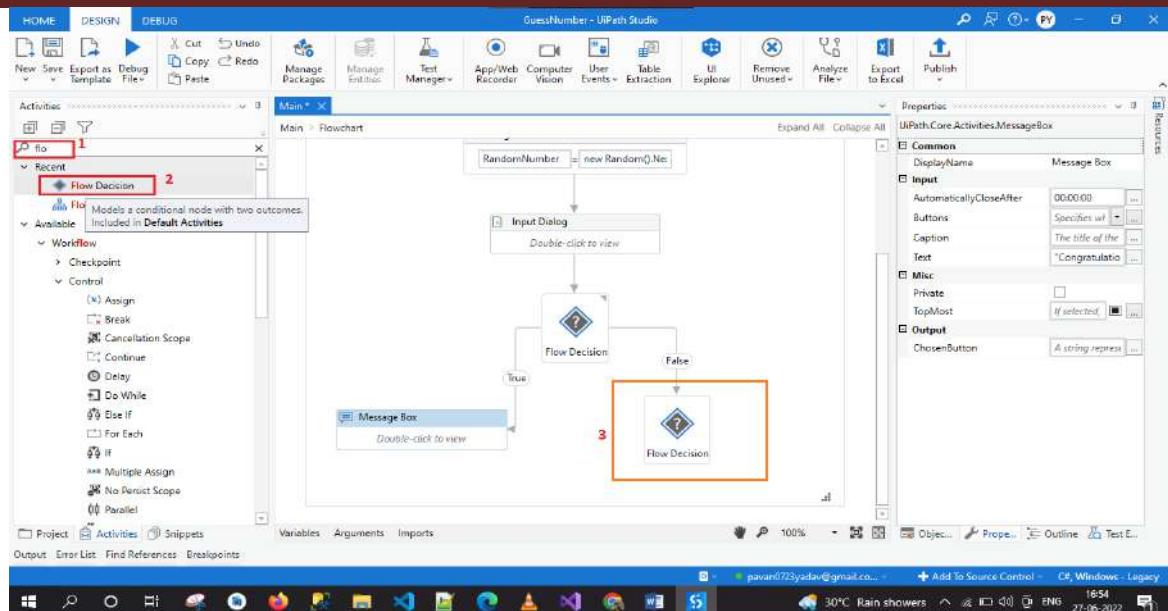


**GuessNumber == RandomNumber**

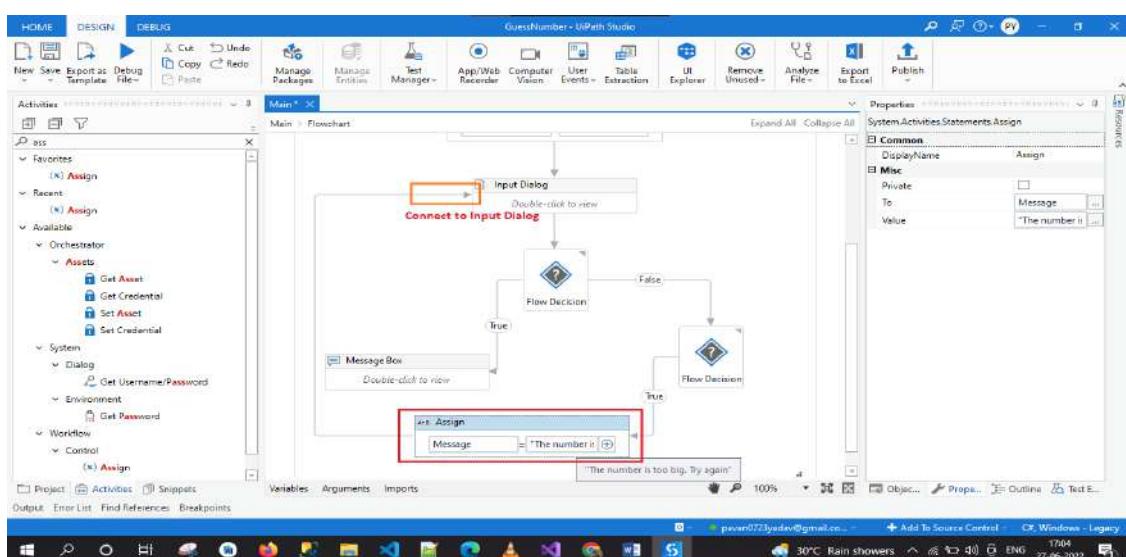
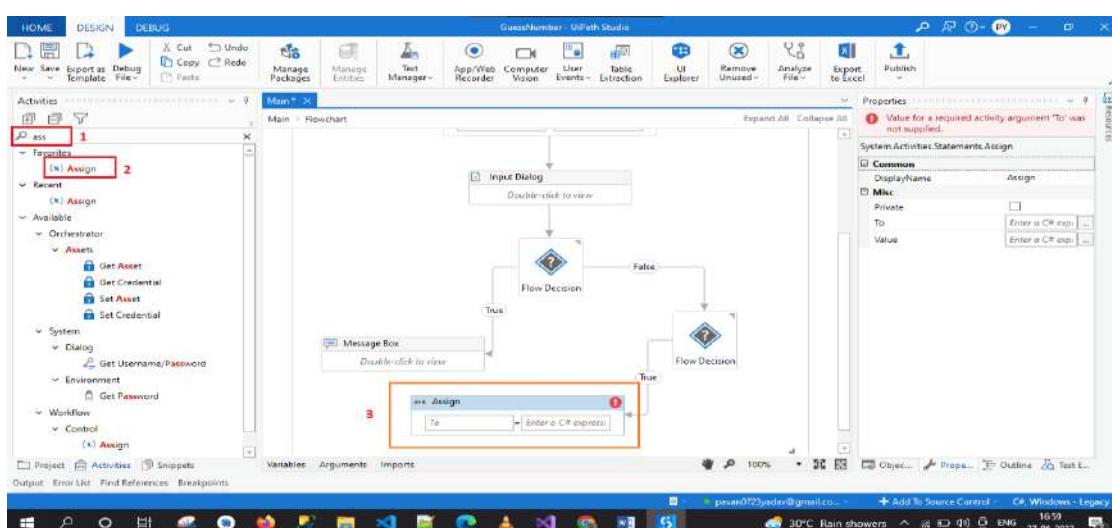
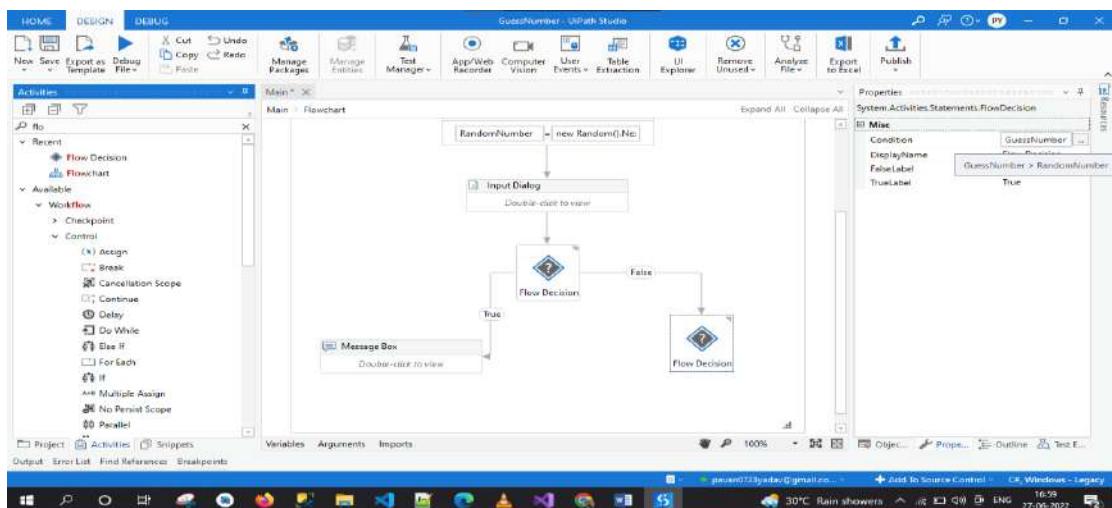


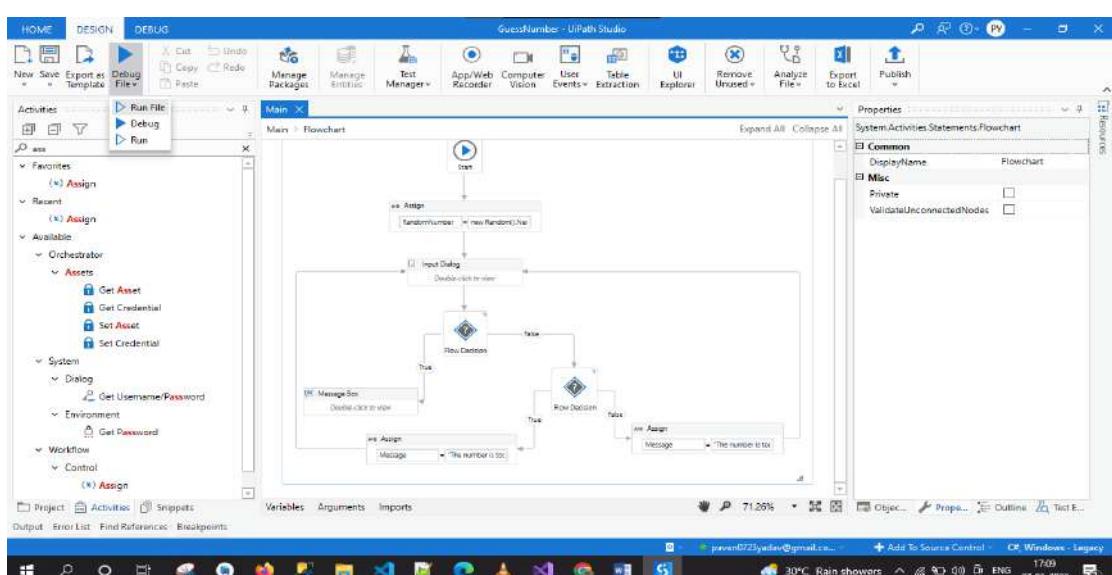
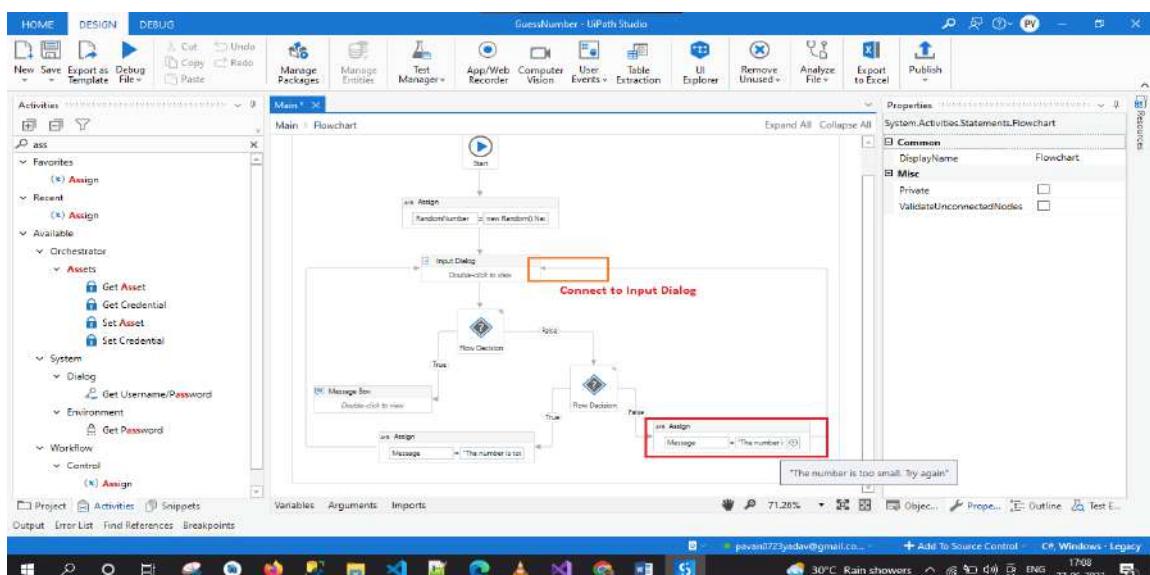
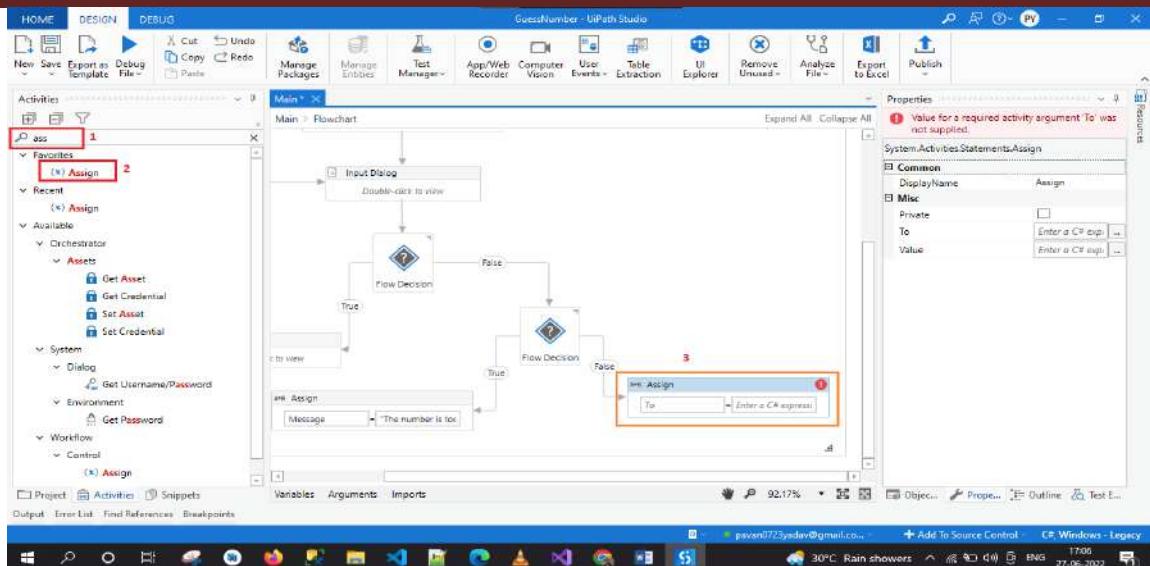
"Congratulation! You guess the number correctly/successfully " + RandomNumber.ToString() + "."



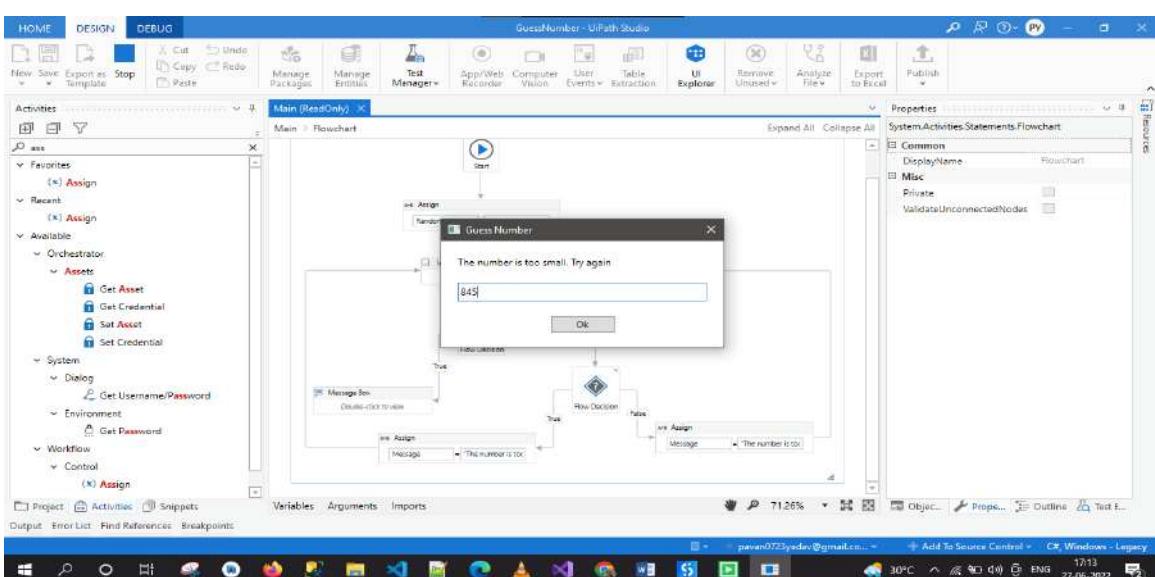
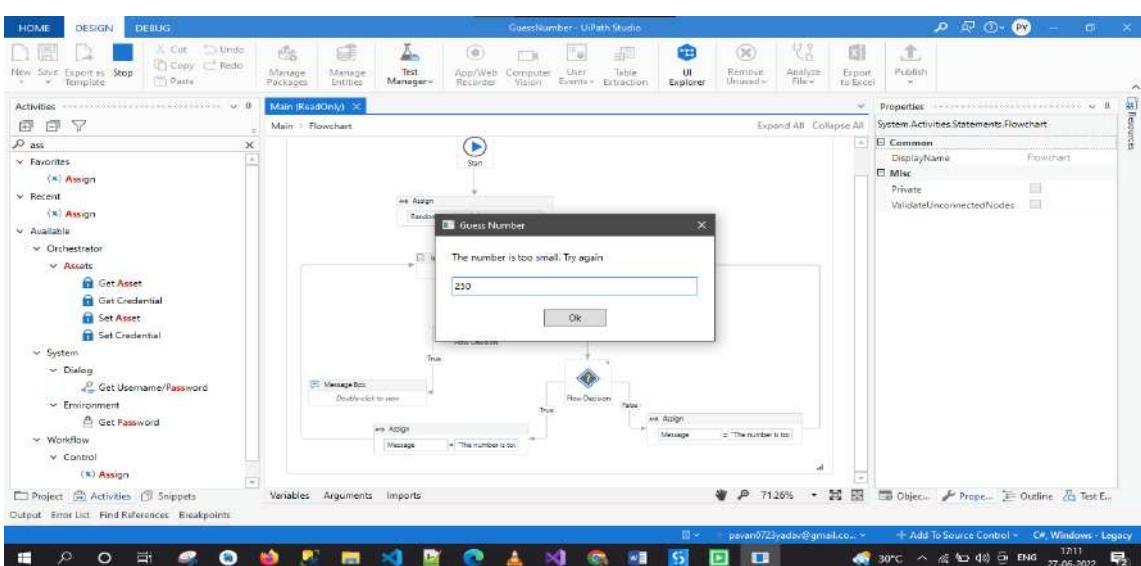
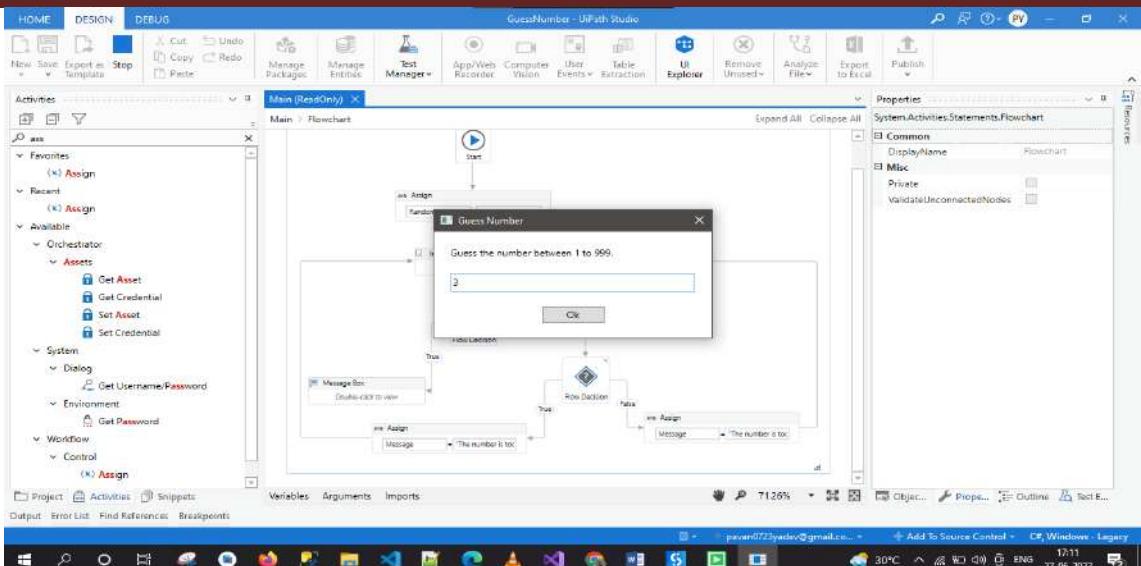


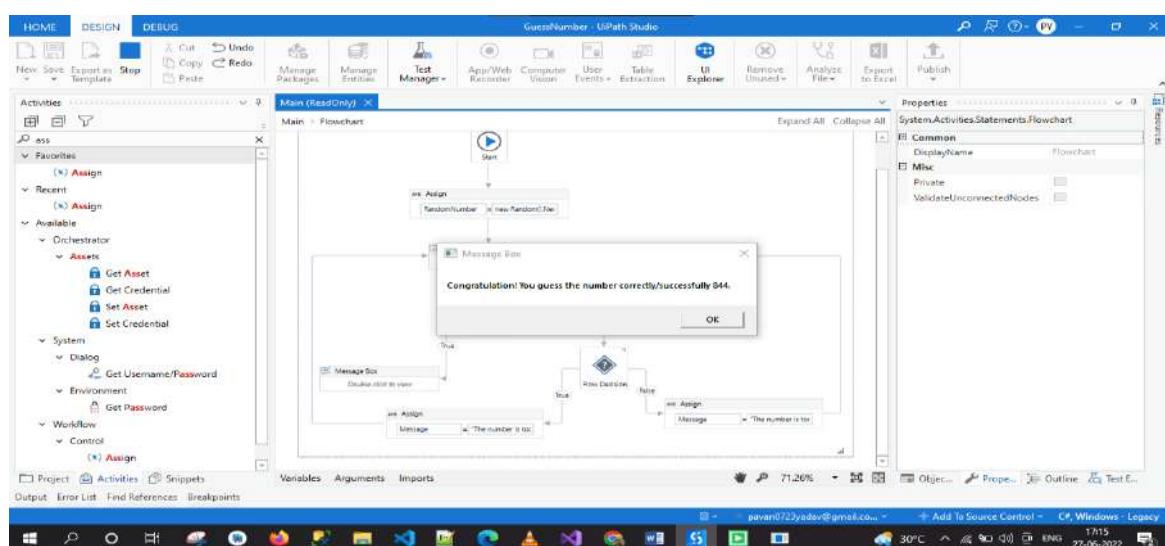
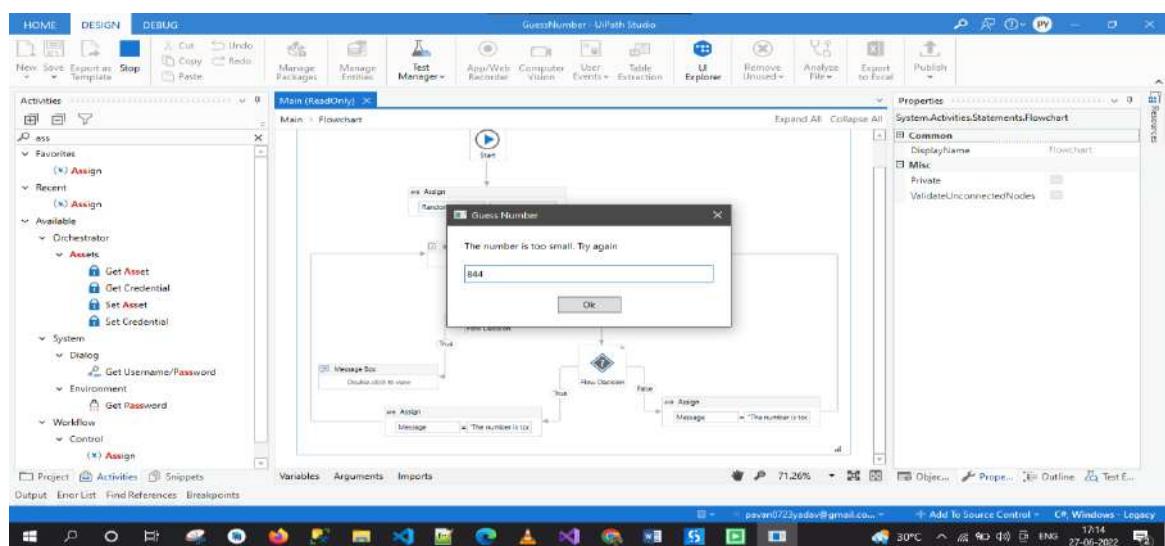
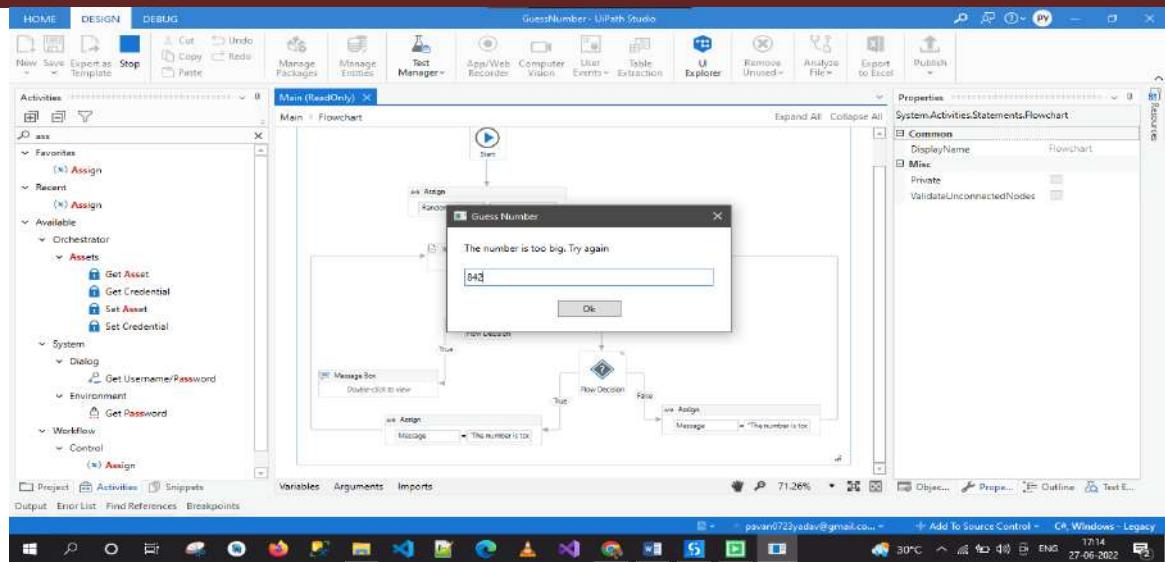
## GuessNumber &gt; RandomNumber





## Output





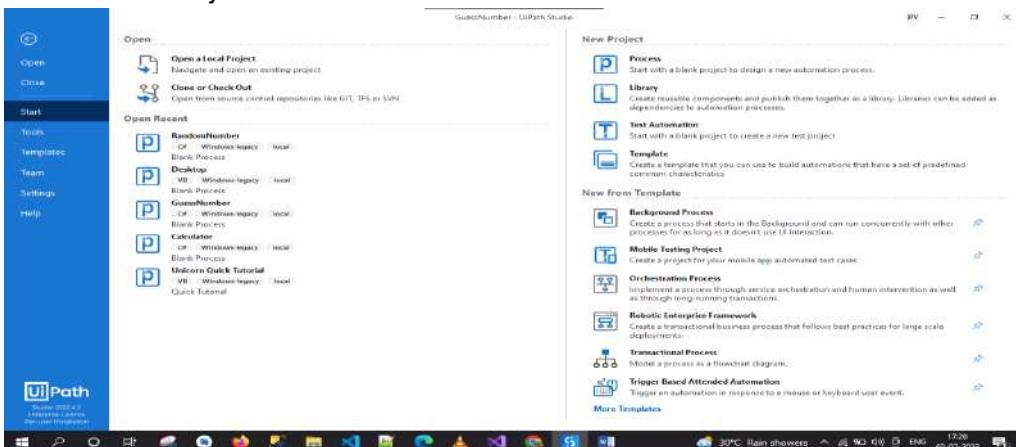
The screenshot shows the 'Output' window from a Microsoft Visual Studio IDE. The window title is 'Output'. At the top, there are several small icons representing different log levels: Information (green circle), Warning (yellow triangle), Error (red square), Debug (blue square), and Trace (grey square). Below the icons is a search bar labeled 'Search'. The main content area displays the following log entries:

```
Execution started for file: Main
GuessNumber execution started
GuessNumber execution ended in: 00:05:01
```

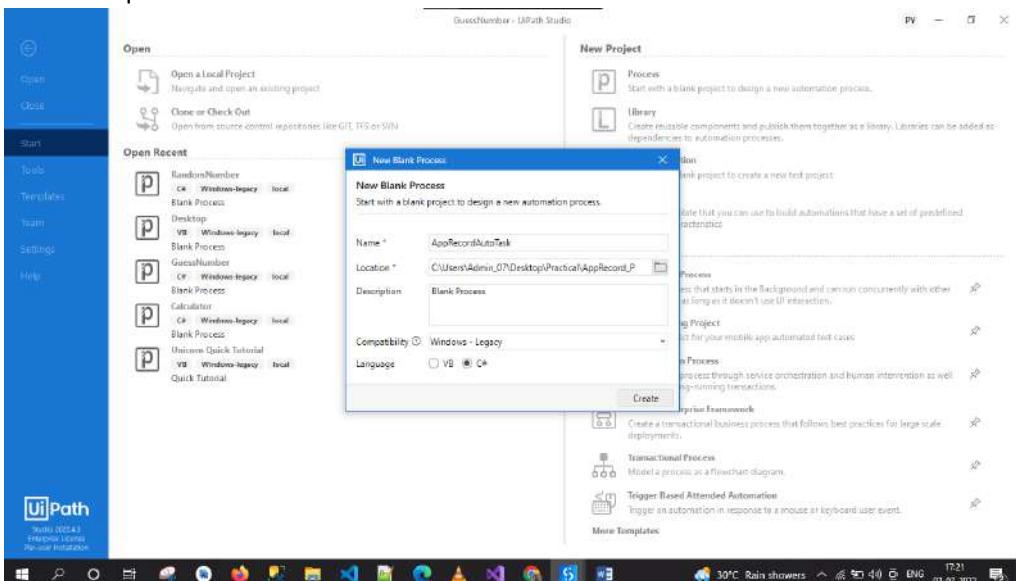
At the bottom of the window, there are tabs for 'Output', 'Error List', 'Find References', and 'Breakpoints'. The status bar at the bottom right shows the user's email address 'pavan072yadav@gmail.com', the option to 'Add To Source Control', and the project name 'C#, Windows - Legacy'.

## C] Create a flowchart-based project

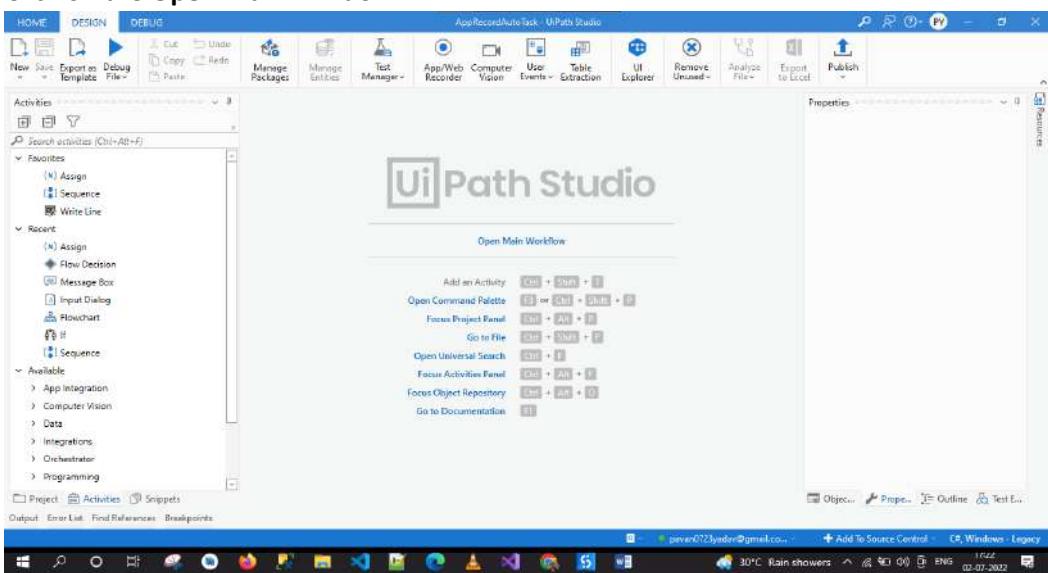
- Create a new Project then click on the Process

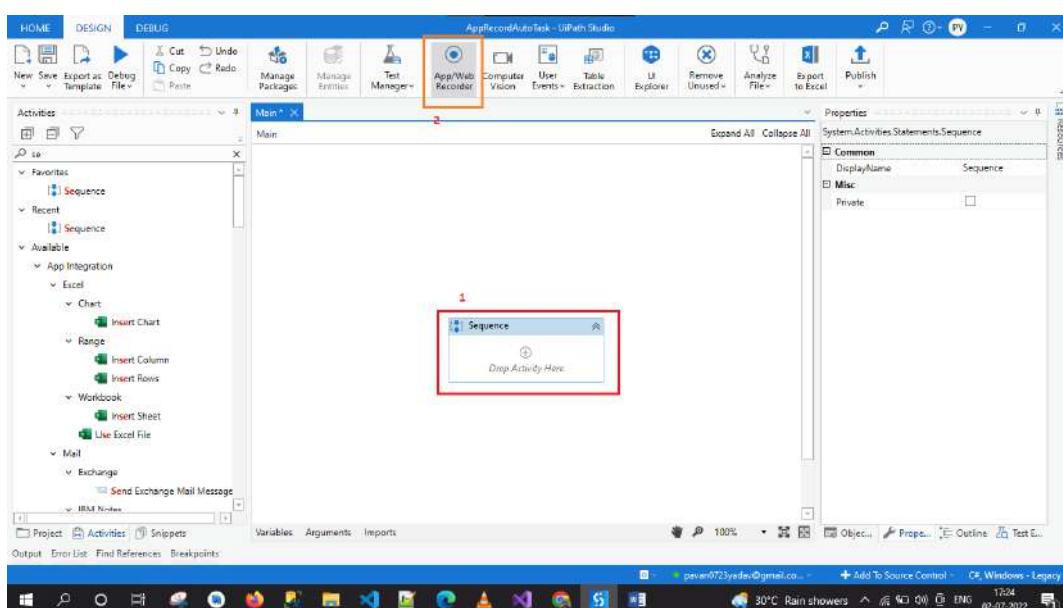
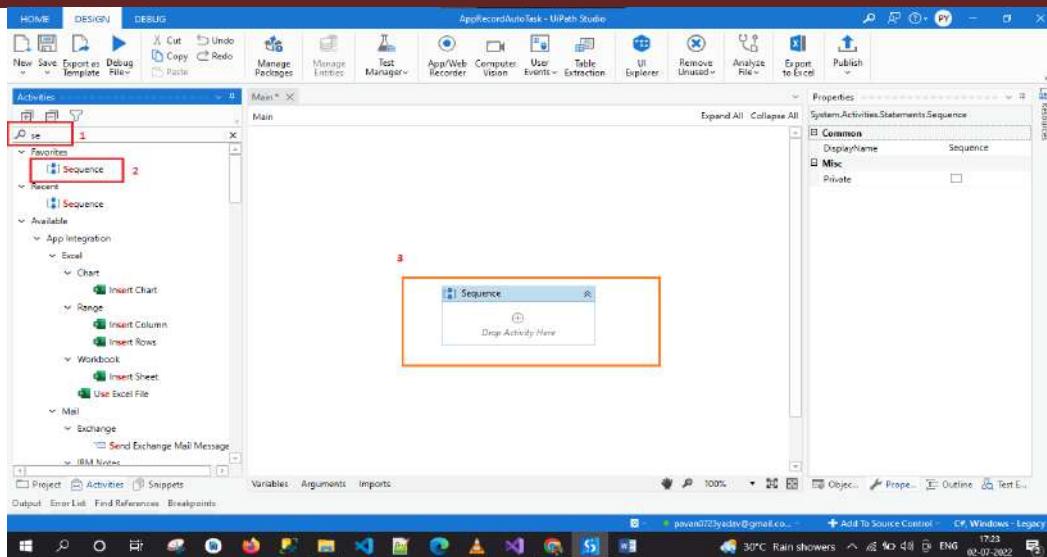


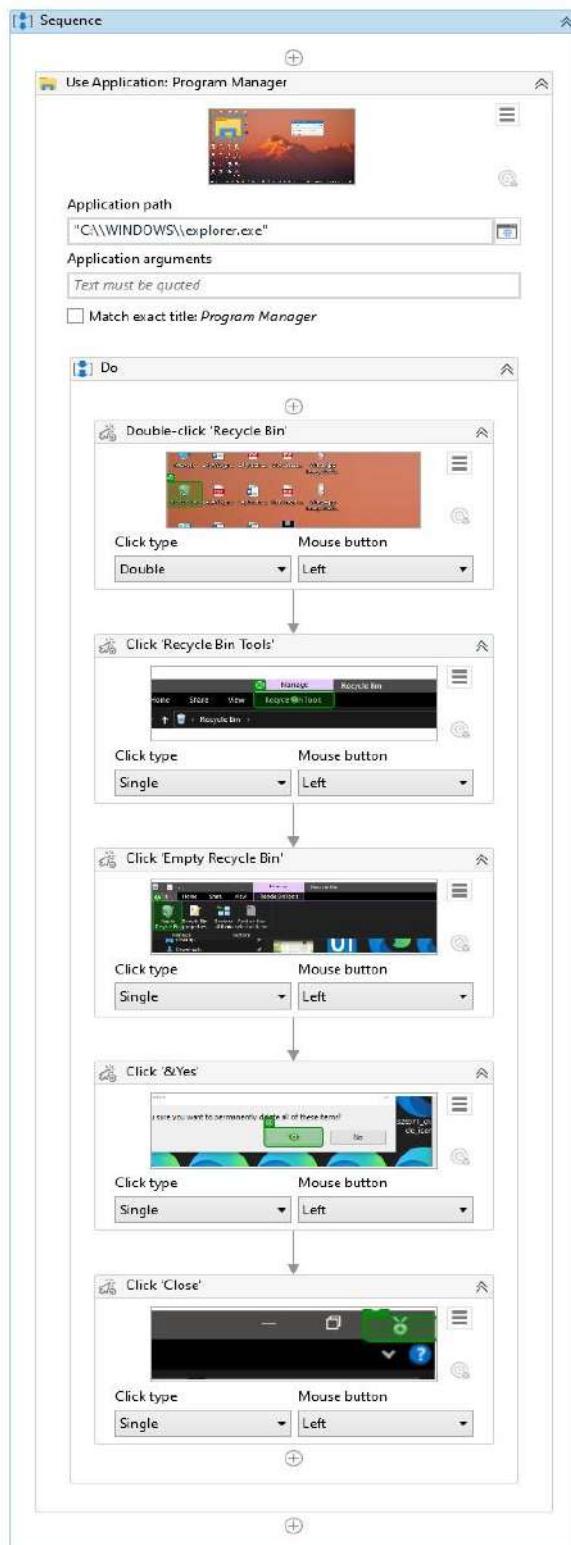
- Fill the required detail of Process



- Click on the Open Main Window



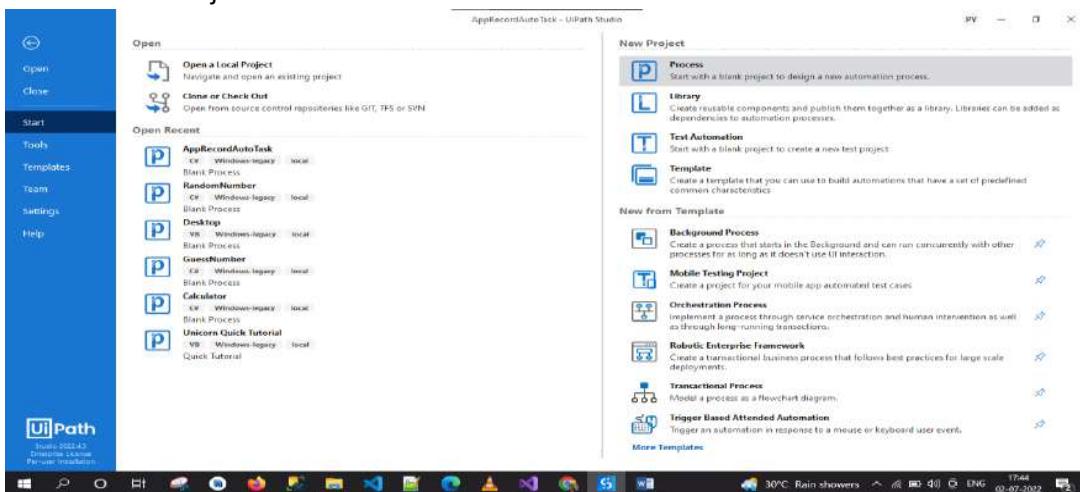




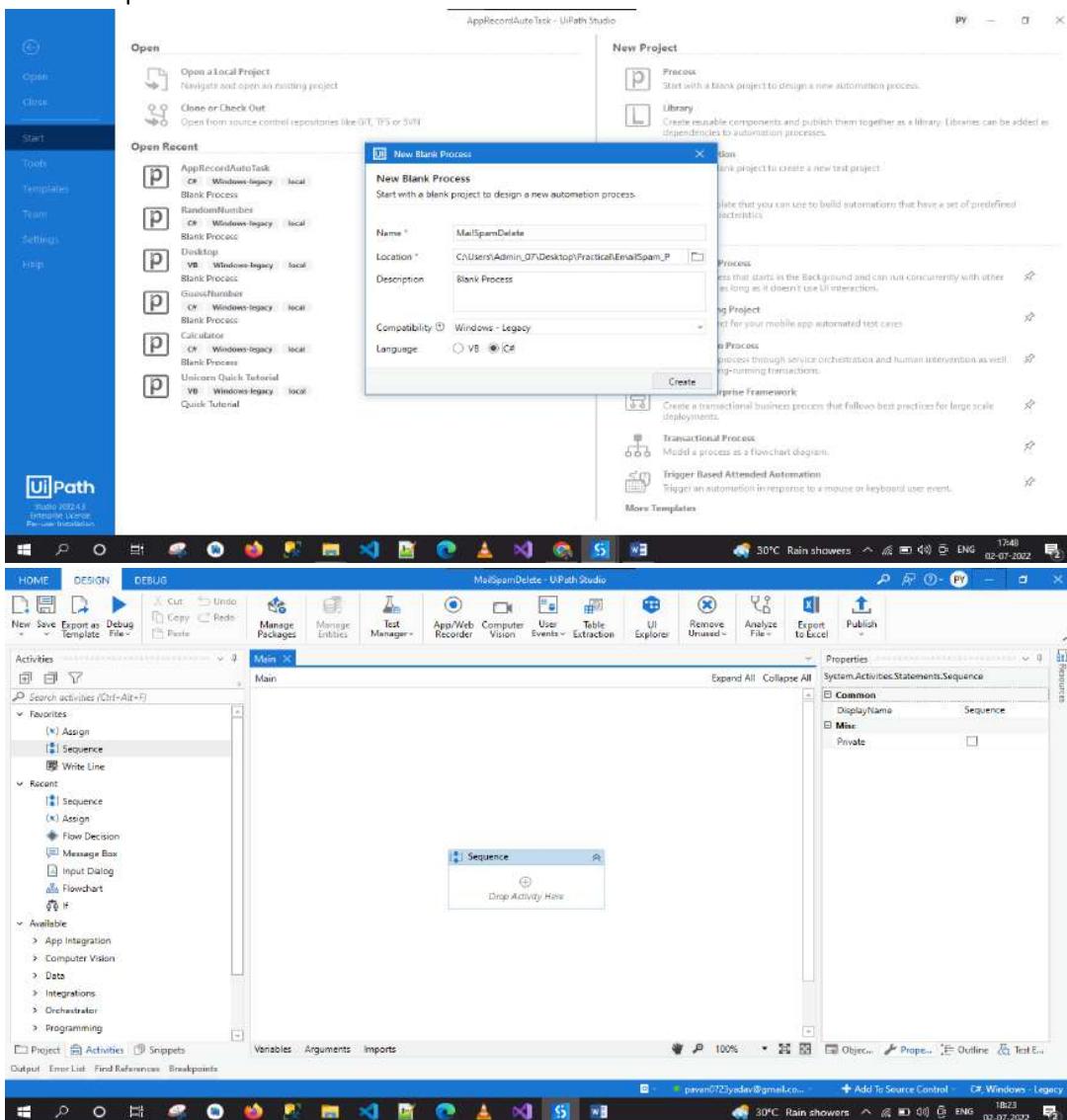
### Video Demo

<https://drive.google.com/file/d/1pnEeZO2kW2XQ9js846XVxRhODby1UTso/view?usp=sharing>

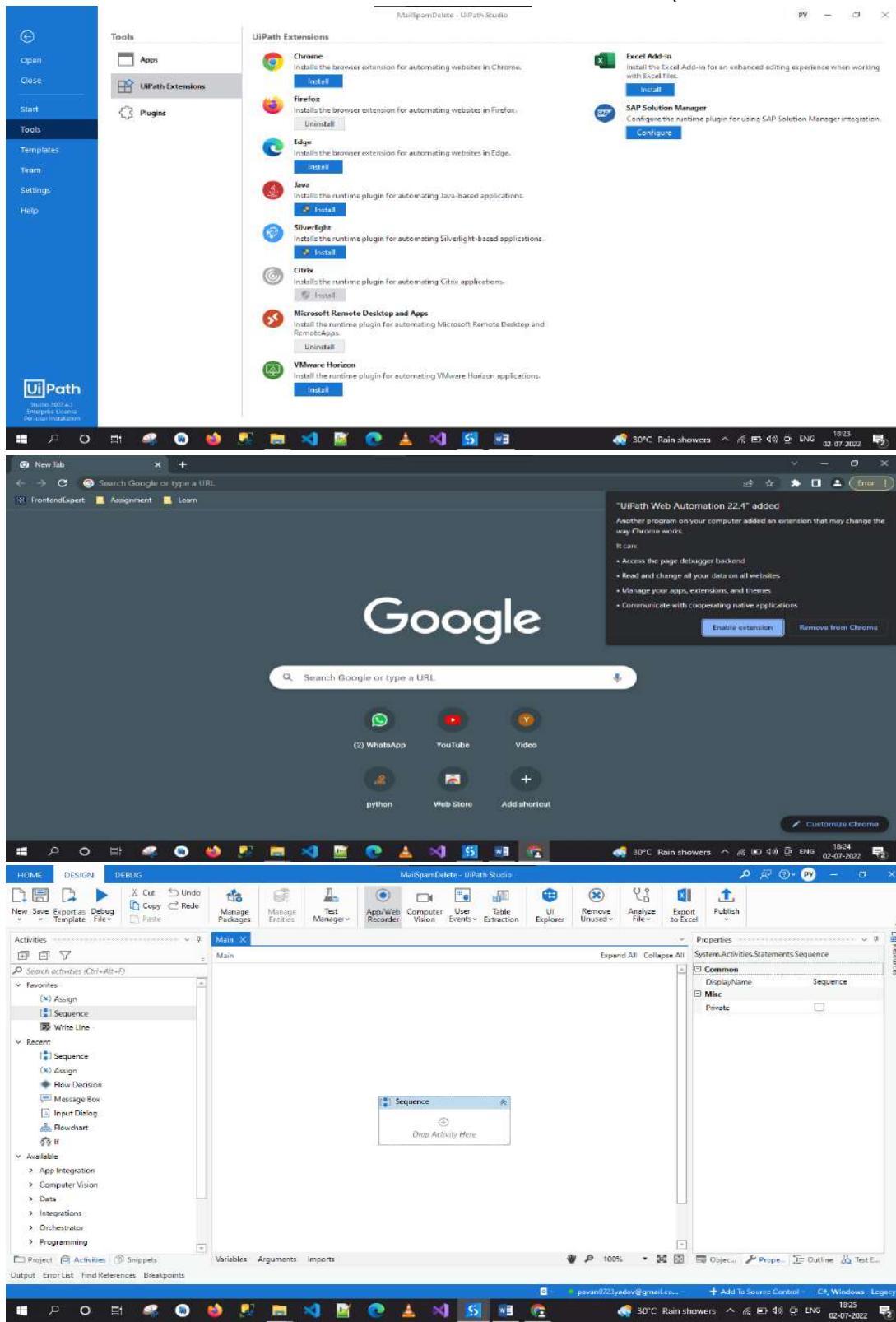
## 1. Create a new Project then click on the Process

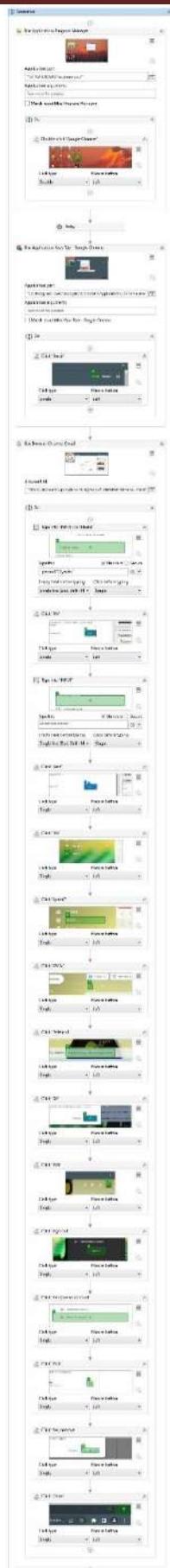


## 2. Fill the required detail of Process



3. Note: Install the extension of UI Path to comfortable Web Browser (recommended Chrome)





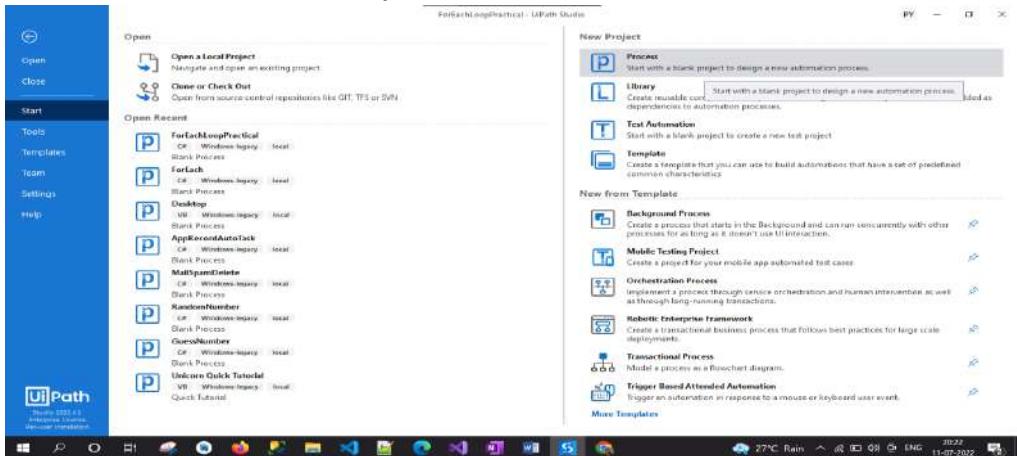
### Video Demo

<https://drive.google.com/file/d/1F1sDy6t3FyqRwTFy4xsu4tLveGGwp01n/view?usp=sharing>

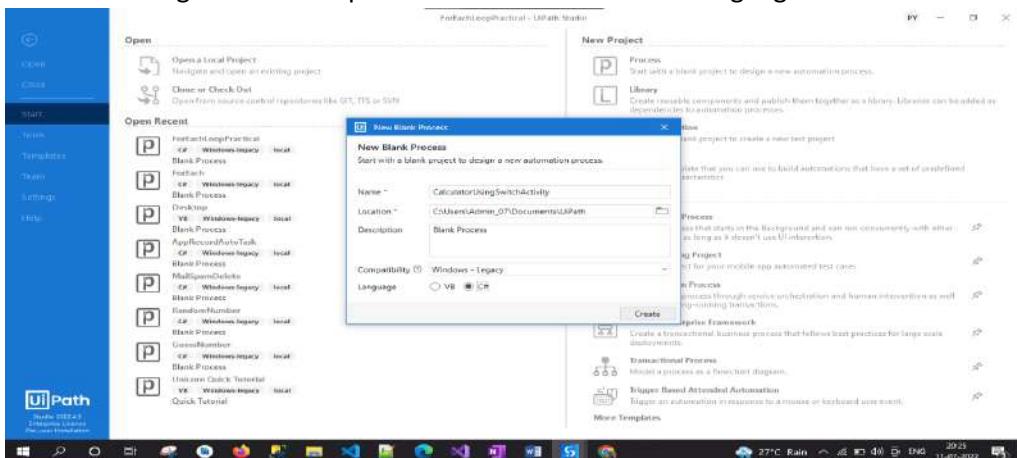
## Practical 2:

### A] Automate UI Path Number Calculation (Subtraction, Multiplication, and Division of numbers).

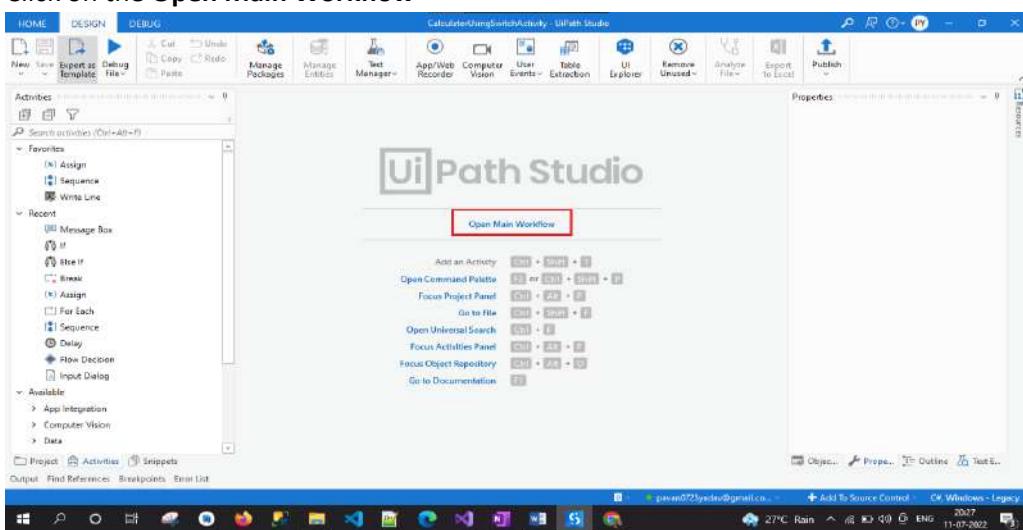
- Click on the Process to New Project

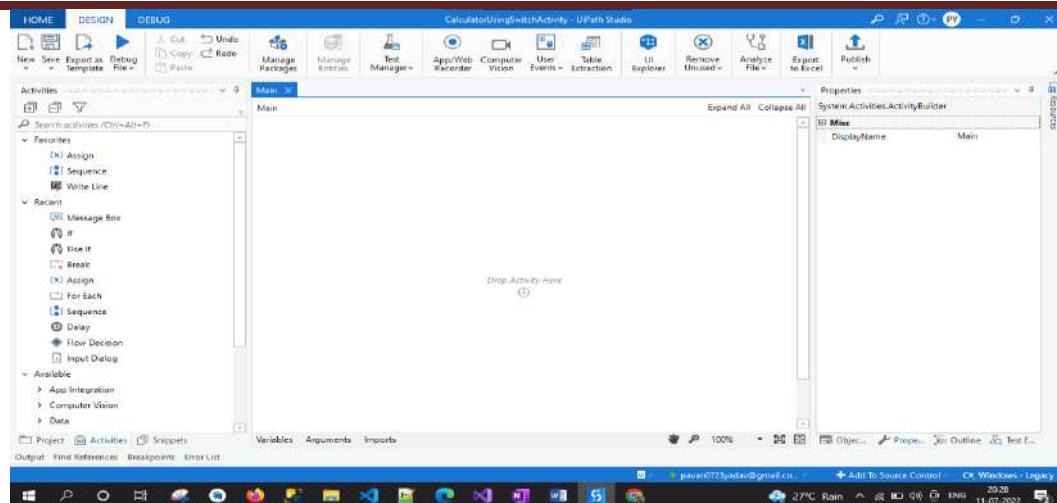


- Write following detail of the process. Note: Select the C# Language

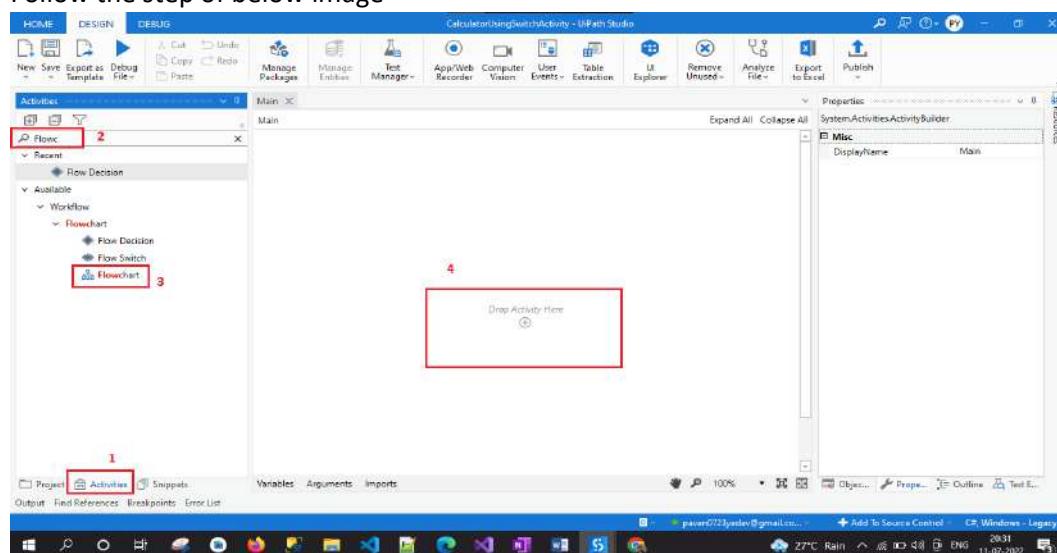


- Click on the Open Main Workflow

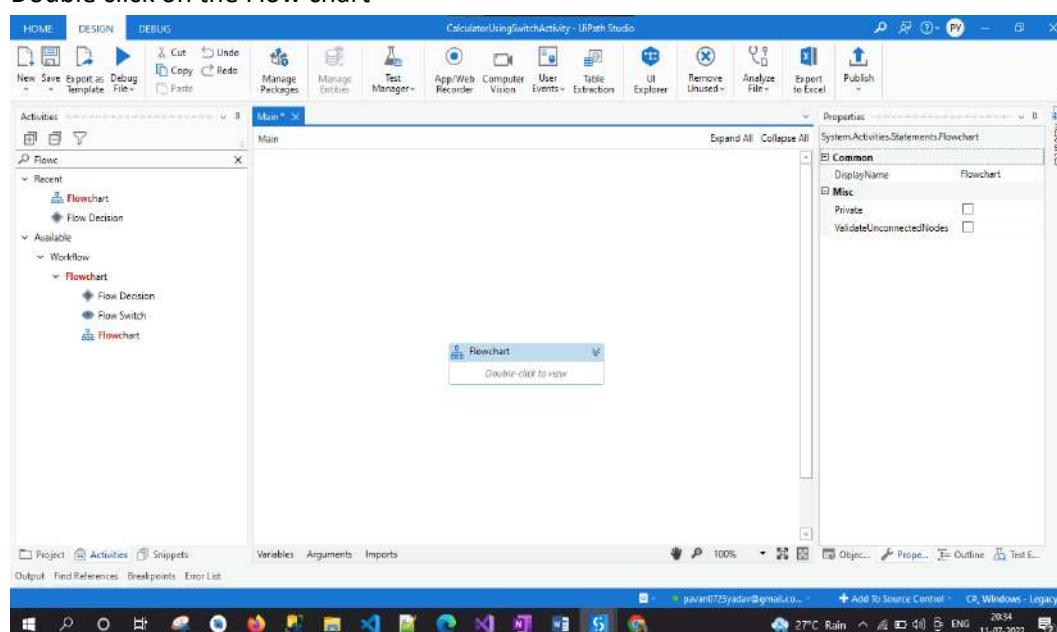




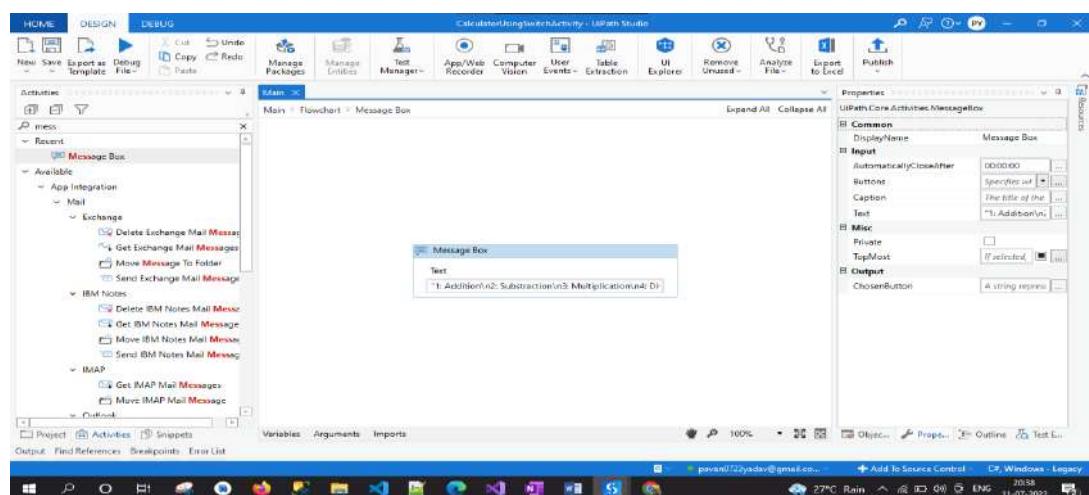
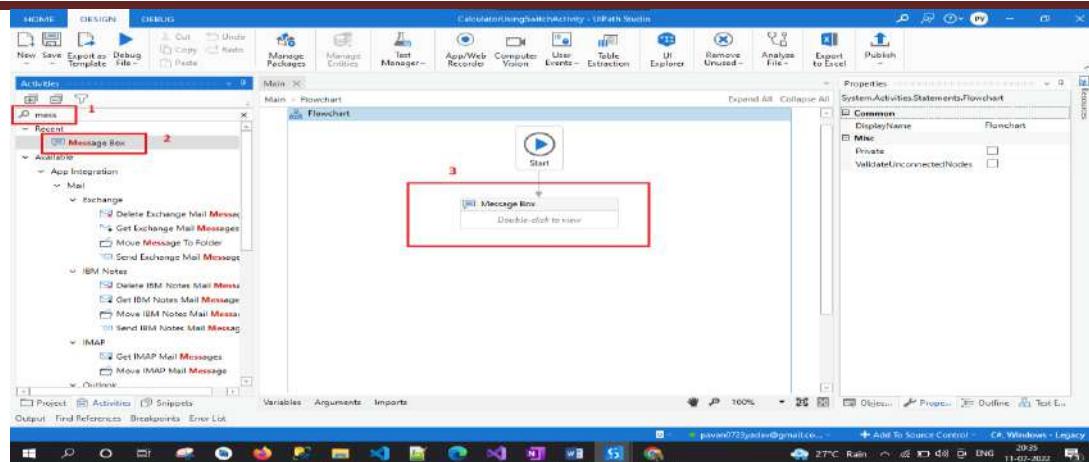
4. Follow the step of below image



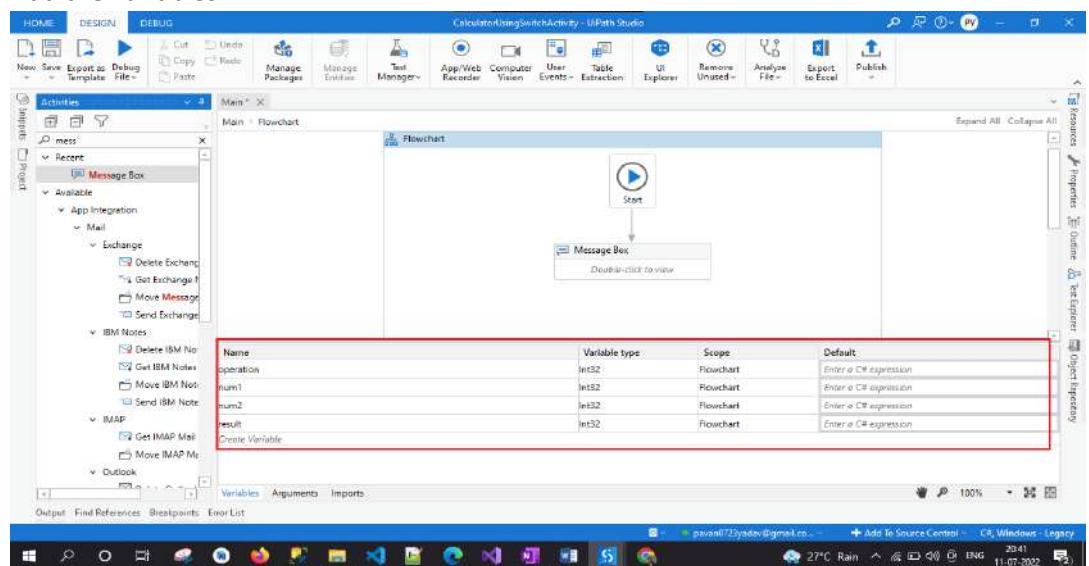
Double click on the Flow chart



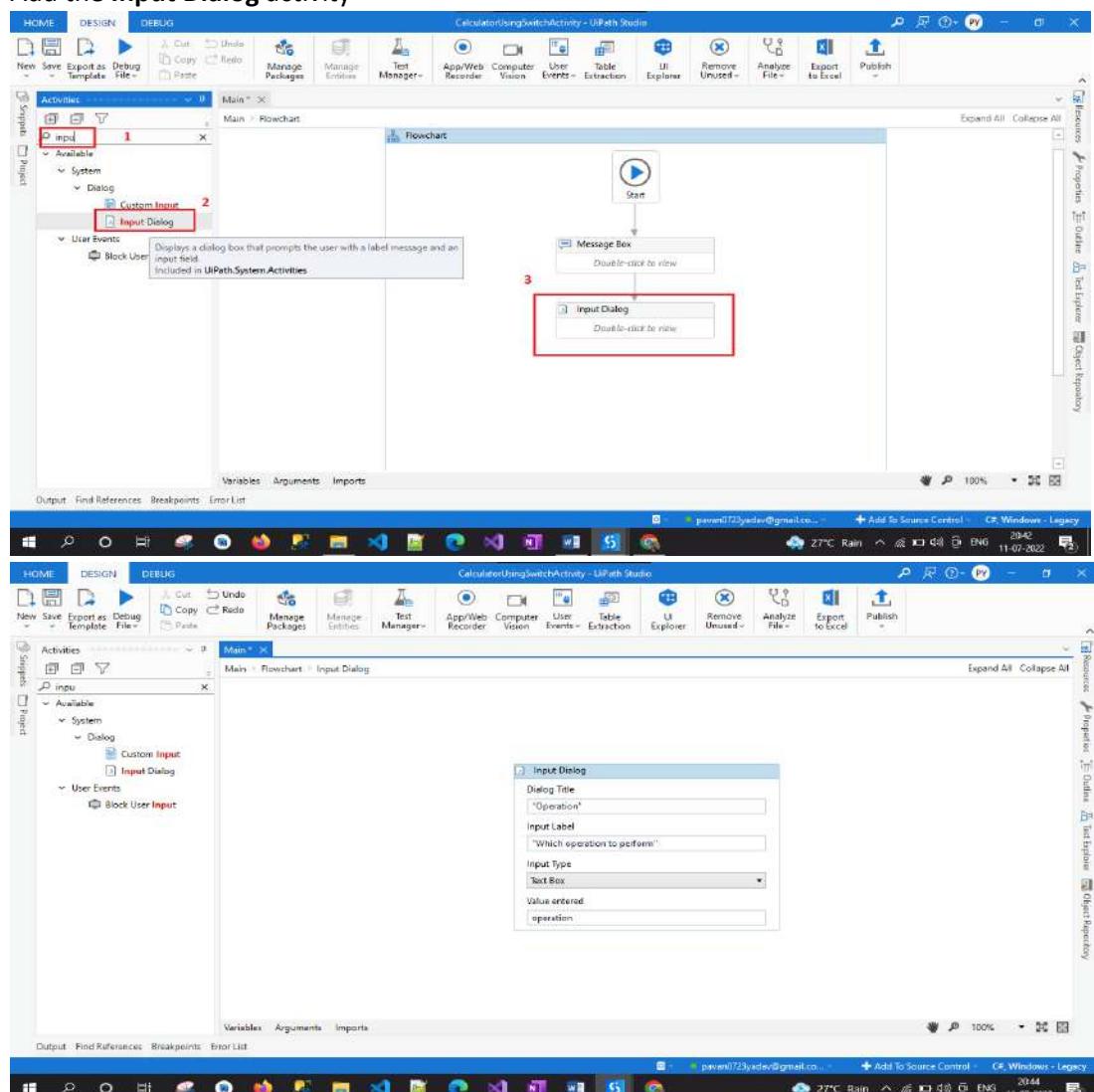
5. Add the Message box



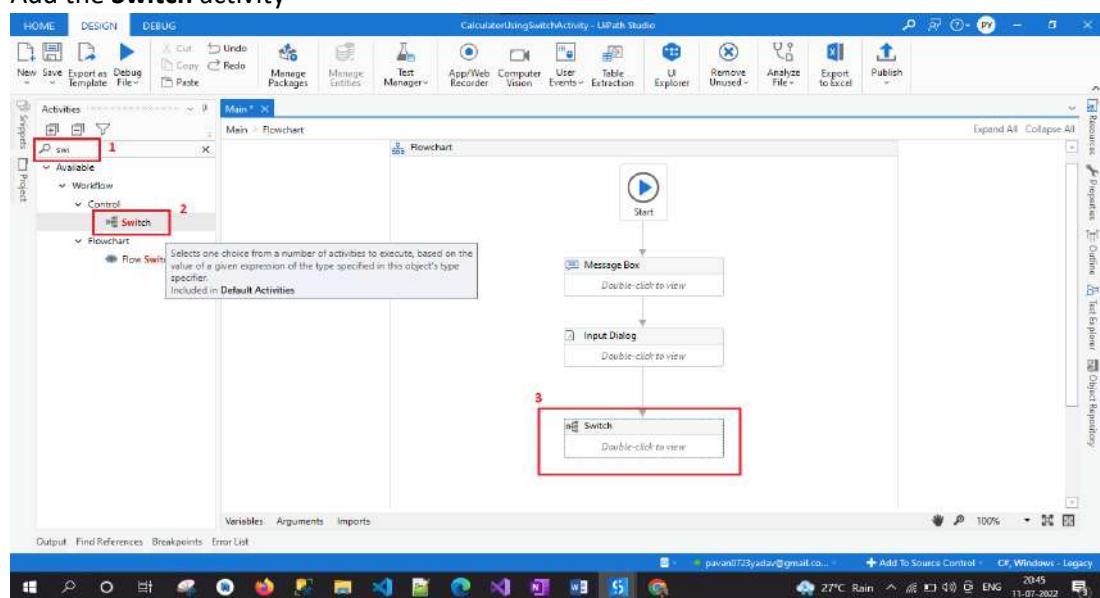
## 6. Add the variables

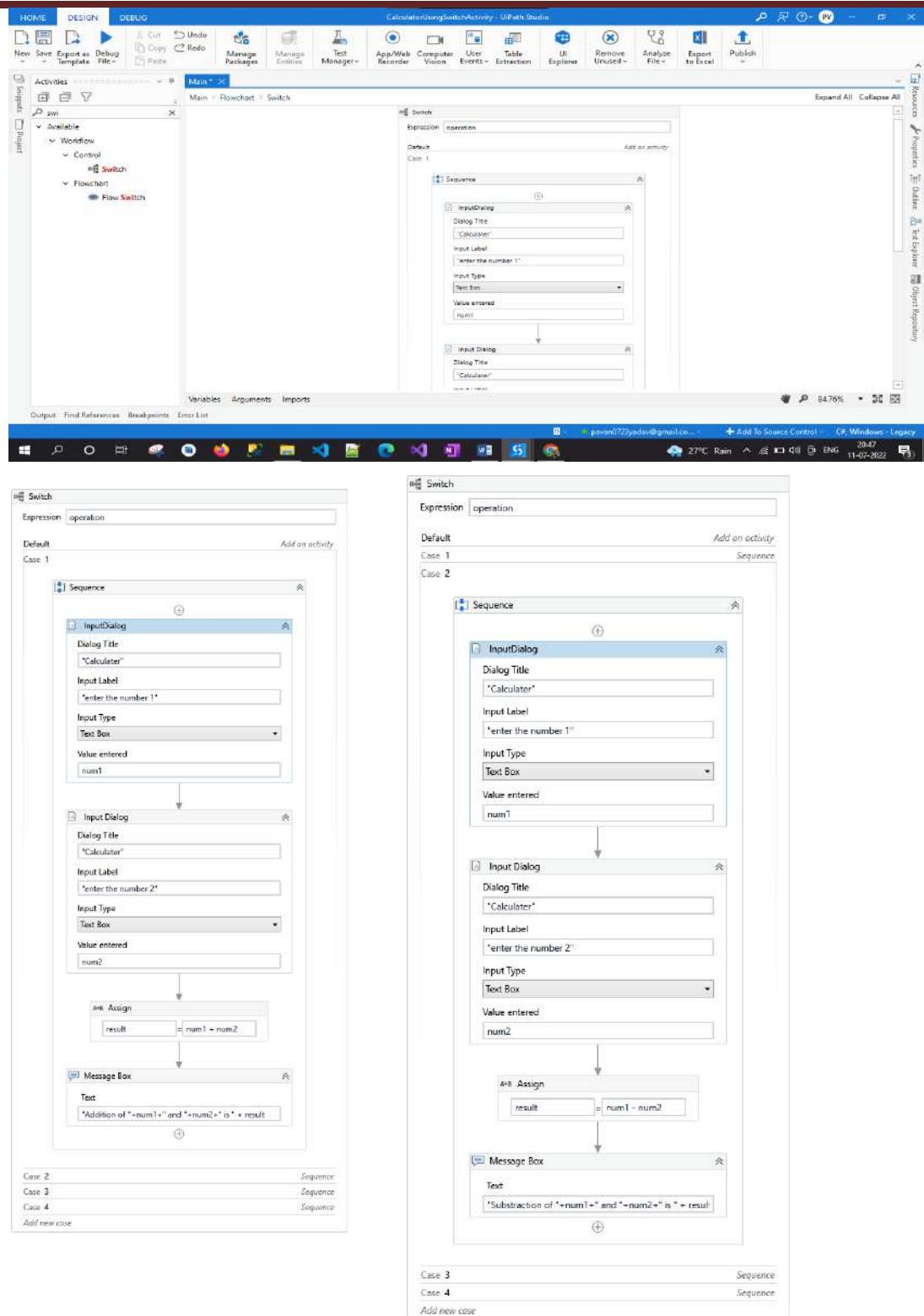


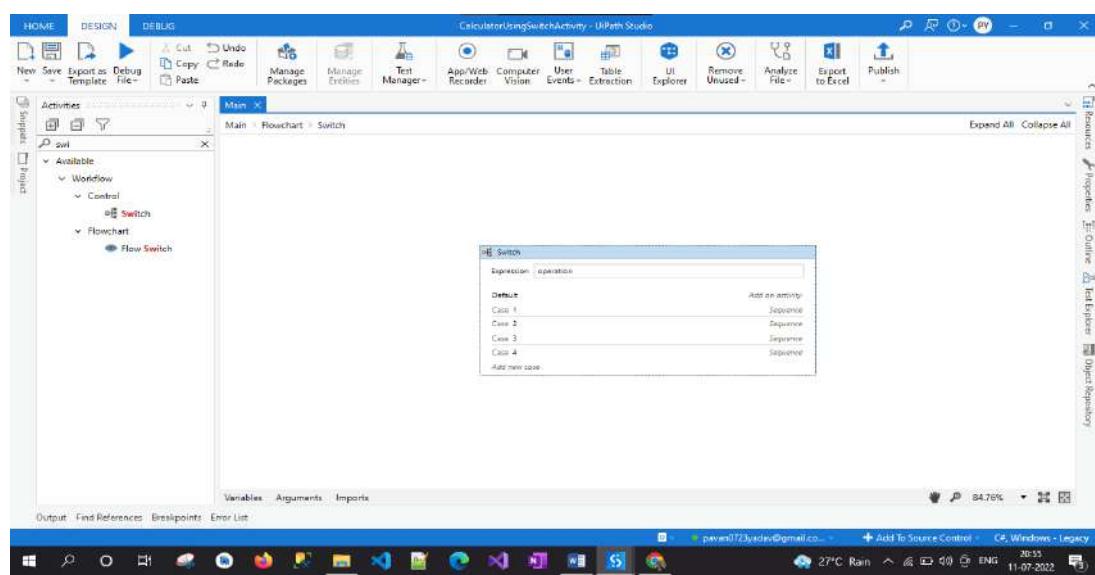
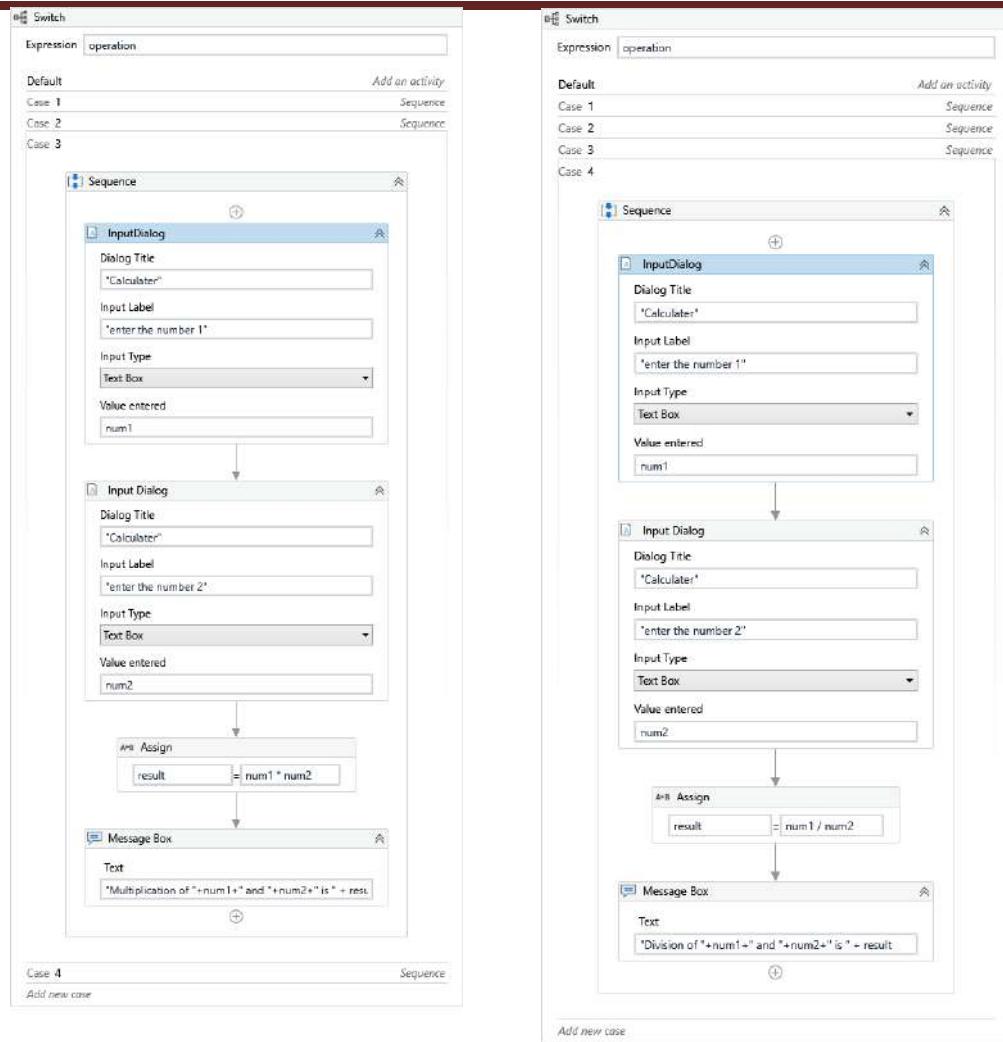
## 7. Add the Input Dialog activity



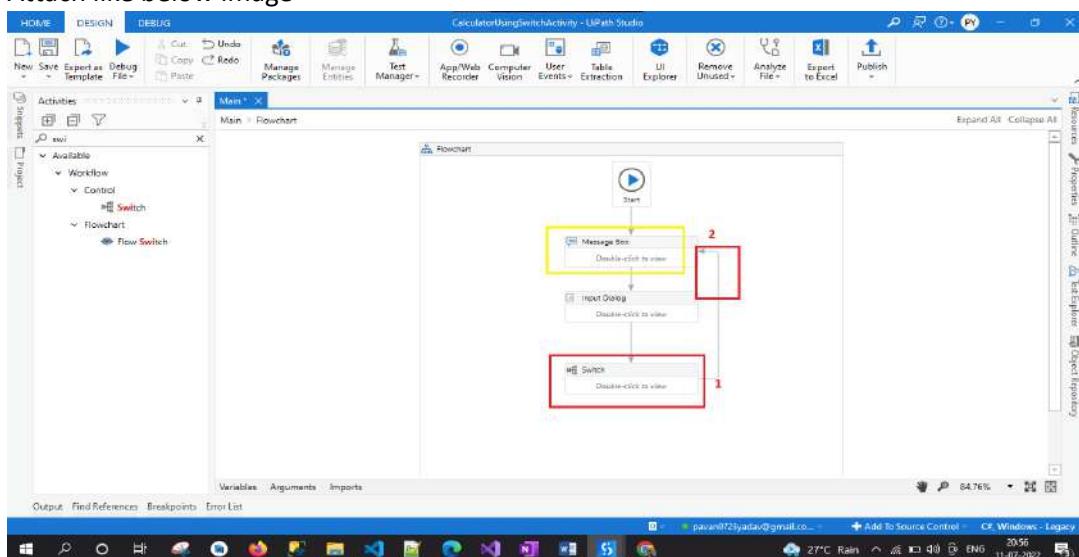
## 8. Add the Switch activity



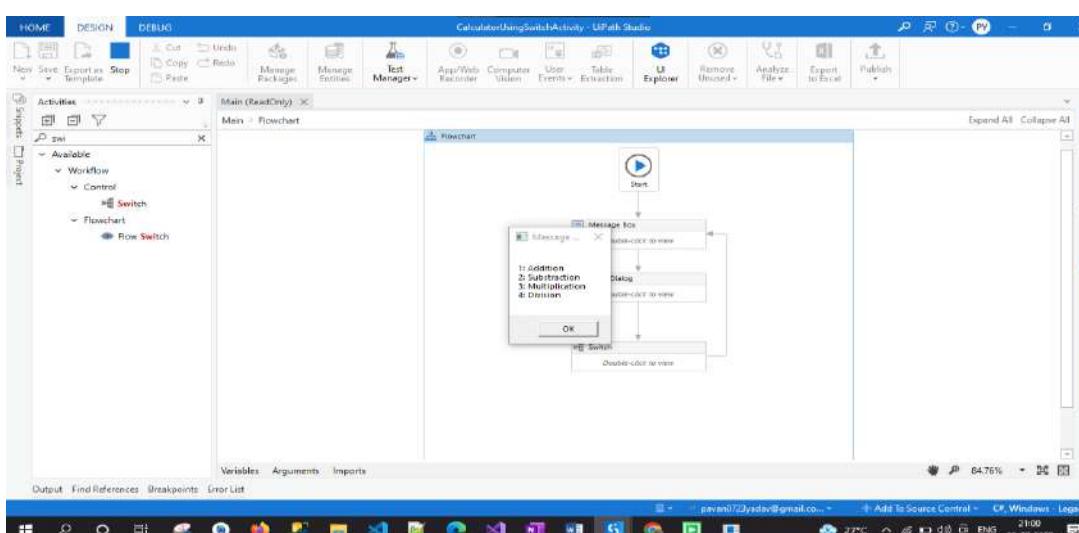
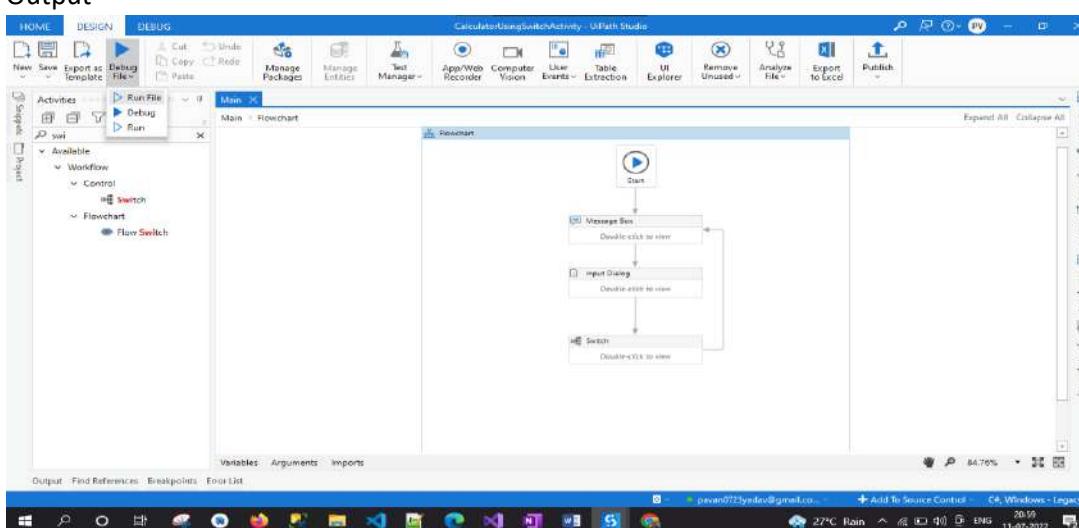


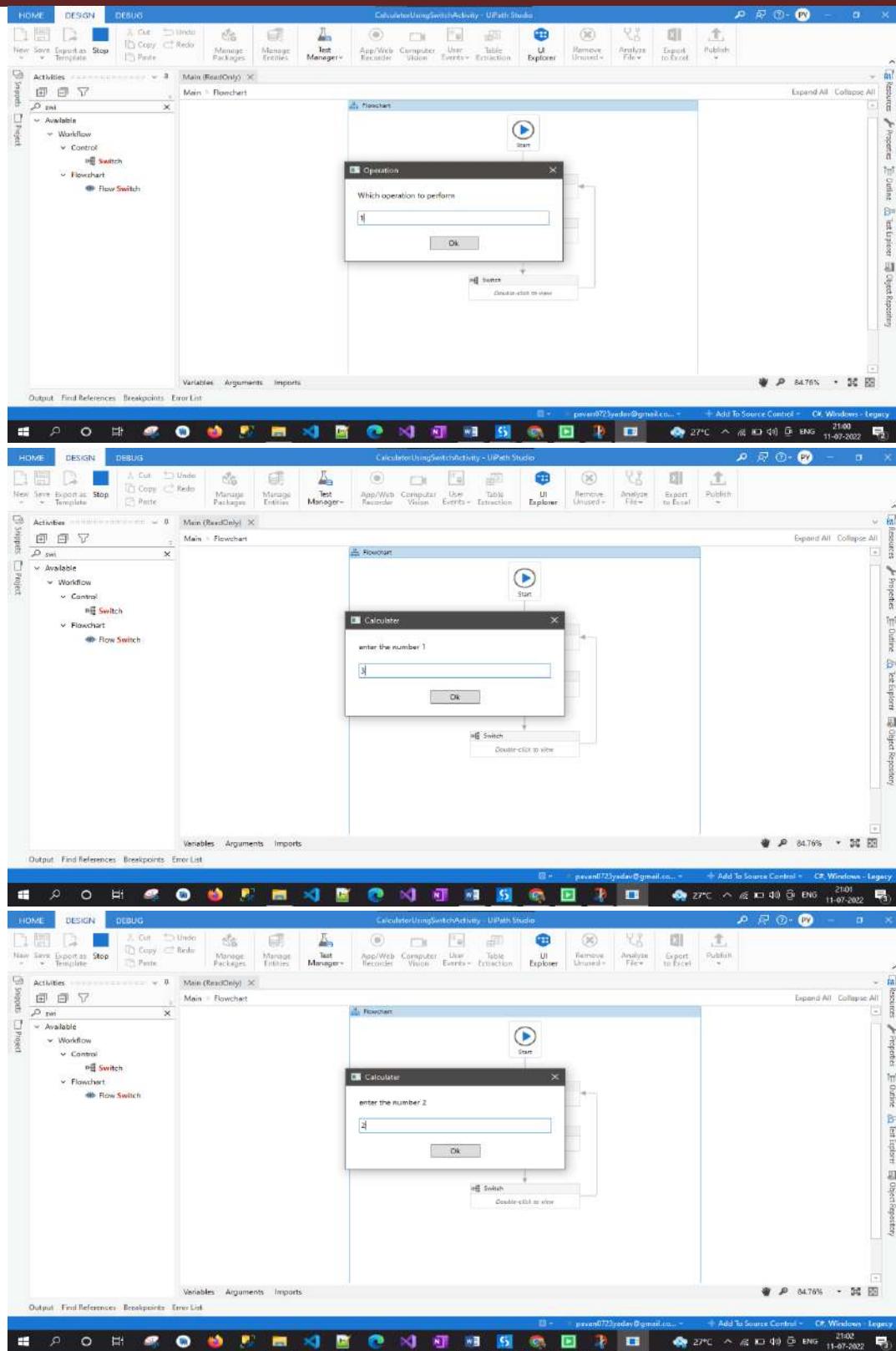


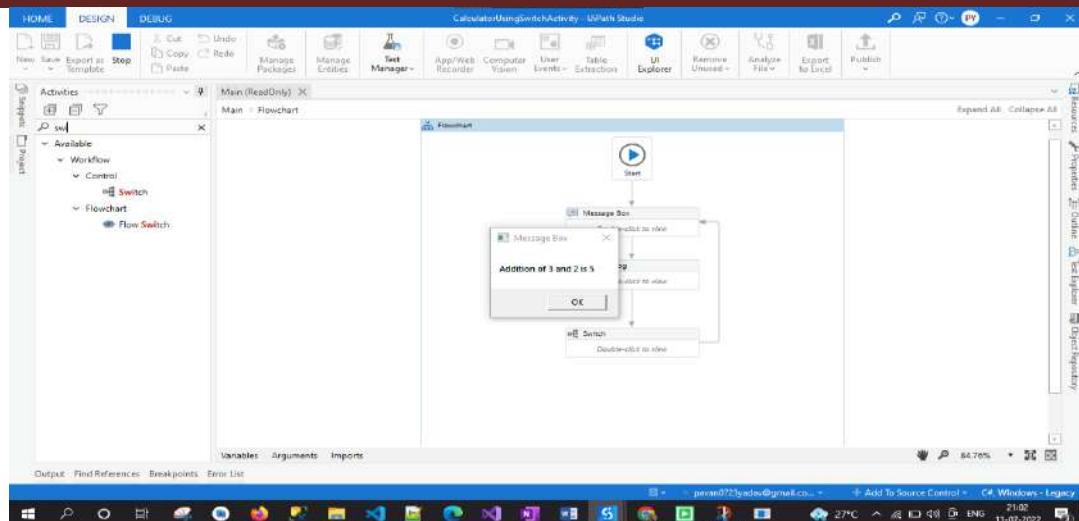
## 9. Attach like below image



## 10. Output







It's run again & again if you understand the Process then watch the video

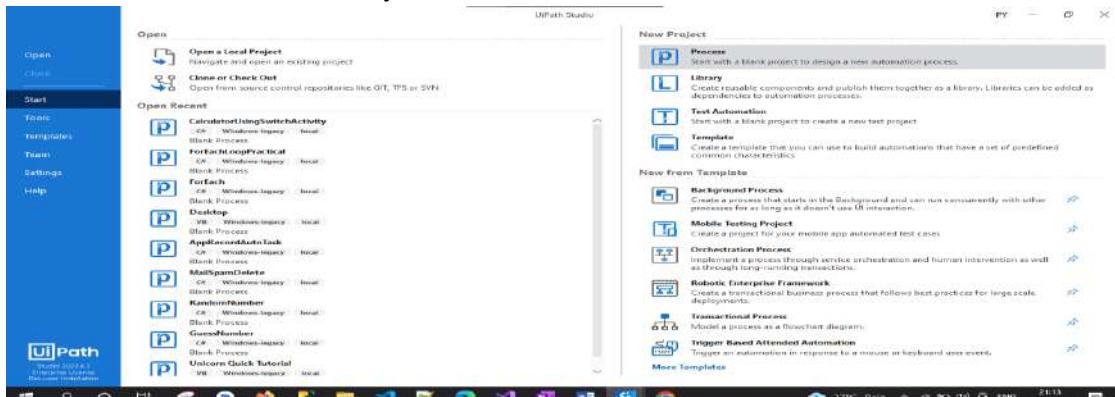
### 11. Video Link:

[https://drive.google.com/file/d/1vfWuJiJued04oXY8AMBlwUcRP8MaCu\\_Y/view?usp=sharing](https://drive.google.com/file/d/1vfWuJiJued04oXY8AMBlwUcRP8MaCu_Y/view?usp=sharing)

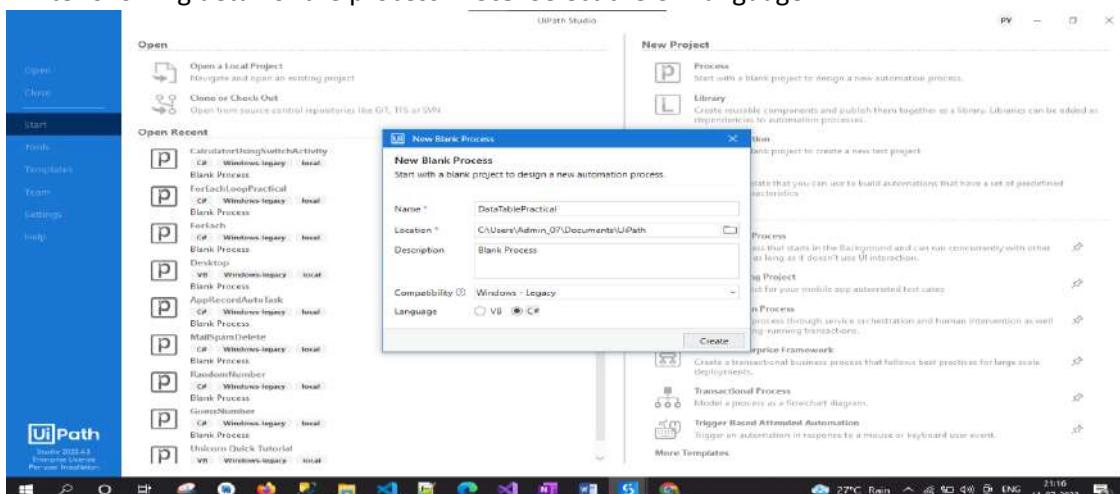
## B] Create an automation UI Path project using different types of variables (number, date-time, Boolean, generic, array, data table)

### ➤ Data Table

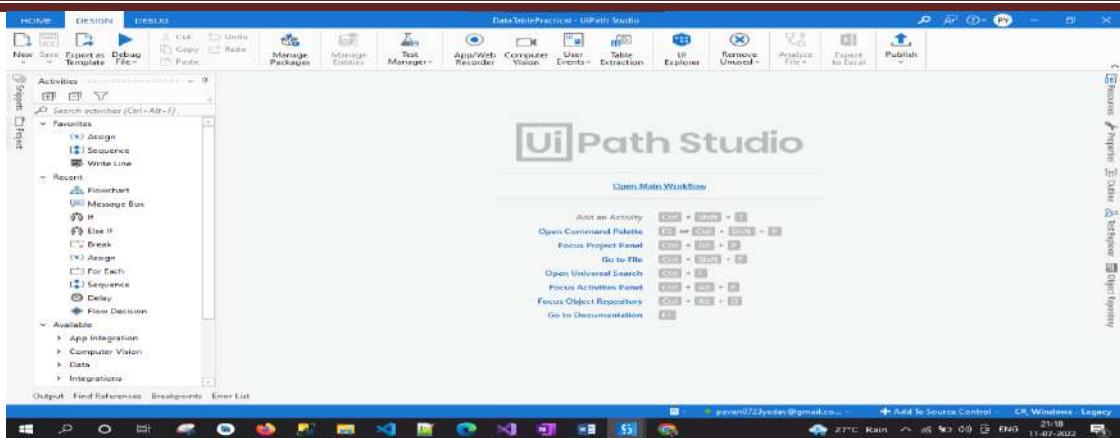
#### 1. Click on the Process to New Project



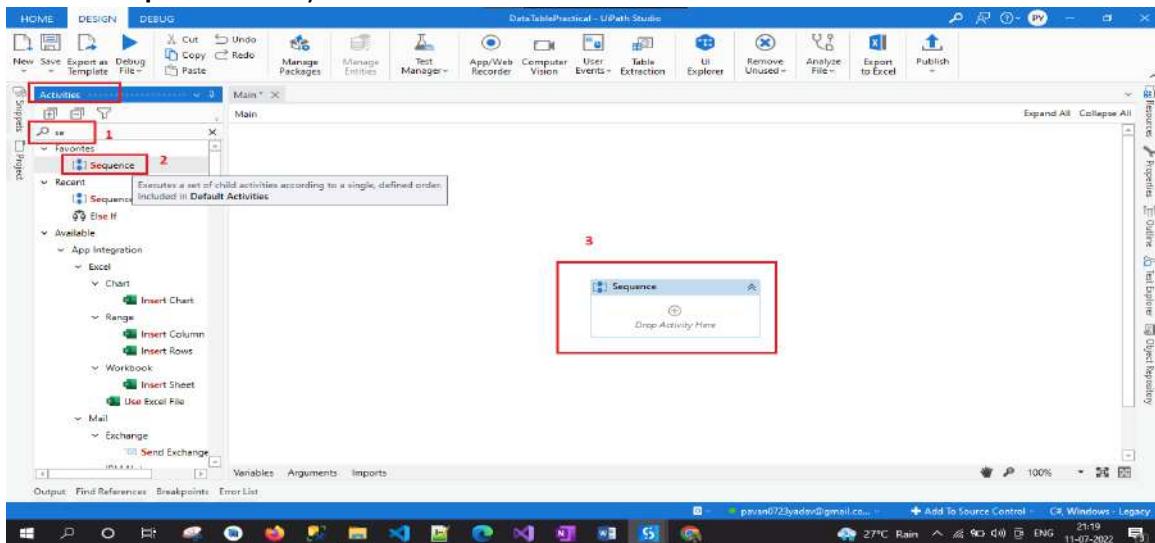
#### 2. Write following detail of the process. Note: Select the C# Language



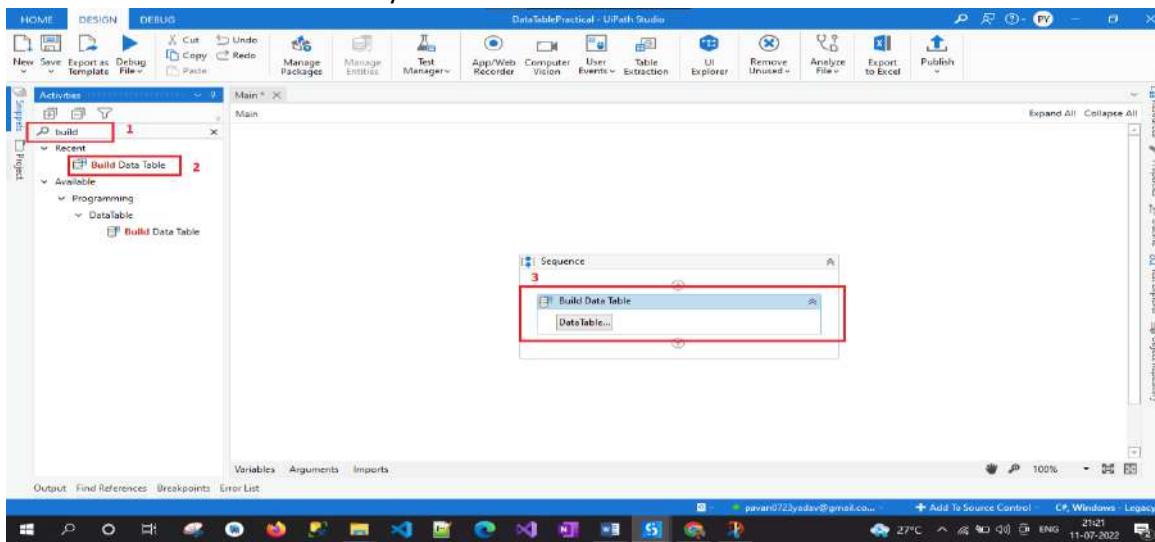
#### 3. Click on the Open Main Workflow

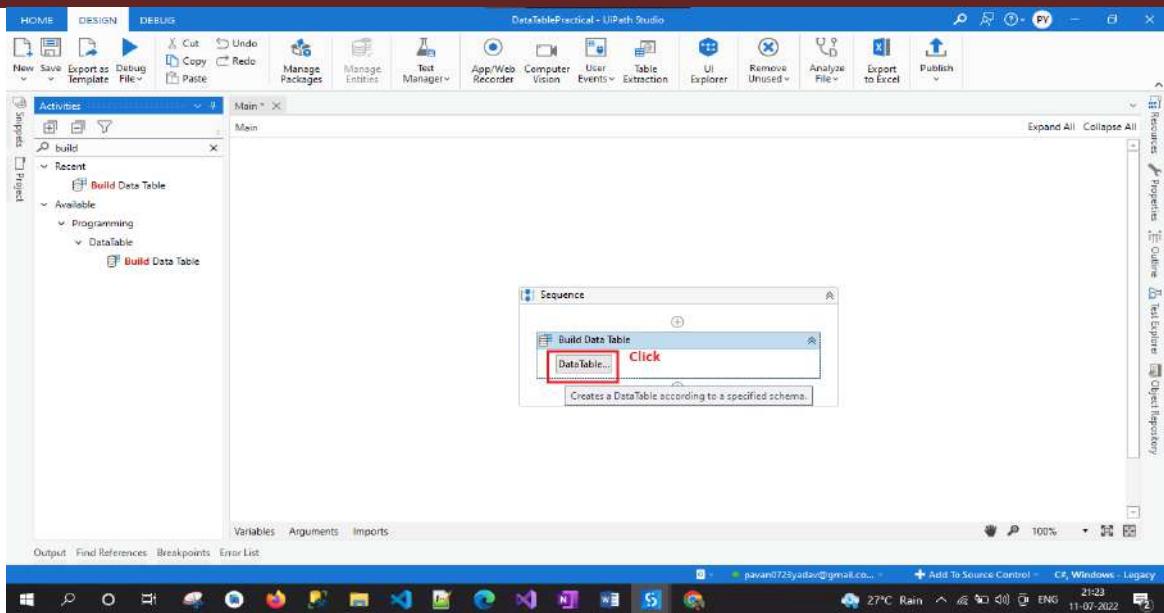


#### 4. Add the Sequence activity

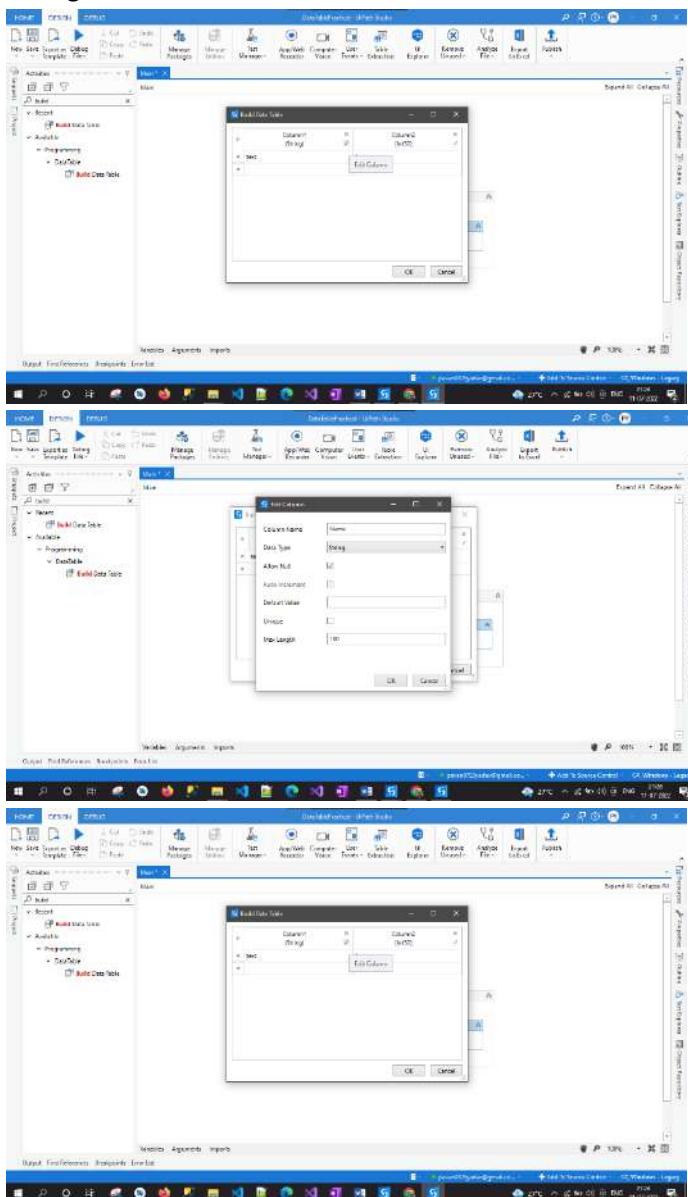


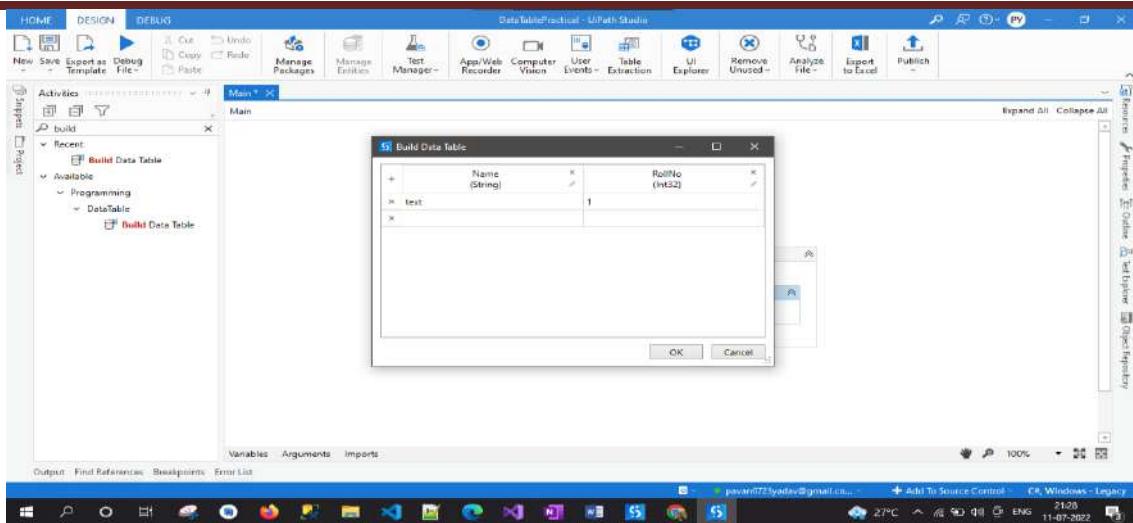
#### 5. Add the Build Data Table activity



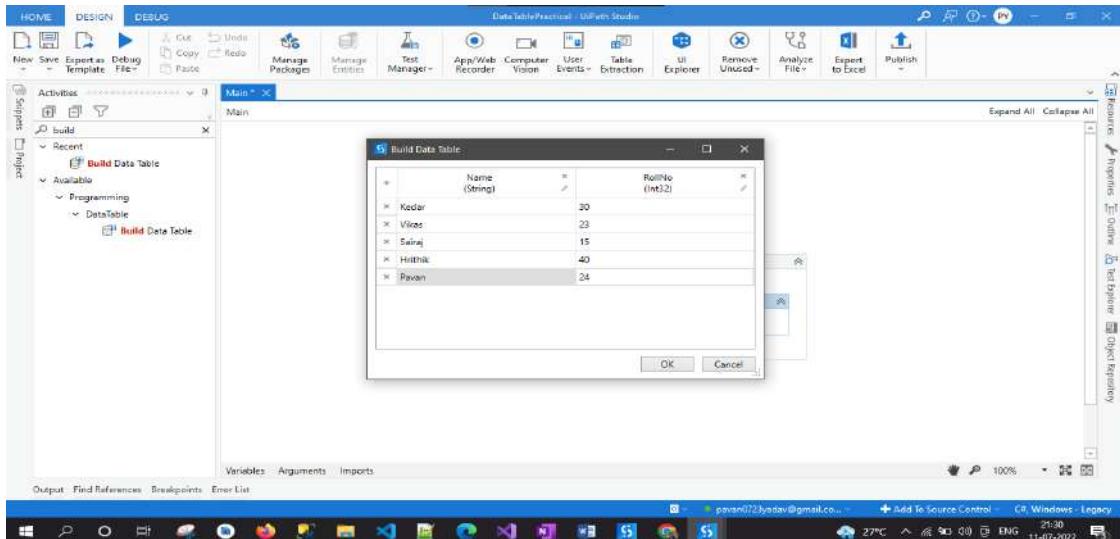


Change the column name to click on the edit button

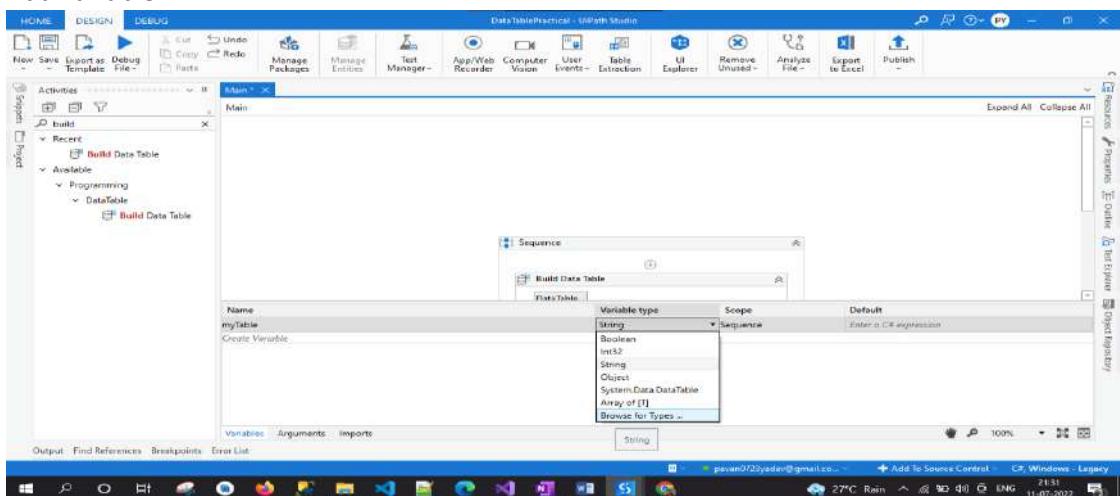


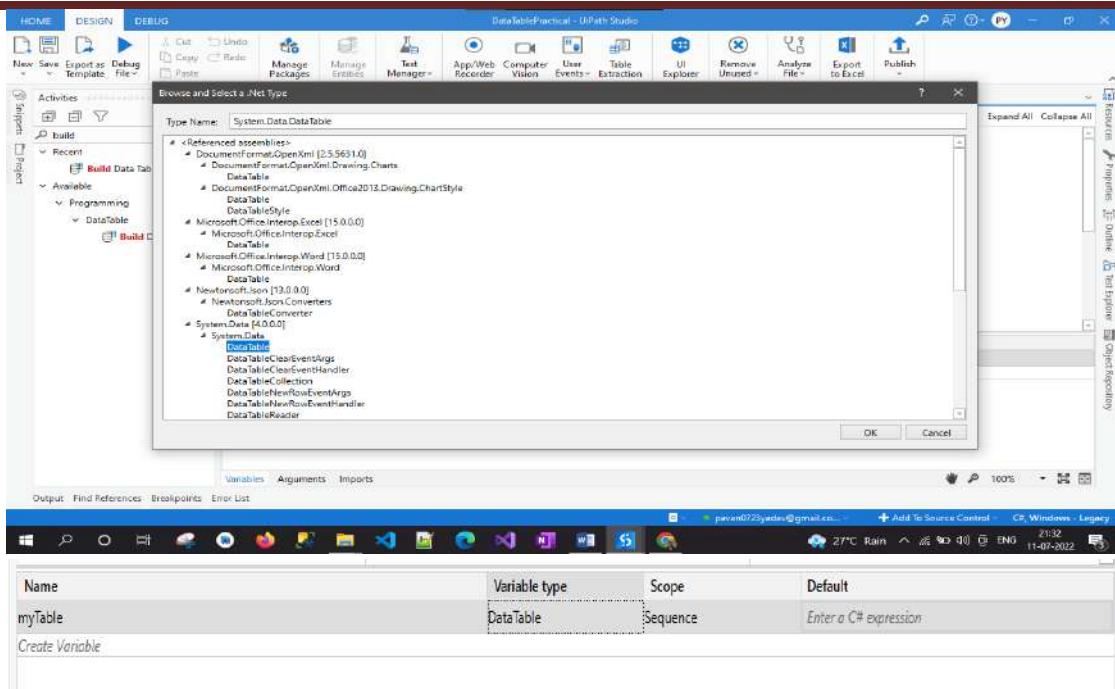


## 6. Add some data

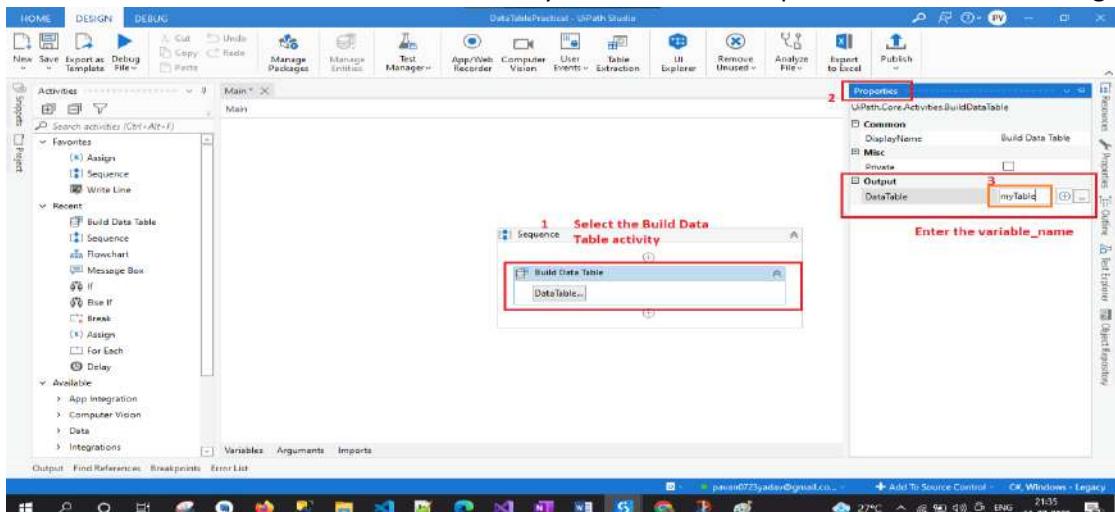


## 7. Add variable

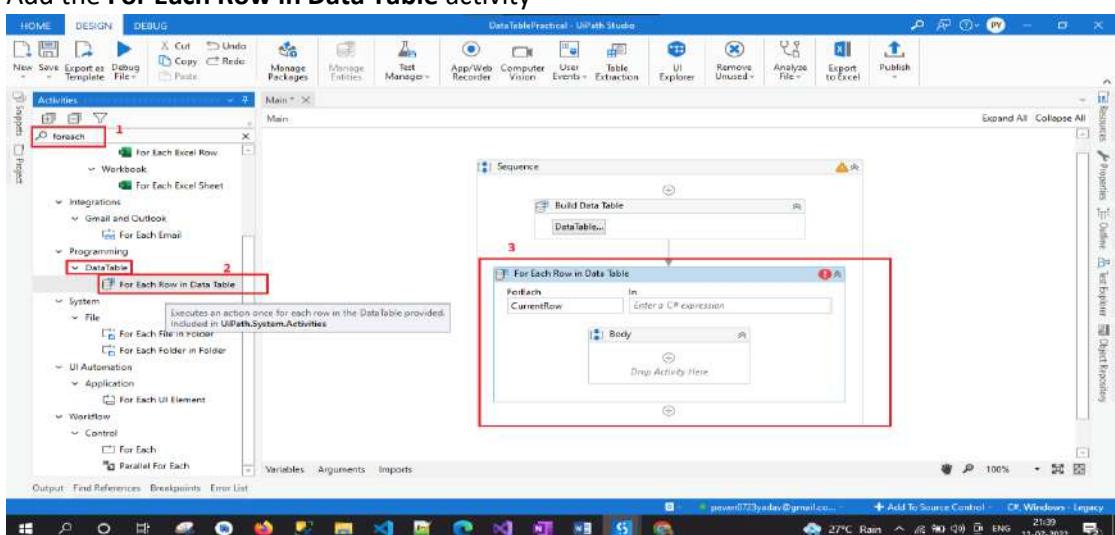




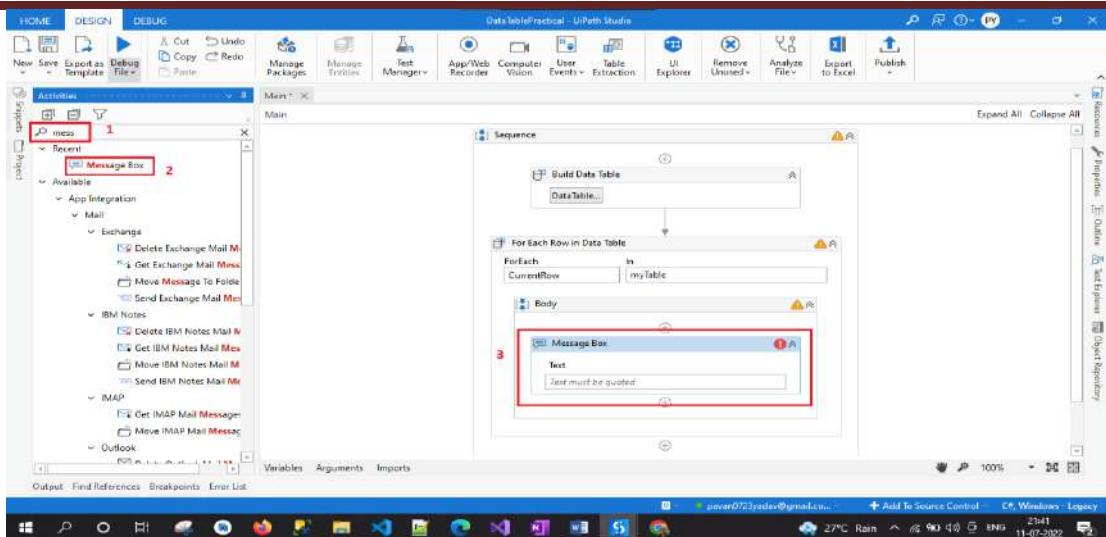
**8. Add variable into the Build Data Table activity DataTable for Output section like below image**



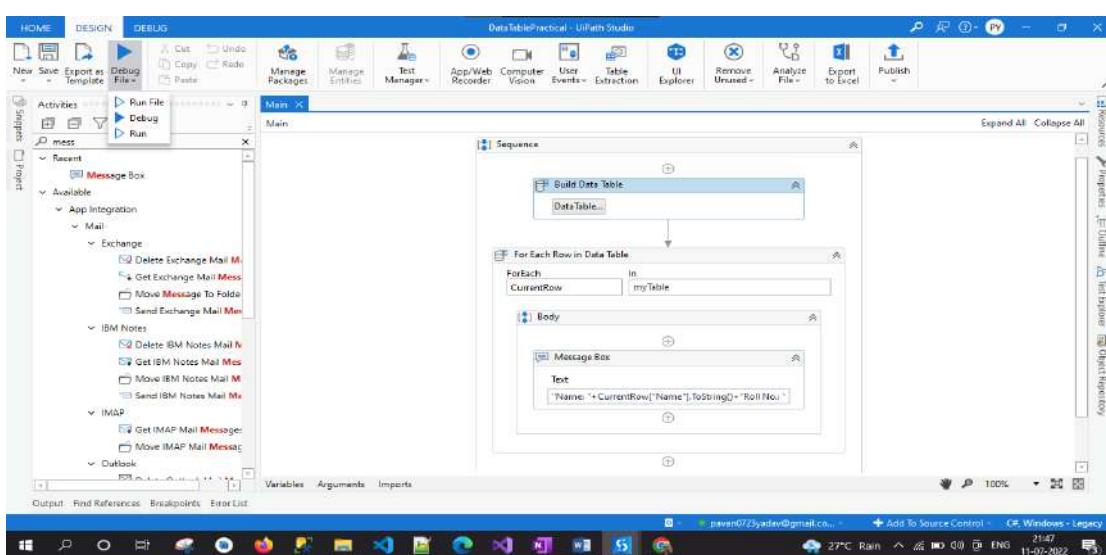
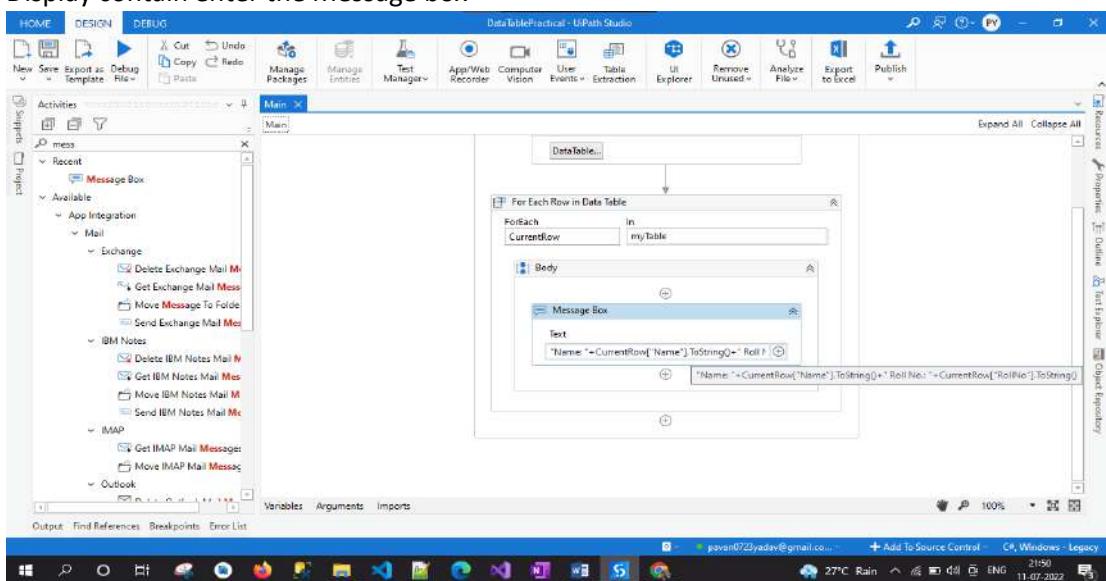
**9. Add the For Each Row in Data Table activity**



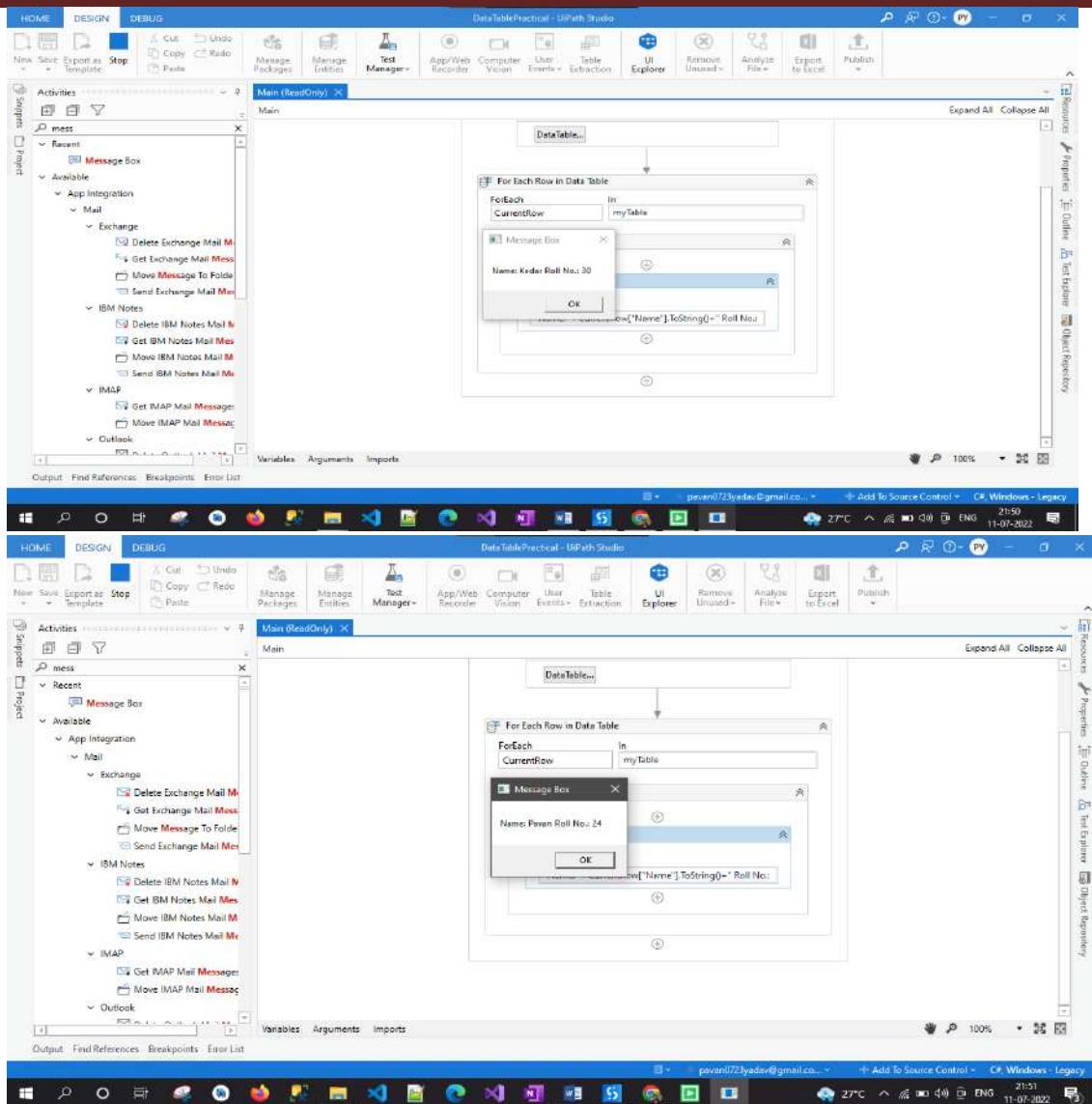
**10. Enter the variable name inside the In and Drag & drop the Message Box activity into the Body of the For Each Row in Data Table activity**



### 11. Display contain enter the Message box



### 12. Output

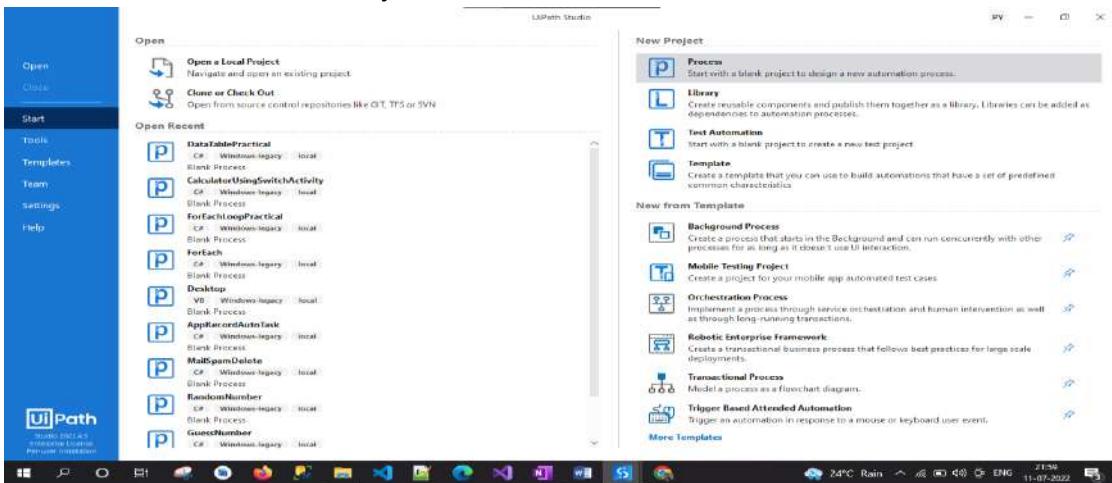


13. Video Link:

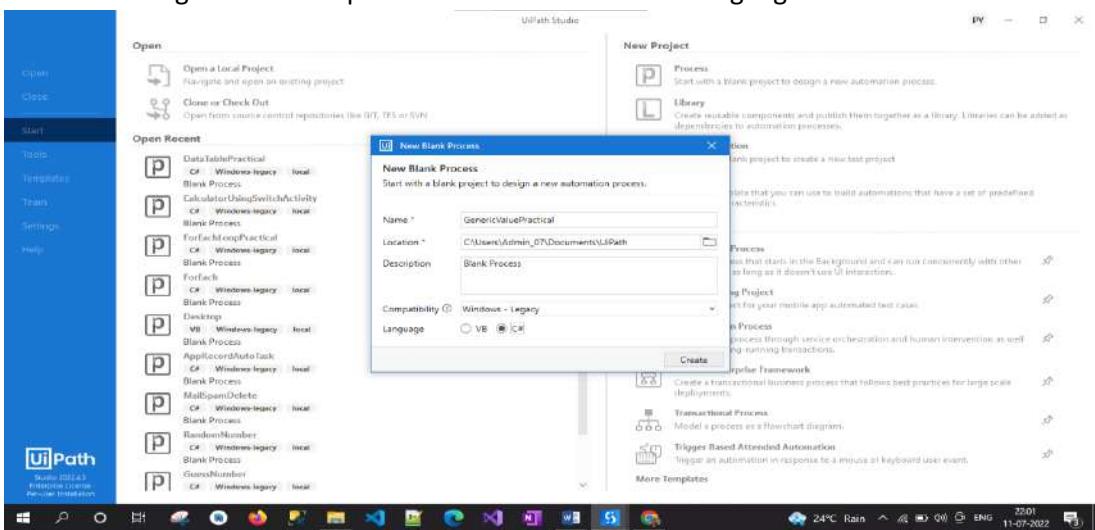
<https://drive.google.com/file/d/1oFbxkX84WtoX2L95VCEuV5ICPMjAKsZK/view?usp=sharing>

## ➤ Generic Value Variable

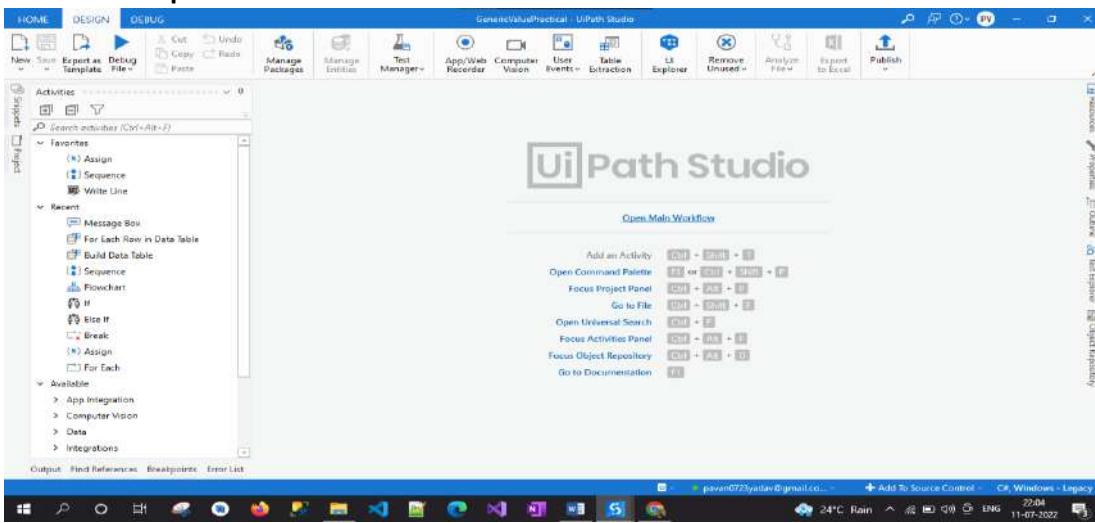
### 1. Click on the Process to New Project



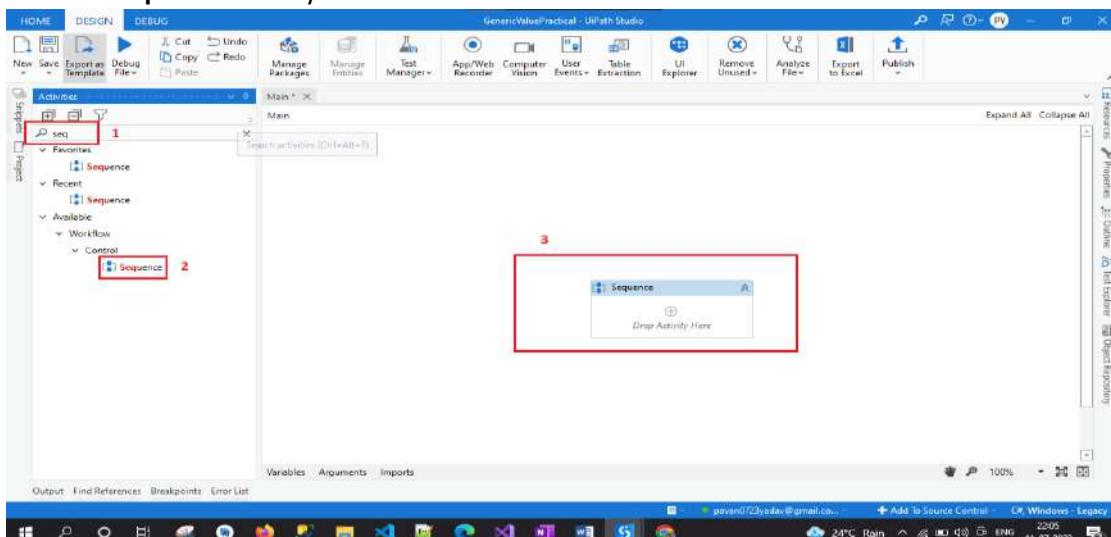
### 2. Write following detail of the process. Note: Select the C# Language



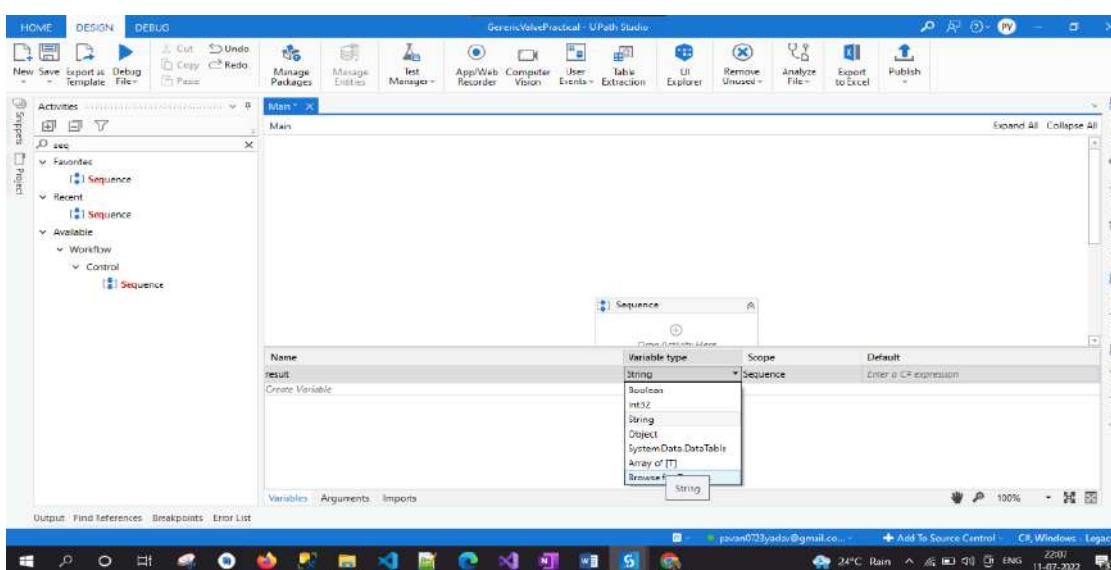
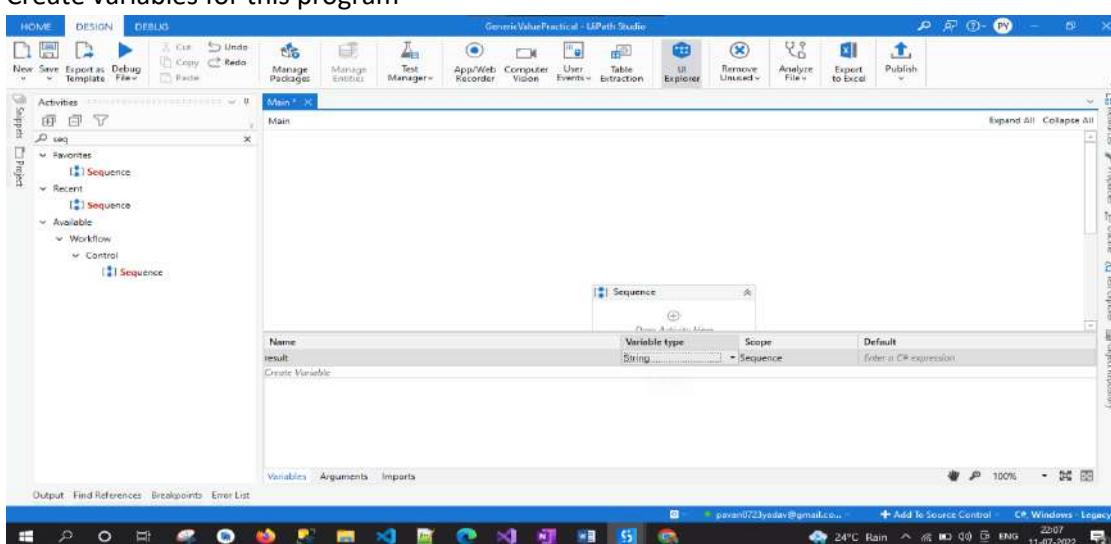
### 3. Click on the Open Main Workflow



#### 4. Add the Sequence activity



#### 5. Create variables for this program



The screenshot shows the UiPath Studio interface with the 'GenericValuePractical - UiPath Studio' window open. In the top left, the 'Variables' tab is selected. A 'Variables and Select a .Net Type' dialog box is displayed, listing 'GenericValue' under 'UiPath.System.Activities (224-1.0)' with its subtypes: 'GenericValue', 'GenericValueFormatProvider', and 'GenericValueTypeConverter'. Below this, a table lists three variables: 'result' (GenericValue, Sequence, Default: 'Enter a C# expression'), 'intValue' (GenericValue, Sequence, Default: '12'), and 'strValue' (GenericValue, Sequence, Default: '"10"'). A 'Create Variable' button is at the bottom of the table.

Name	Variable type	Scope	Default
result	GenericValue	Sequence	Enter a C# expression
intValue	GenericValue	Sequence	12
strValue	GenericValue	Sequence	"10"
<a href="#">Create Variable</a>			

## 6. Add the Assign activity

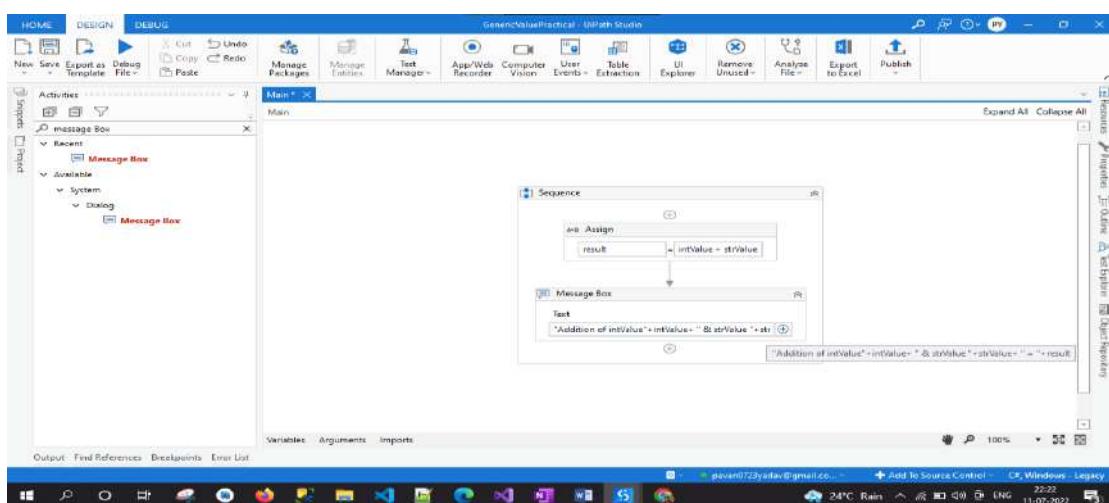
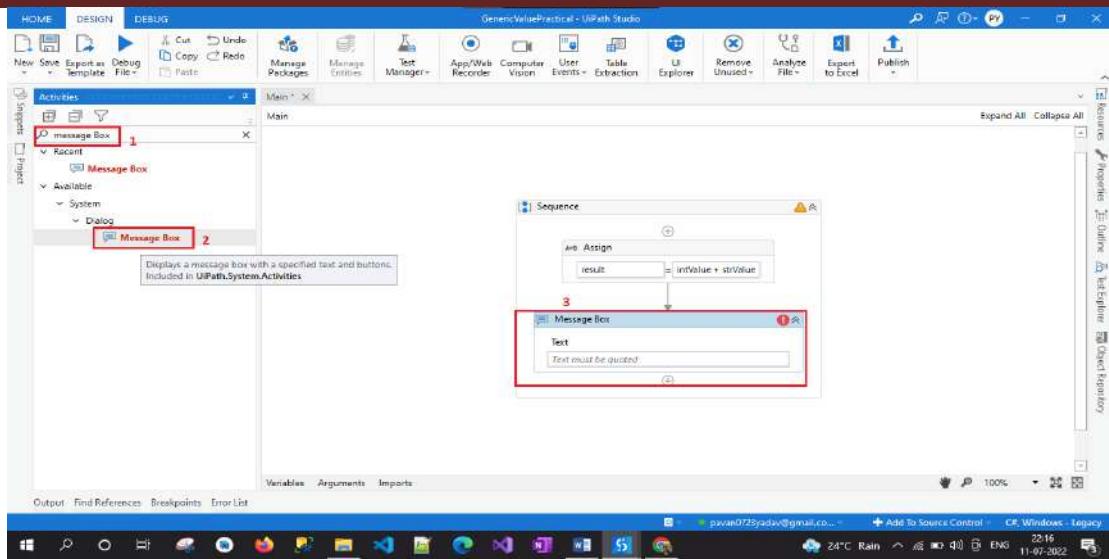
The screenshot shows the UiPath Studio interface with the 'Main' workflow open. The 'Activities' palette on the left has an 'Assign' activity selected and highlighted with a red box. In the main workspace, a 'Sequence' activity is open, and an 'Assign' activity is added to it, also highlighted with a red box. The 'Assign' activity has the following configuration: 'To' is set to 'result' and 'Value' is set to 'Enter a C# expression'. The 'Assign' activity is numbered '1'. A tooltip 'Add Multiple Assign' is visible near the activity.

The 'Main' workflow contains a 'Sequence' activity with one 'Assign' activity:

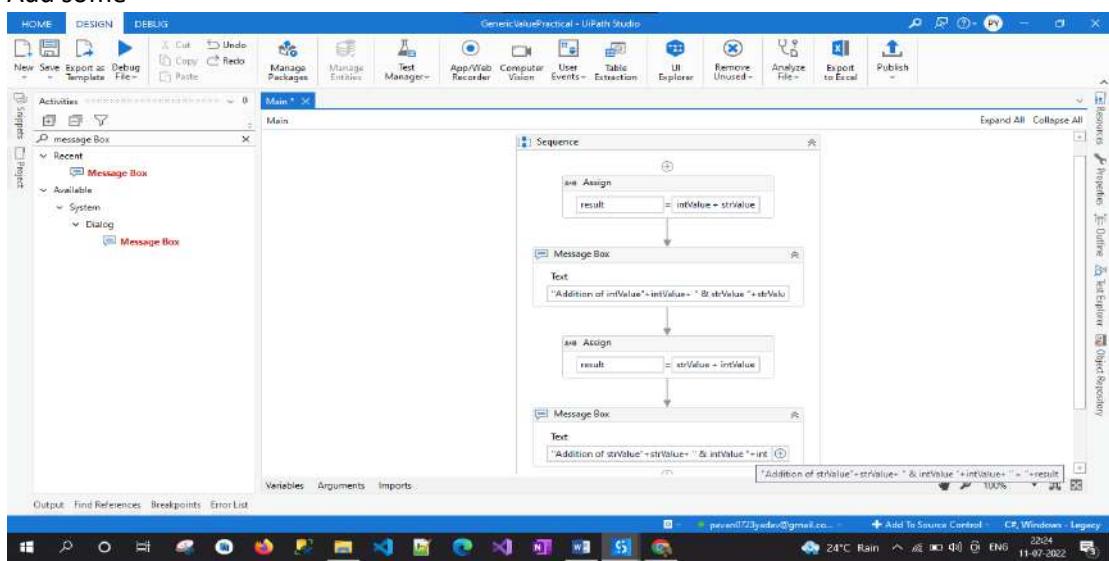
```

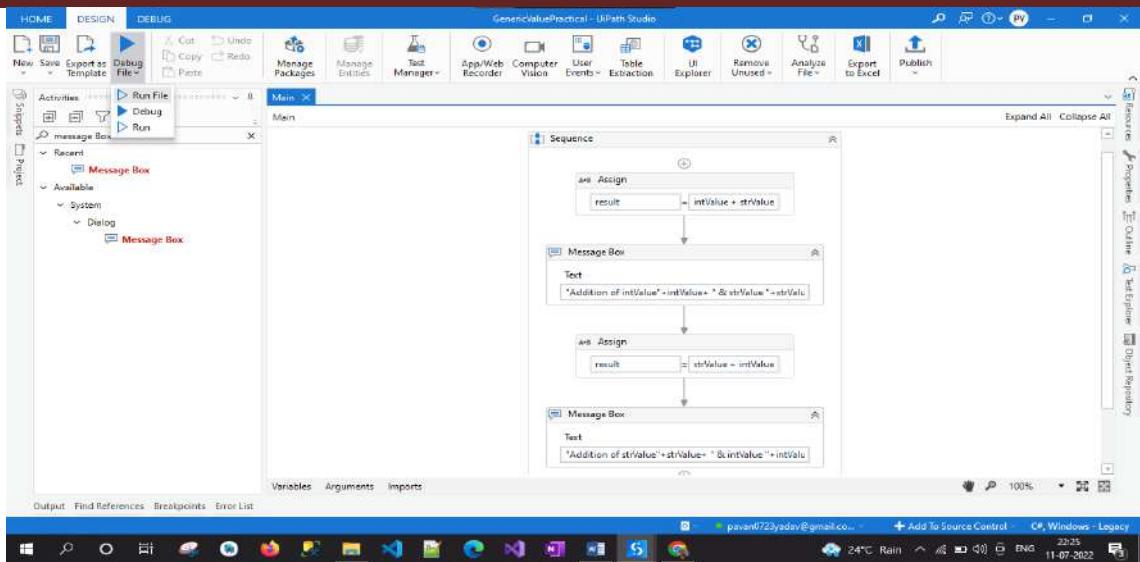
sequence
  assign result = intValue + strValue
  intValue = strValue
  
```

## 7. Add Message Box activity

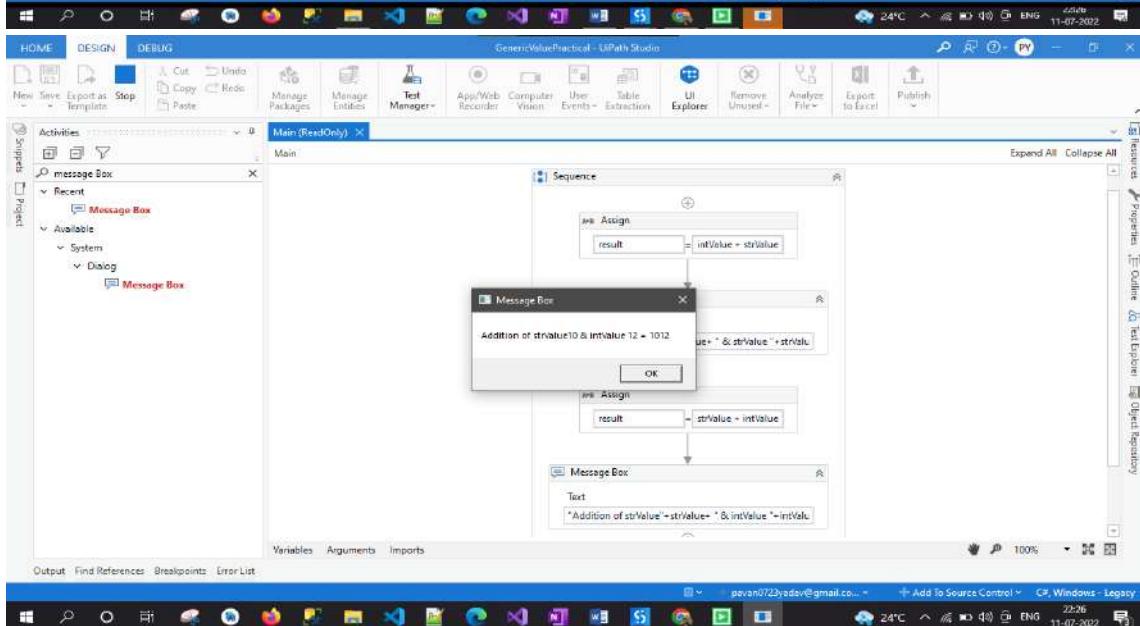
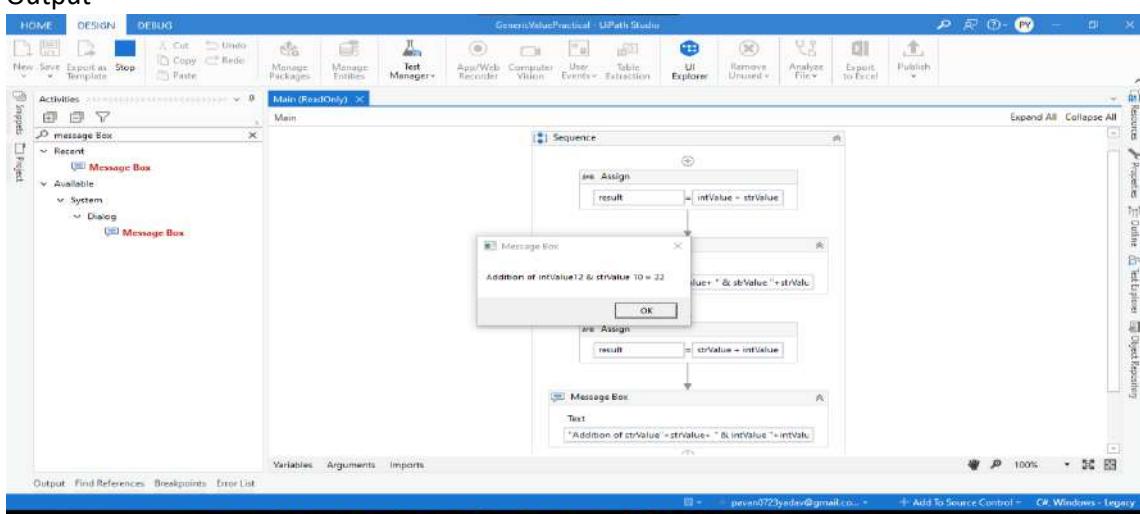


## 8. Add some





## 9. Output

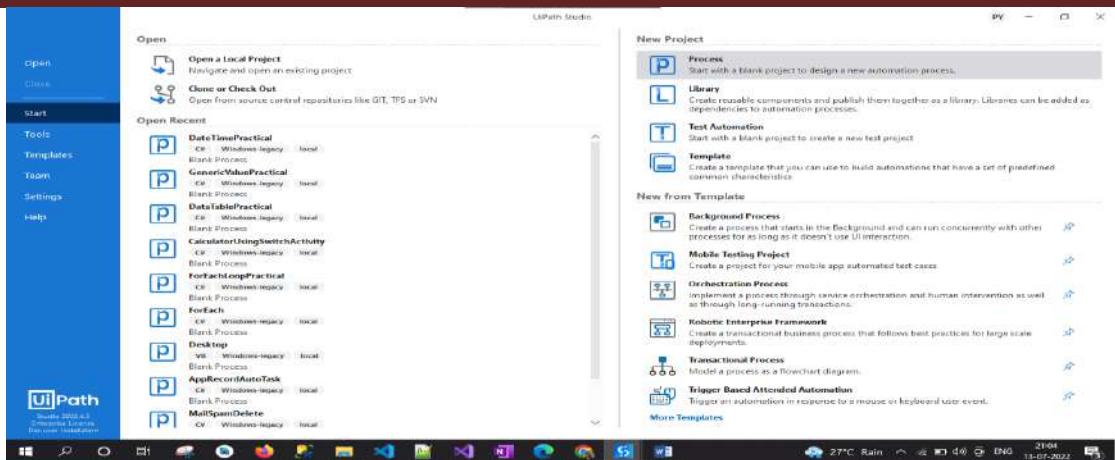


## 10. Video Link:

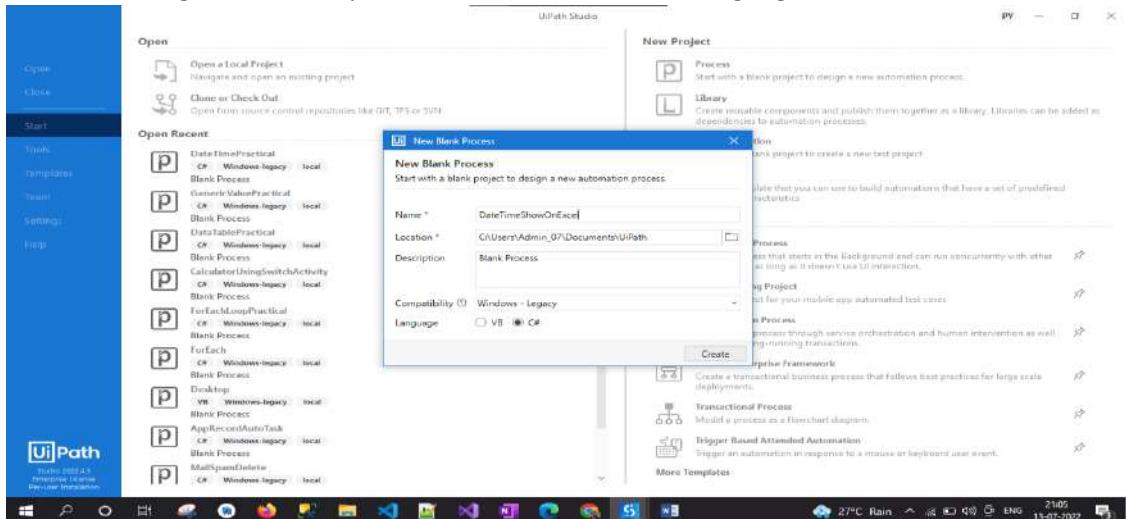
<https://drive.google.com/file/d/1f7grPGPZ4OenjpmkQrOxkdkrXasMOrF/view?usp=sharing>

### ➤ Date Time on Excel

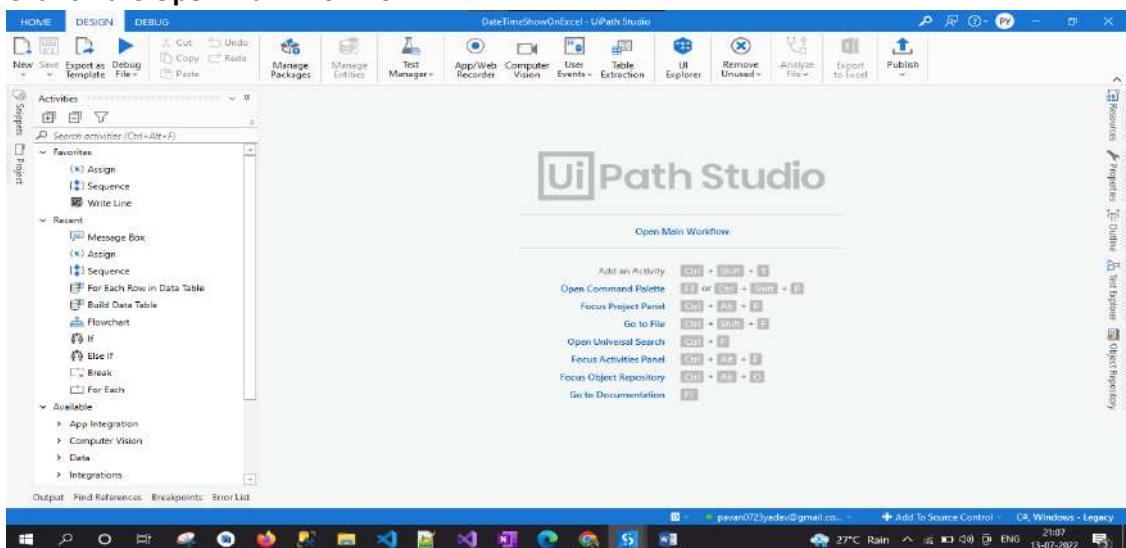
#### 1. Click on the Process to New Project



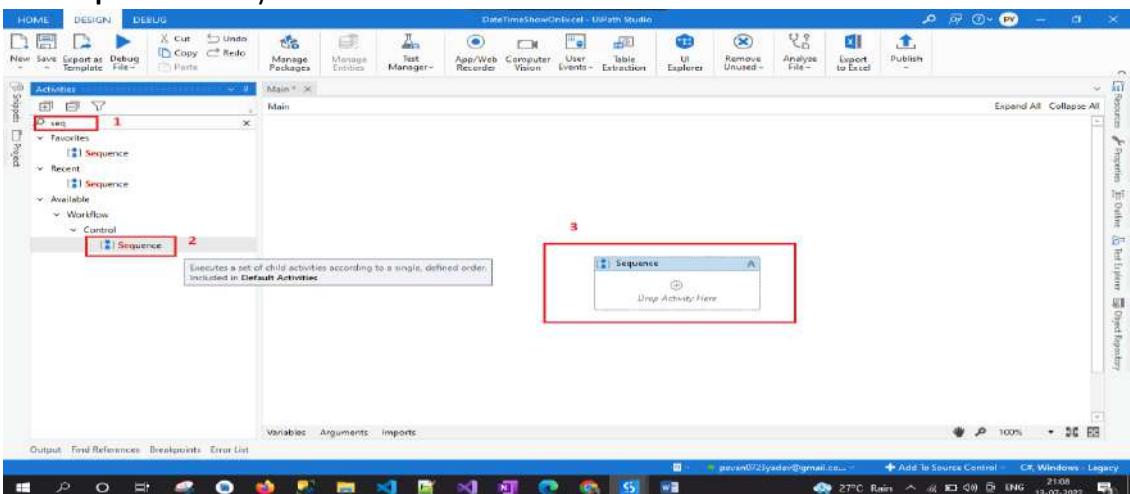
## 2. Write following detail of the process. Note: Select the C# Language



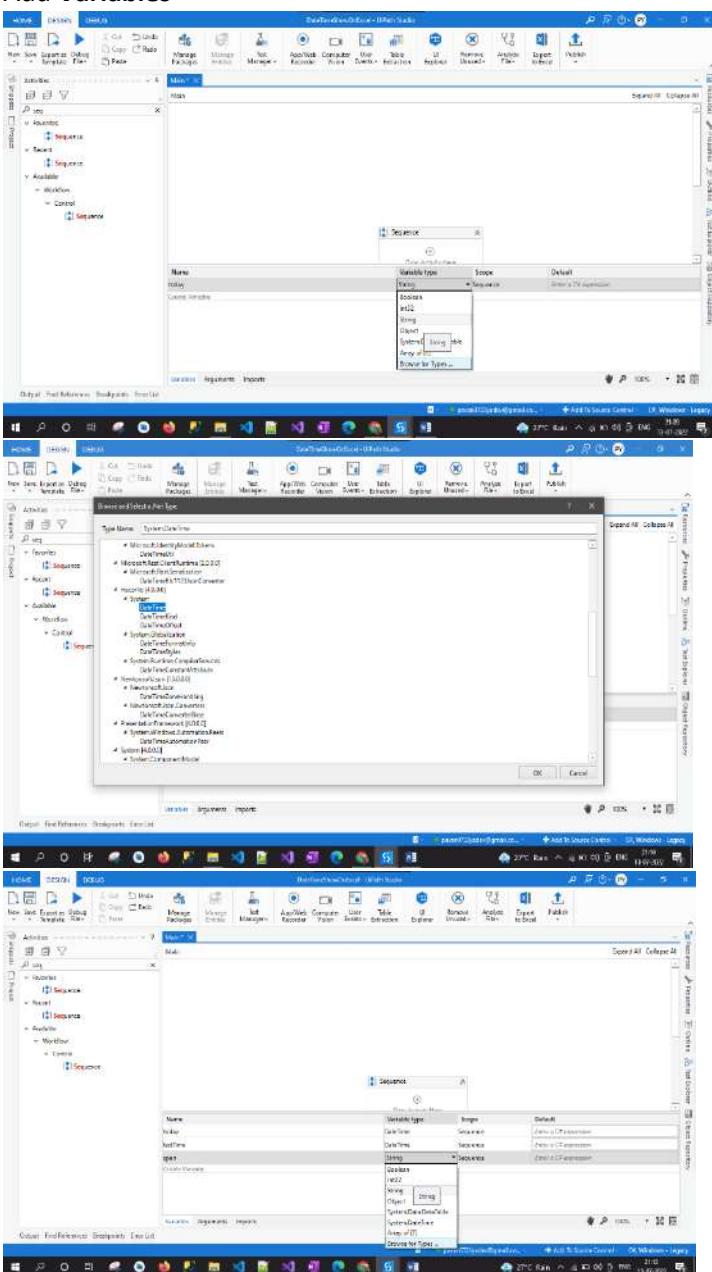
## 3. Click on the Open Main Workflow

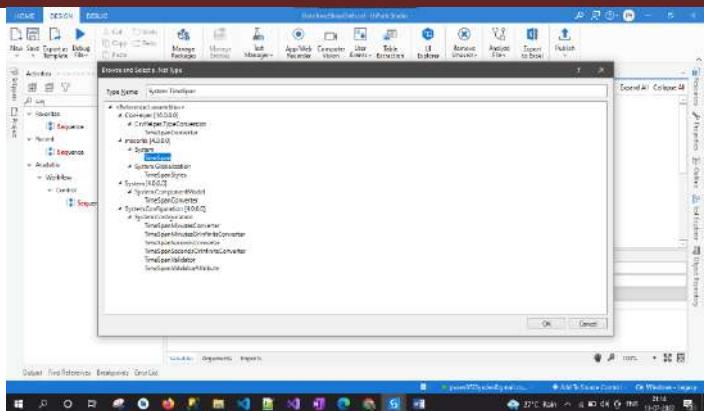


#### 4. Add Sequence activity on the Main



#### 5. Add Variables

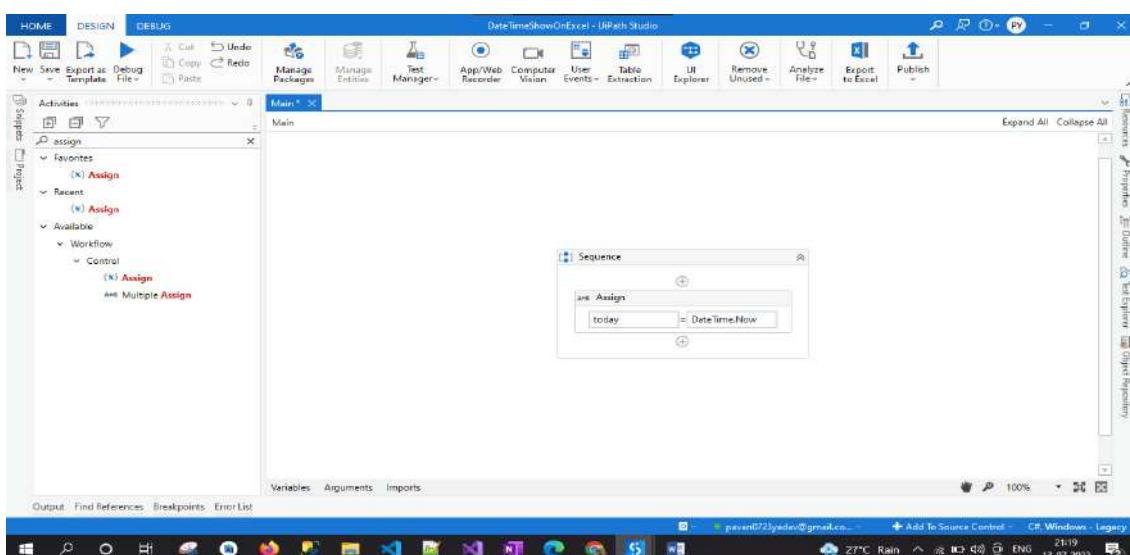
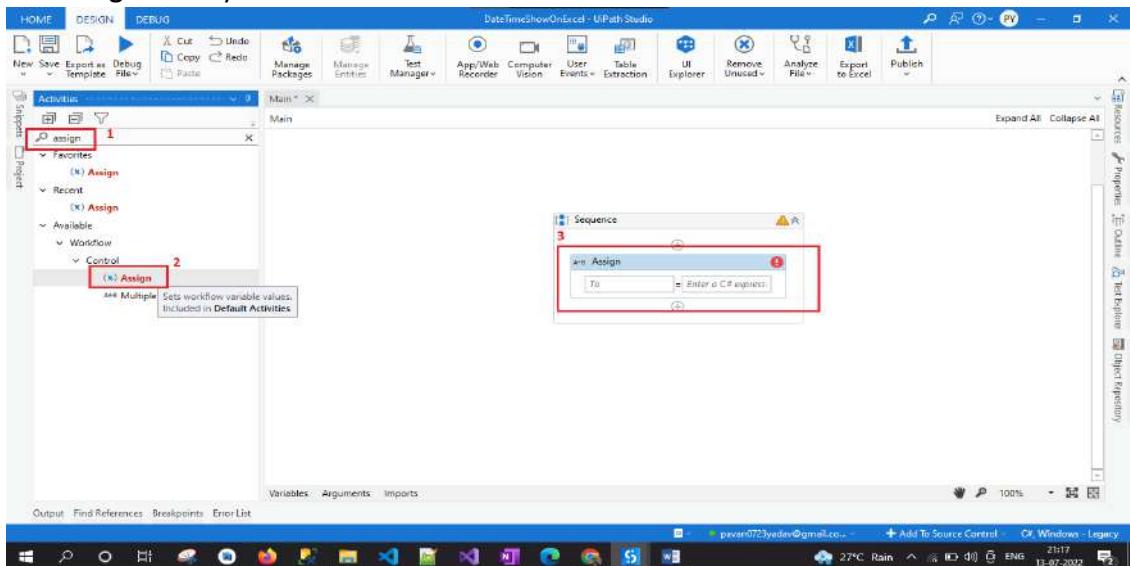




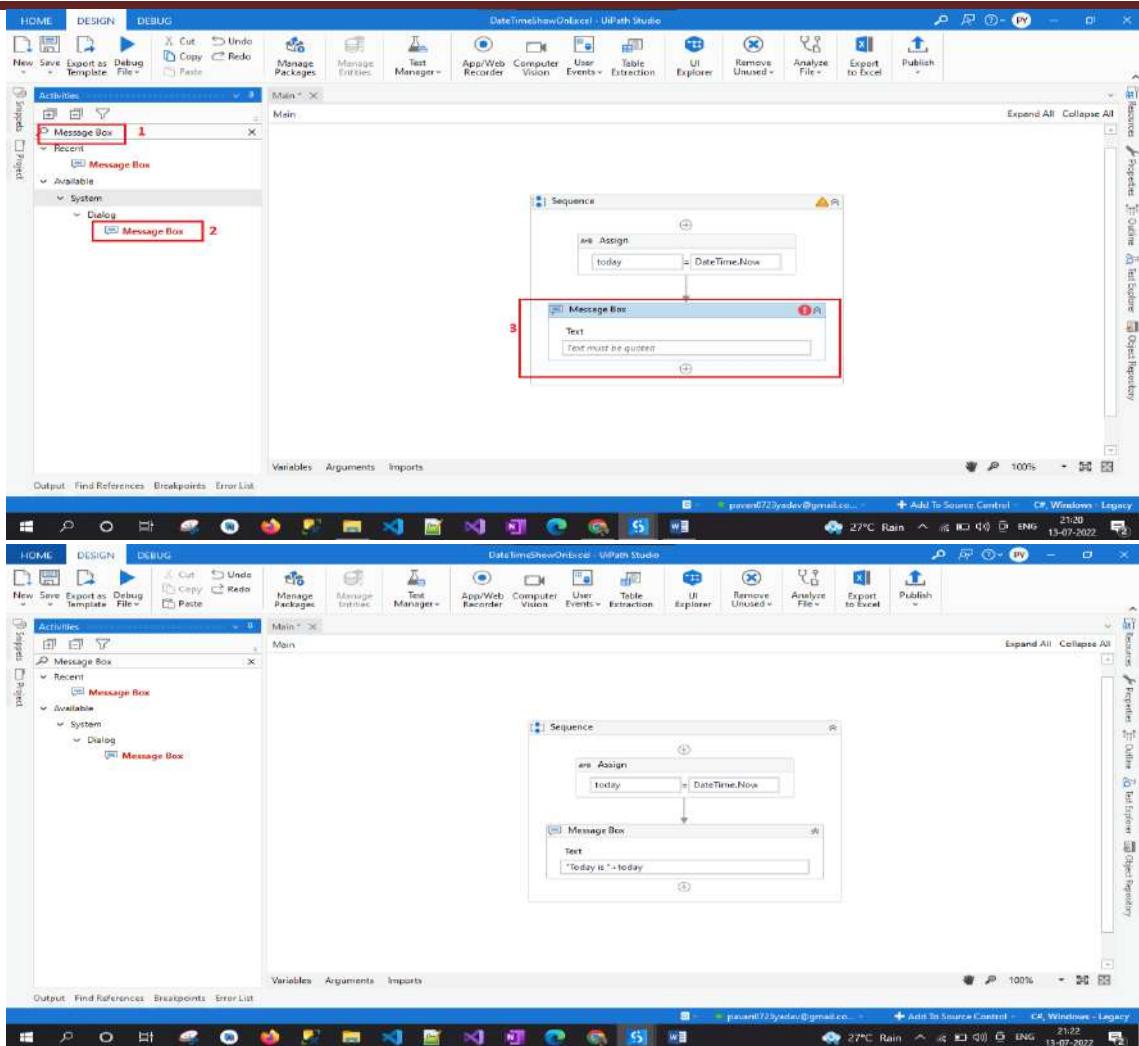
1.00:30:30

Name	Variable type	Scope	Default
today	DateTime	Sequence	Enter a C# expression
lastTime	DateTime	Sequence	Enter a C# expression
span	TimeSpan	Sequence	1.00:30:30
<a href="#">Create Variable</a>			

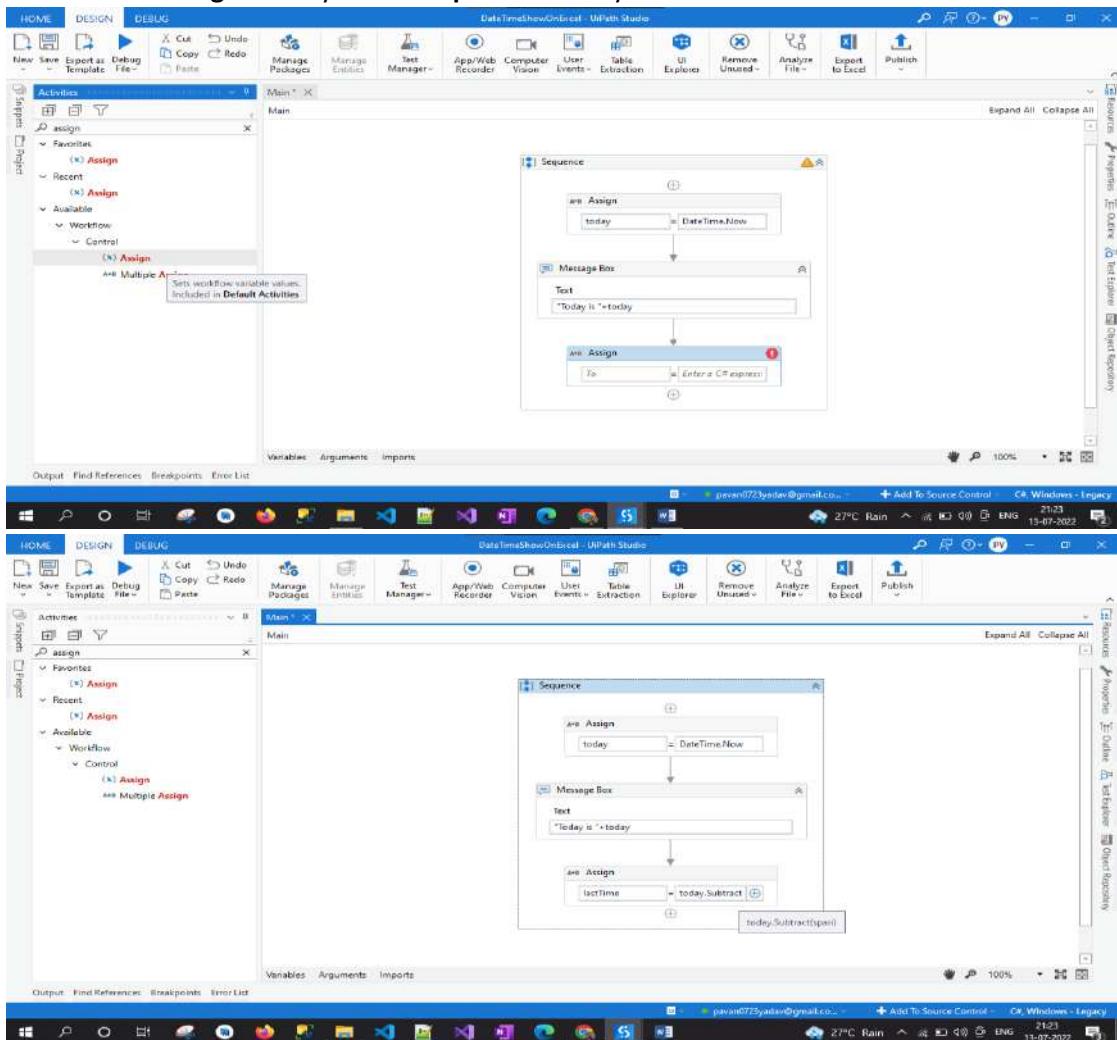
## 6. Add Assign Activity



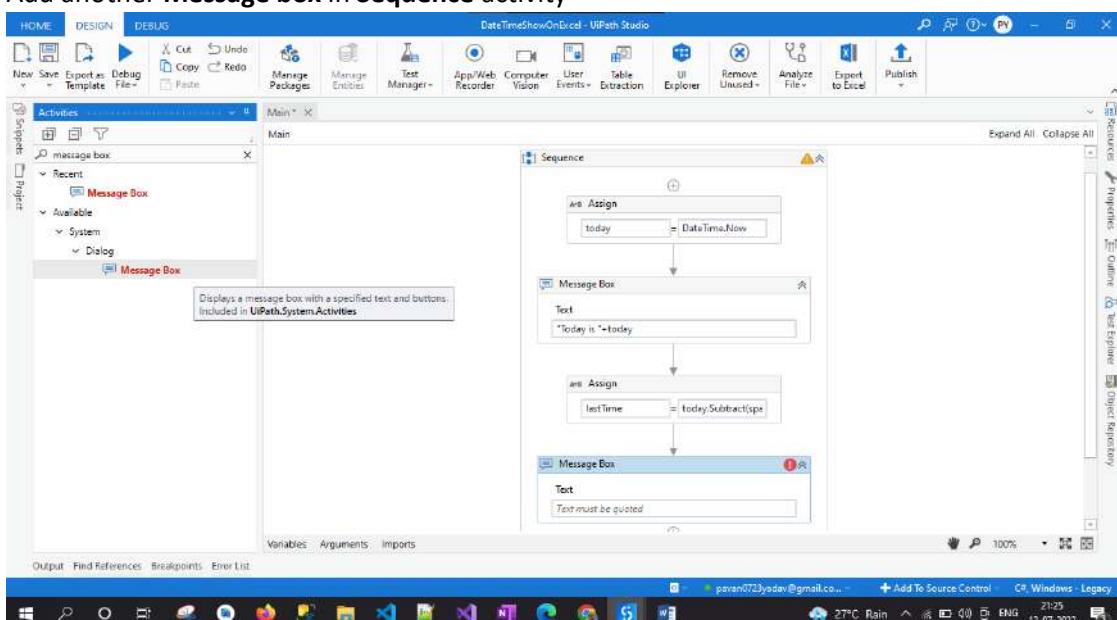
## 7. Add Message Box activity

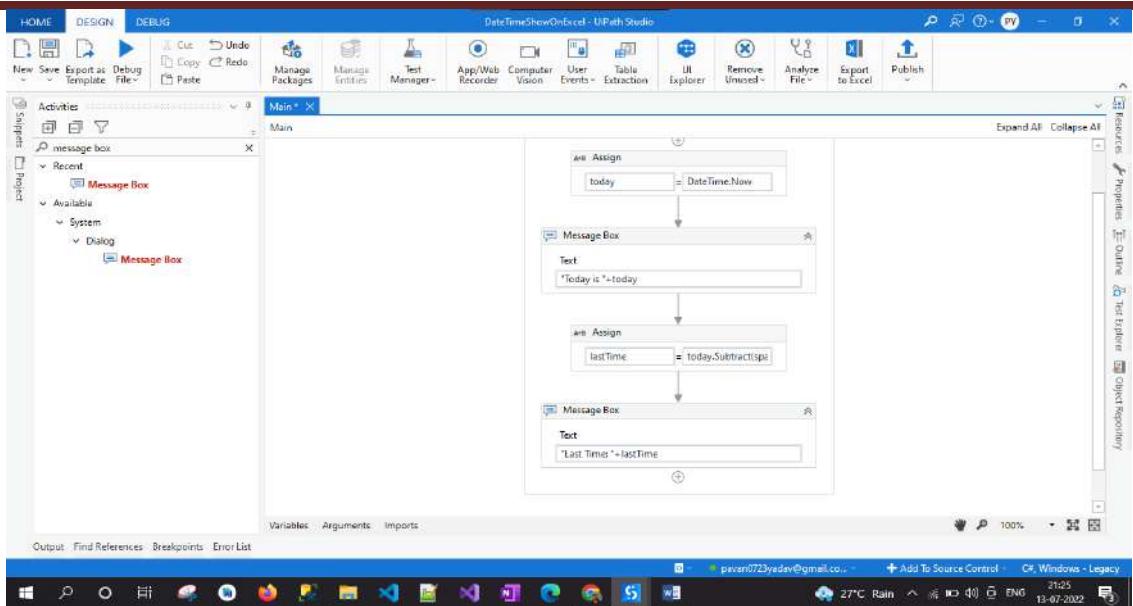


## 8. Add another Assign activity in the Sequence activity

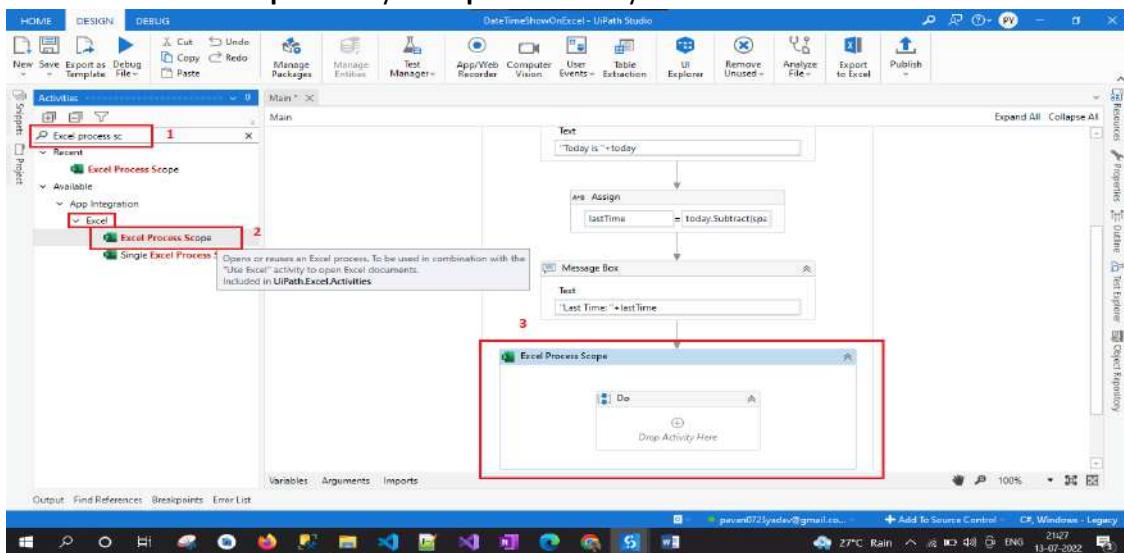


## 9. Add another Message box in Sequence activity

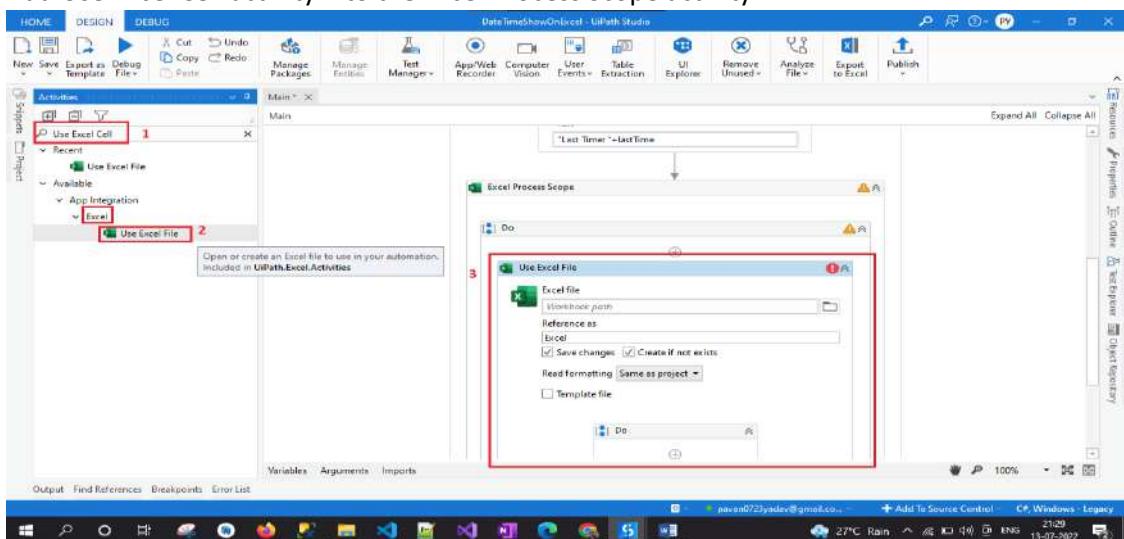


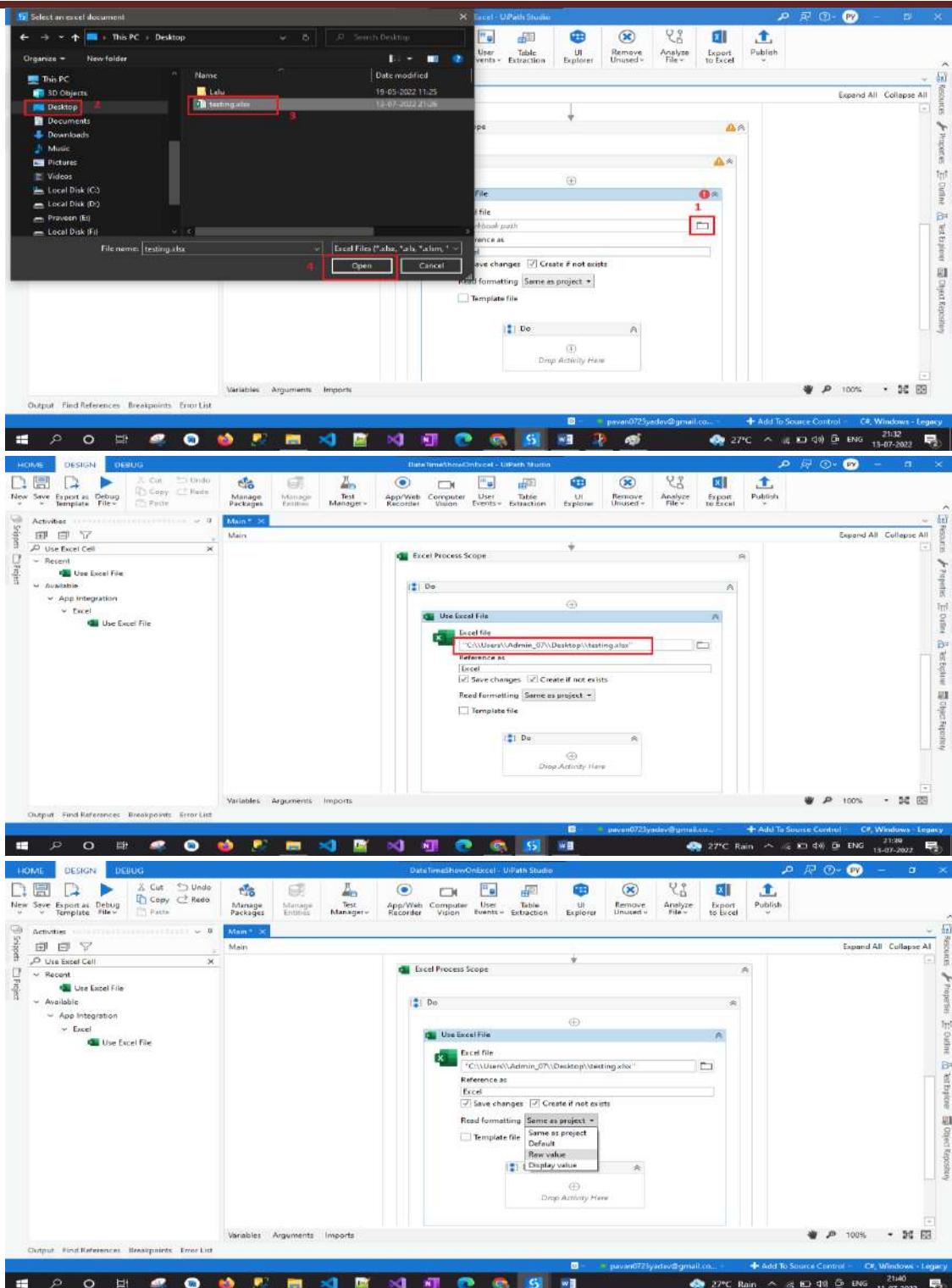


## 10. Add Excel Process Scope activity in Sequence activity

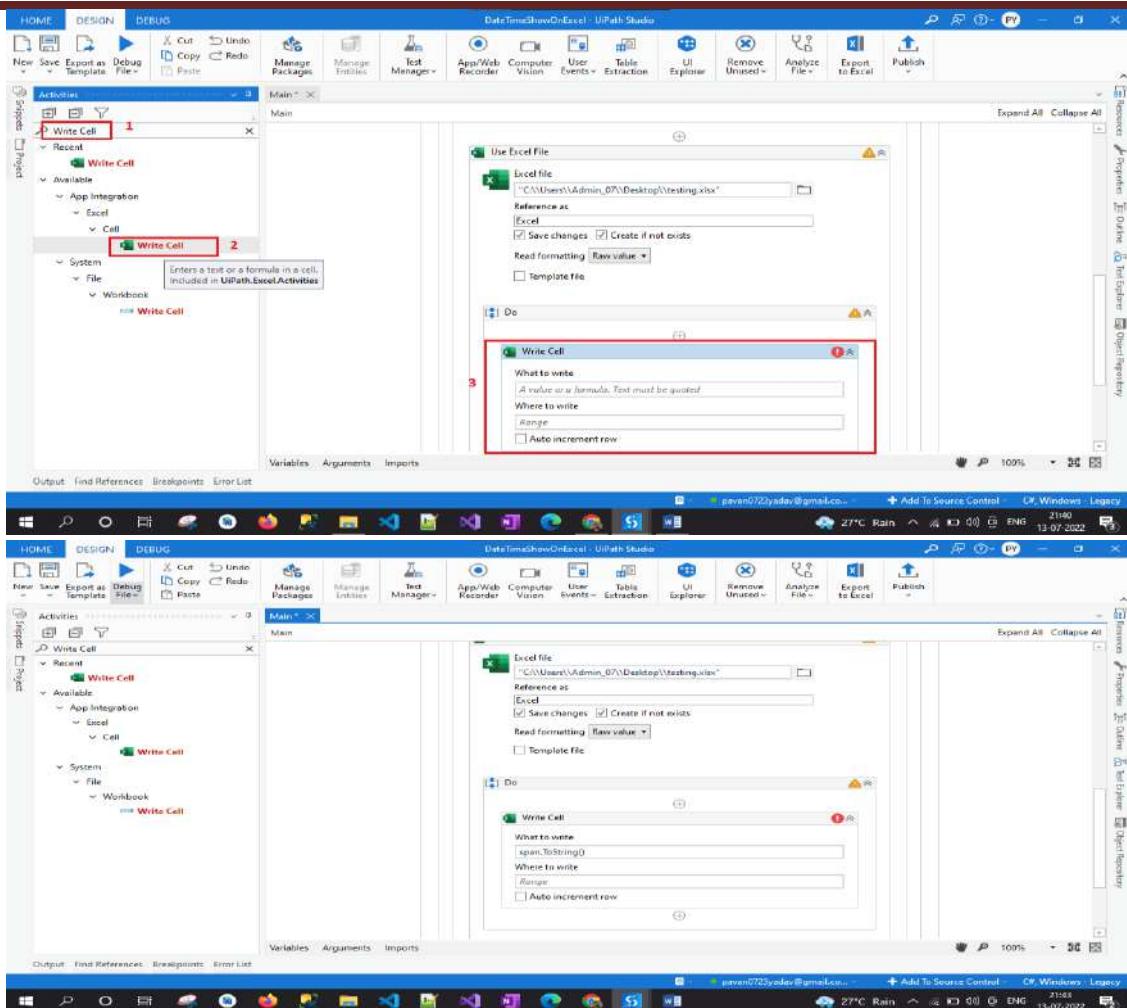


## 11. Add Use Excel Cell activity into the Excel Process Scope activity

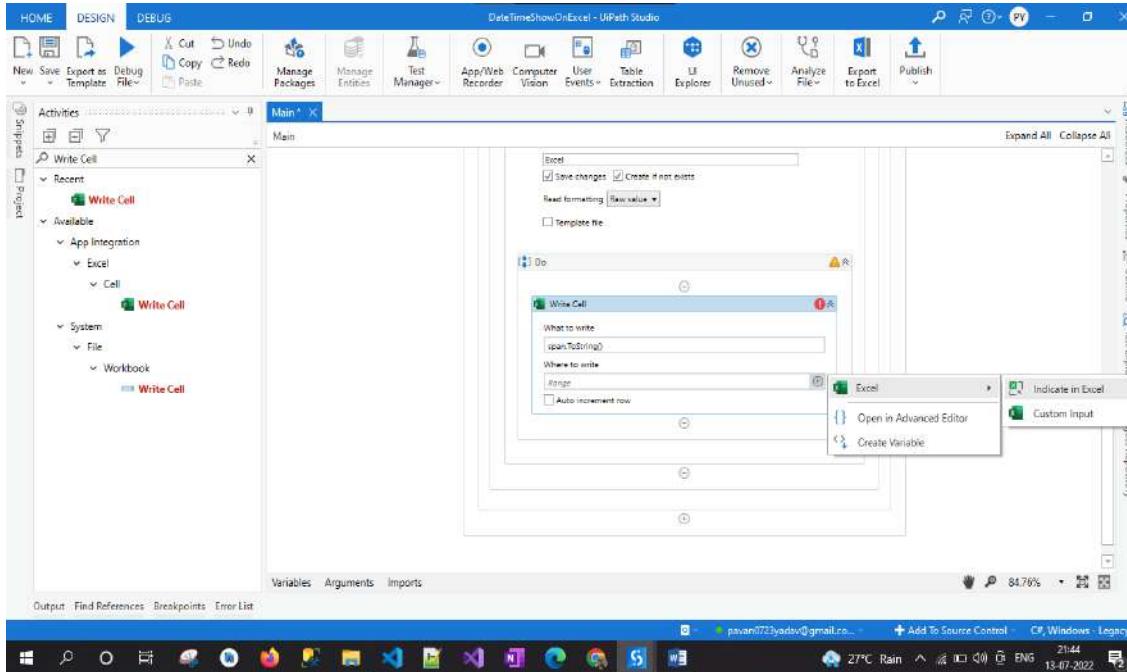


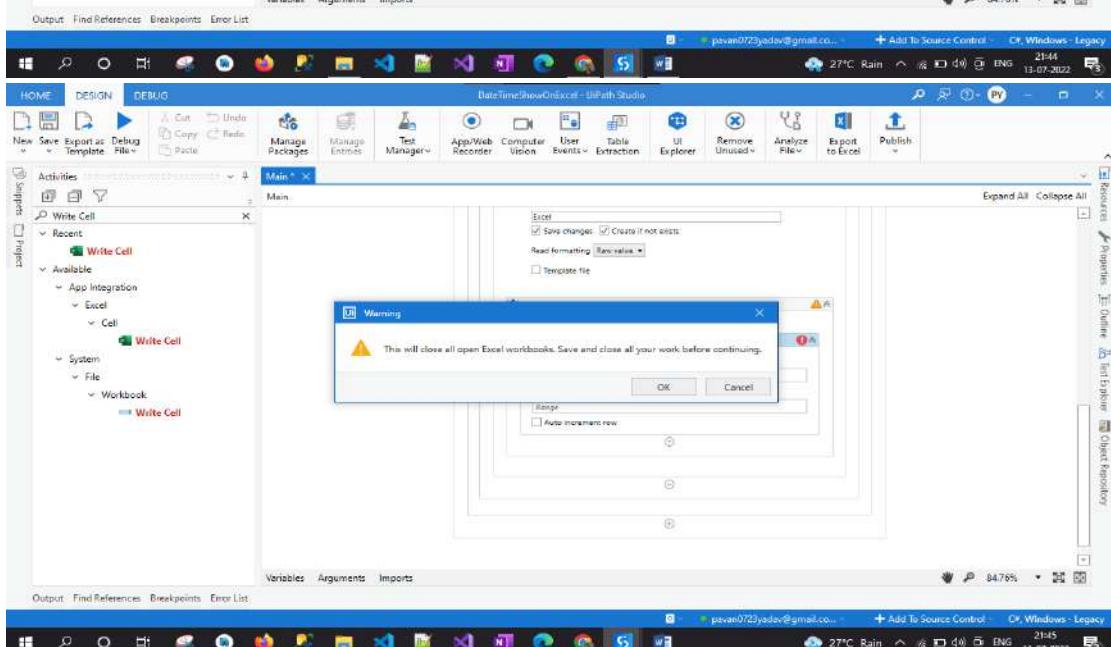
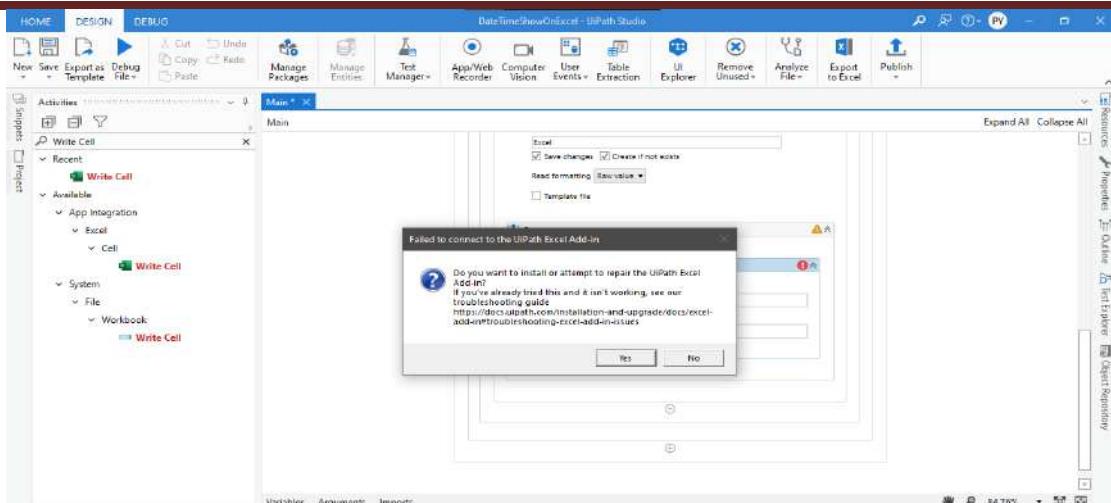


12. Add Write Cell activity inside the Use Excel File activity

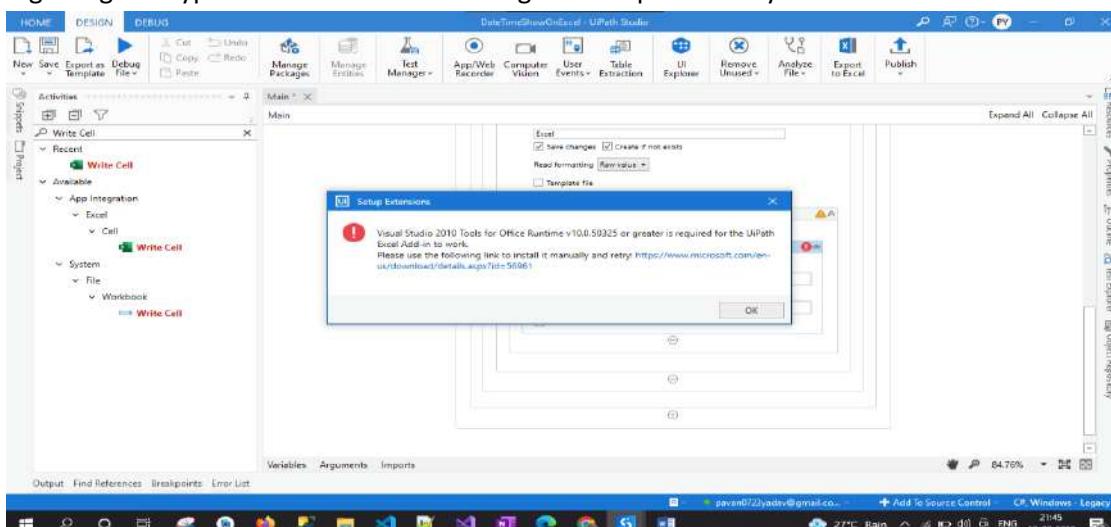


### 13. Go to Excel option > Indicate in Excel

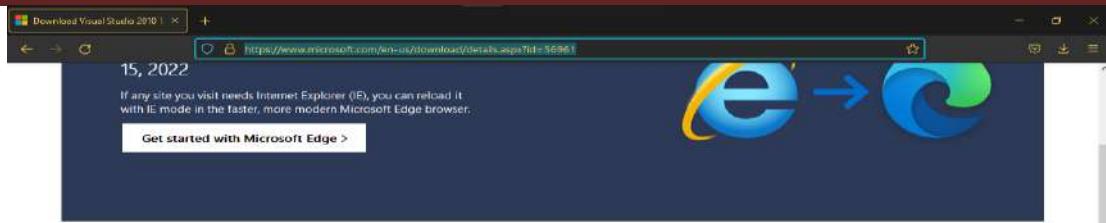




If getting this type of error then follow the given link provided by the UIPath



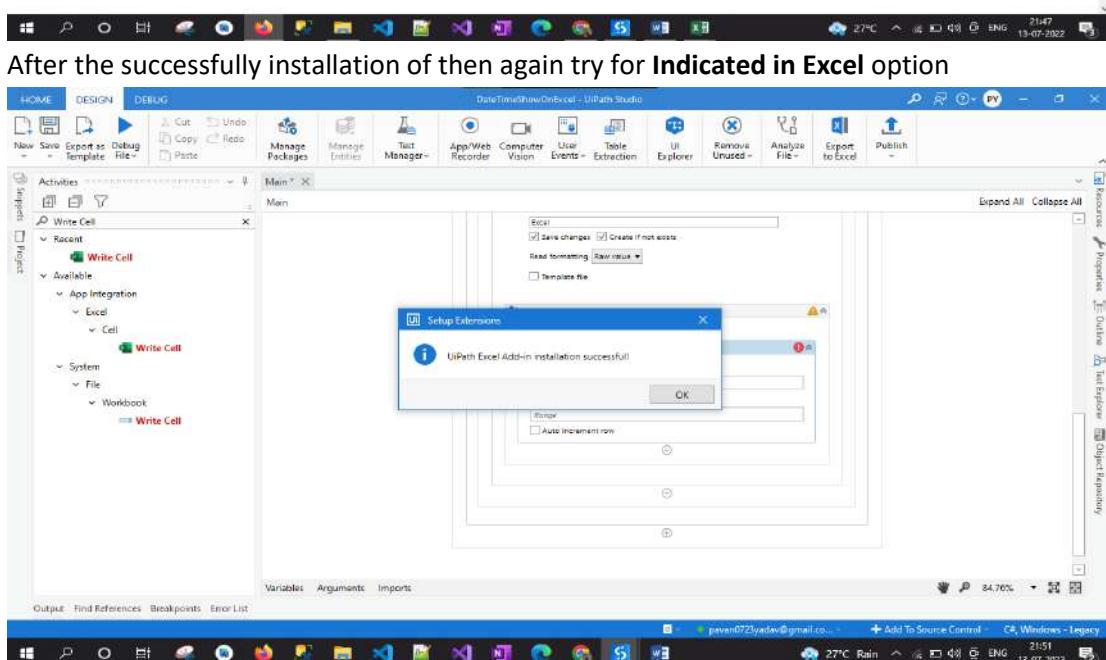
<https://www.microsoft.com/en-us/download/details.aspx?id=56961>



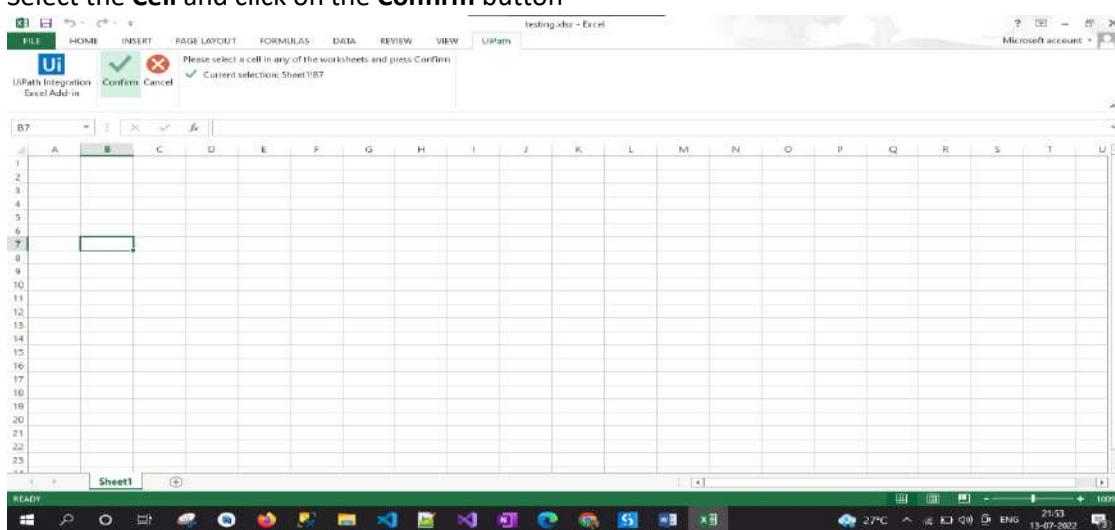
Visual Studio 2010 Tools for Office Runtime

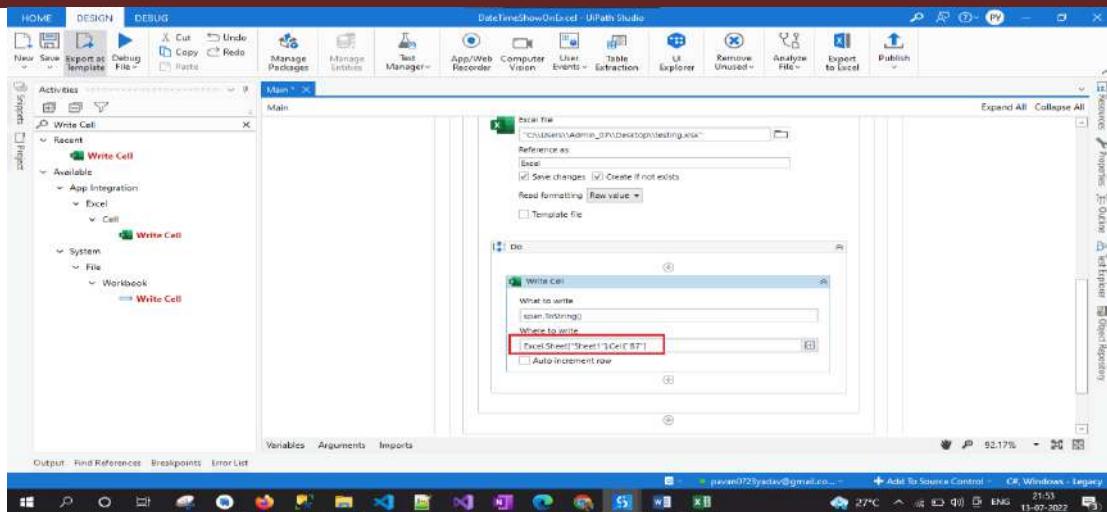
Important! Selecting a language below will dynamically change the complete page content to that language.  
Select Language: English   Download

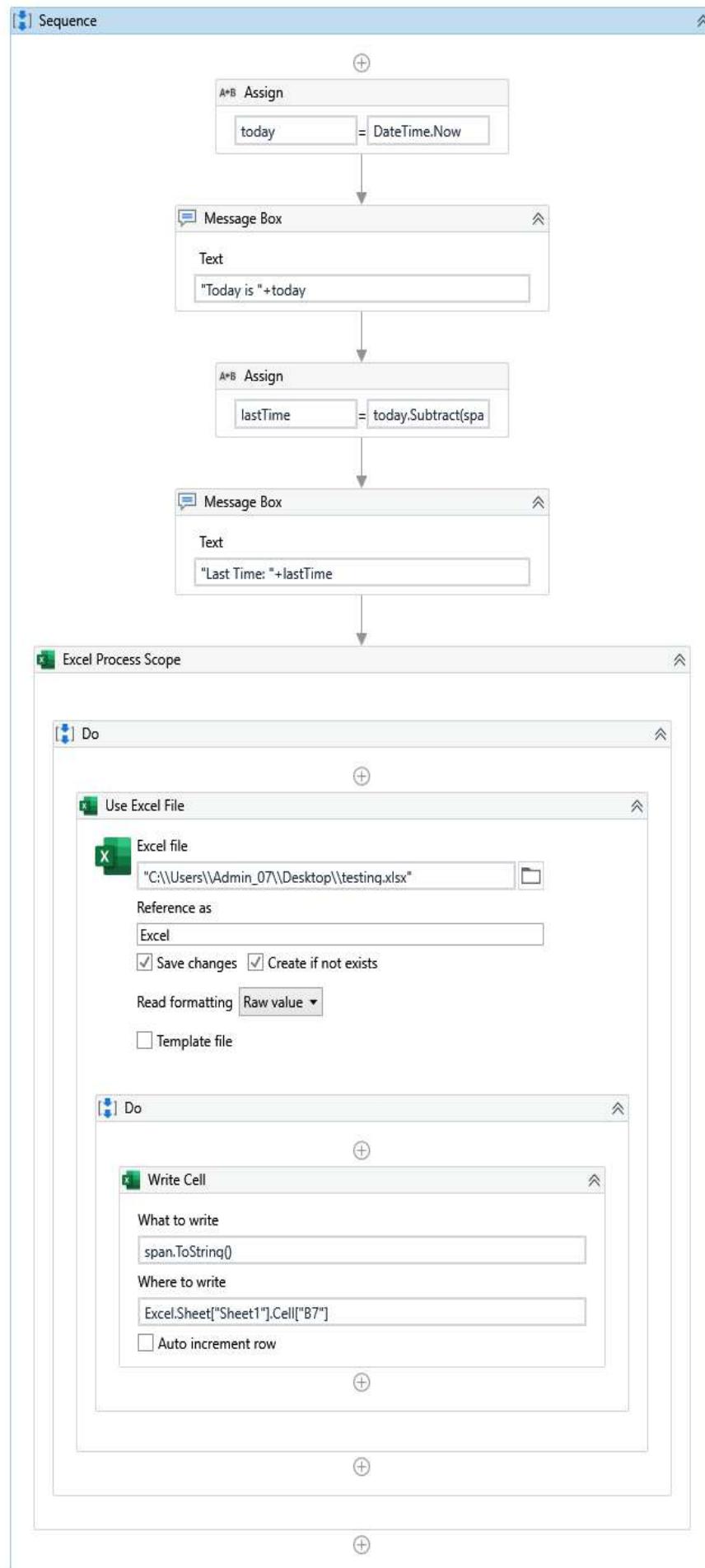
This download installs the Visual Studio 2010 Tools for Office Runtime, which is required to run Microsoft Office based solutions built using Microsoft Visual Studio 2010, 2012, 2013, 2015, 2017 and 2019.



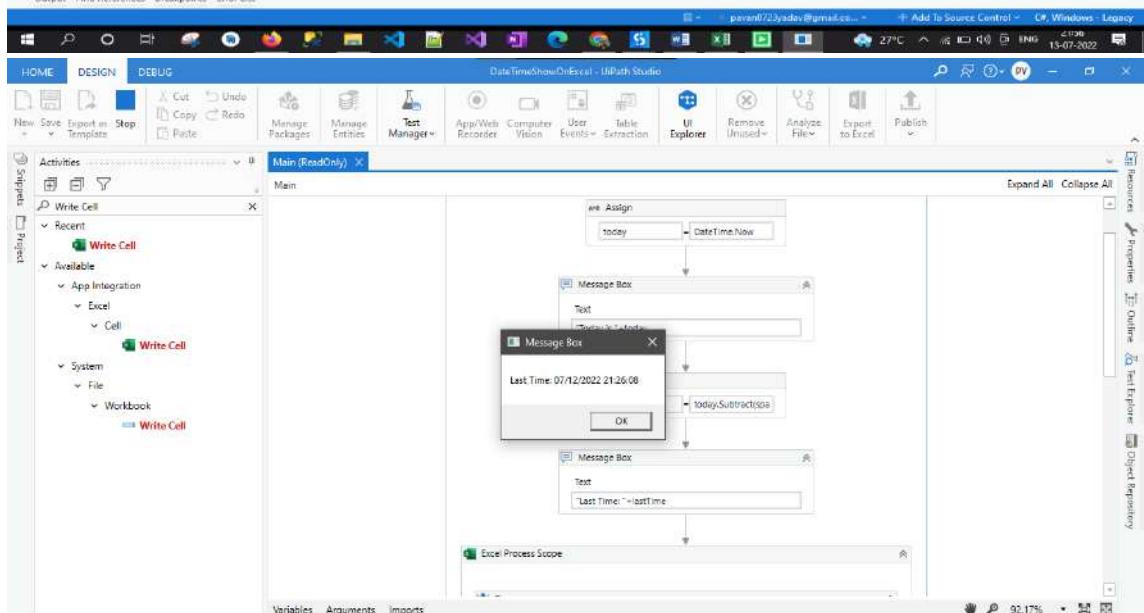
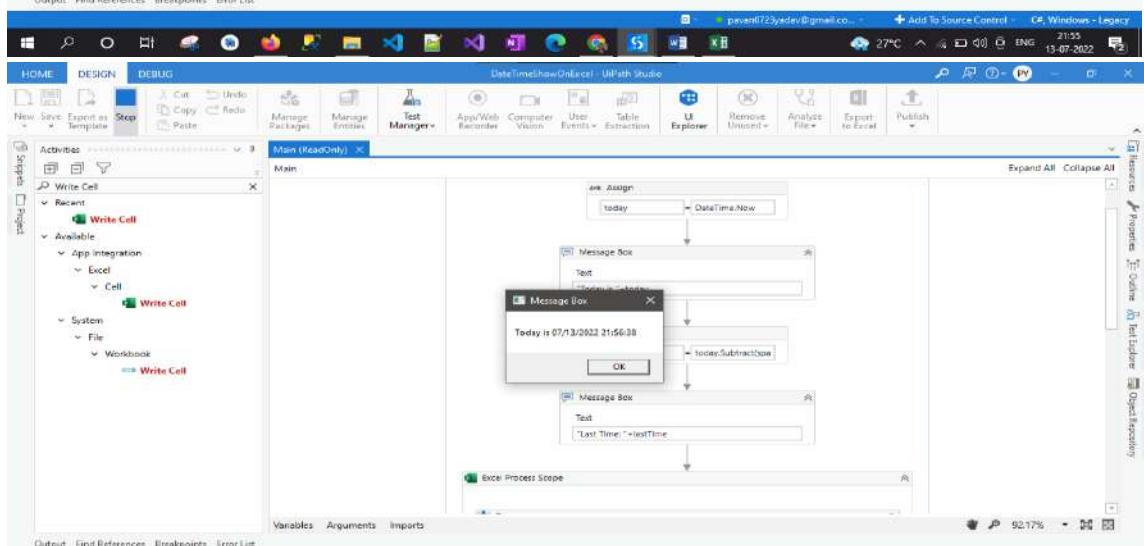
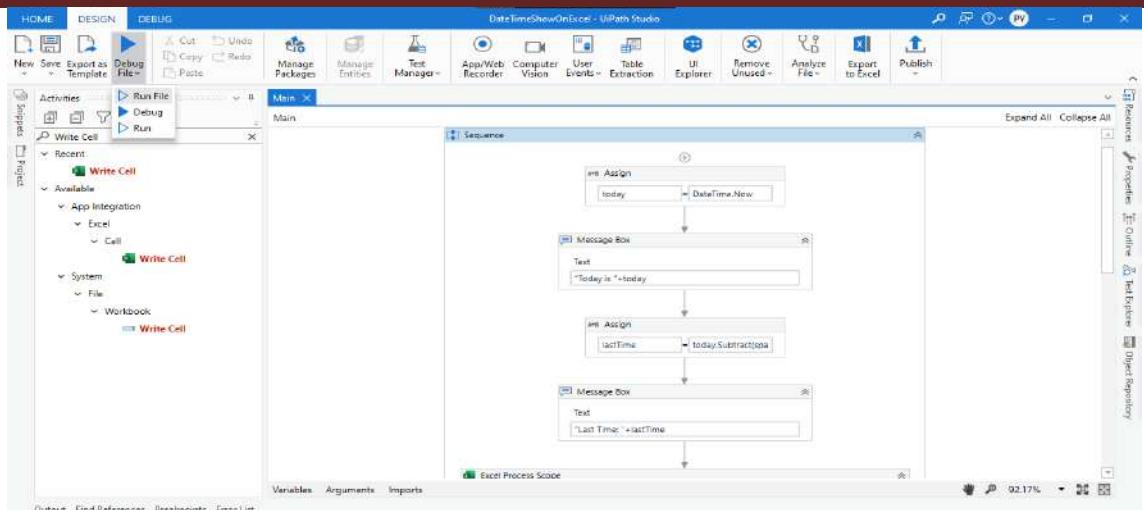
#### 14. Select the Cell and click on the Confirm button

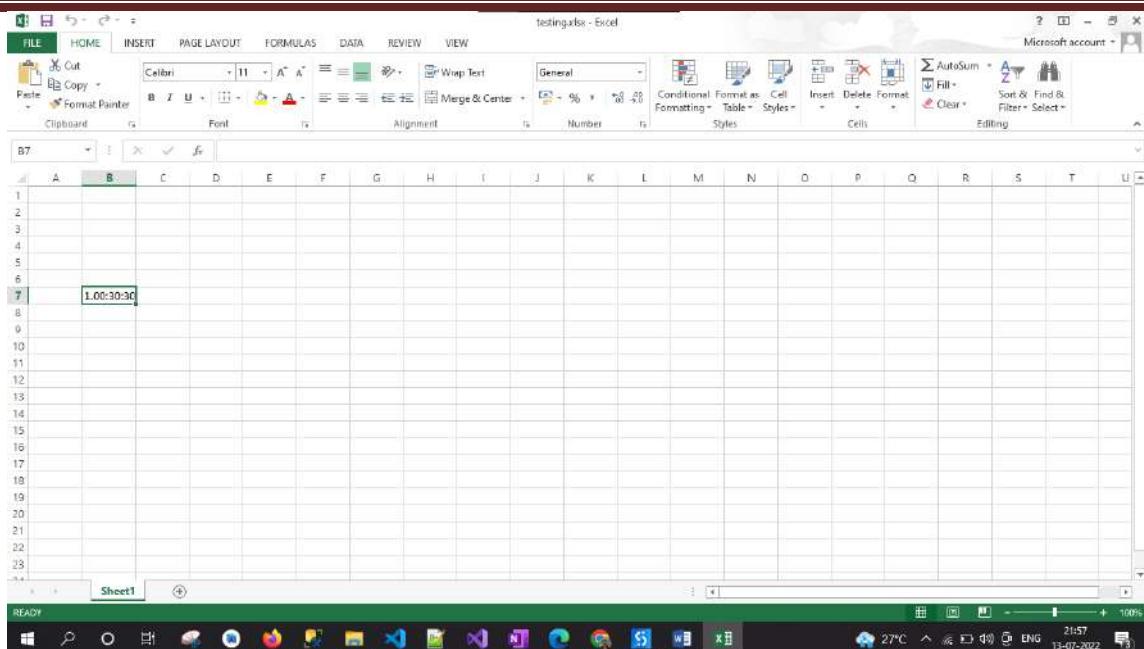






## 15. Output





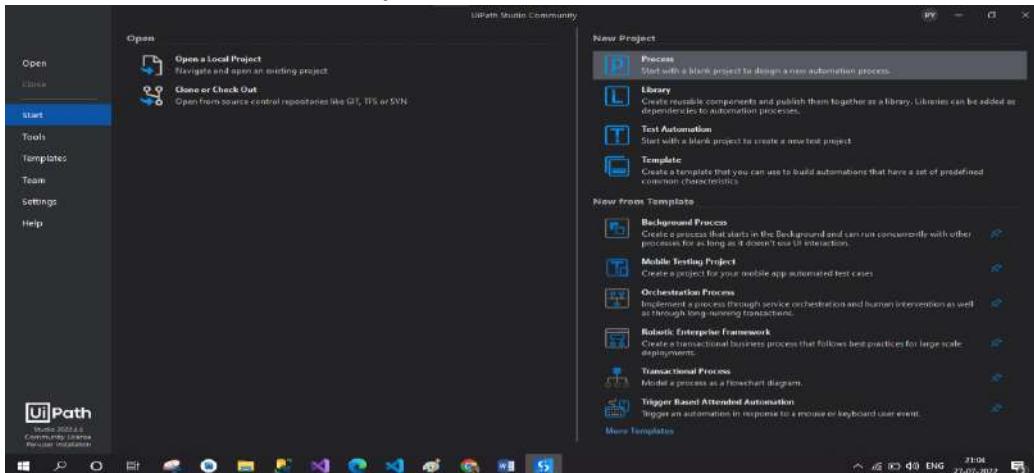
#### 16. Video Link:

<https://drive.google.com/file/d/1cr07ygtxNHyNhyl2NuDWGyaWFtTyy9/view?usp=sharing>

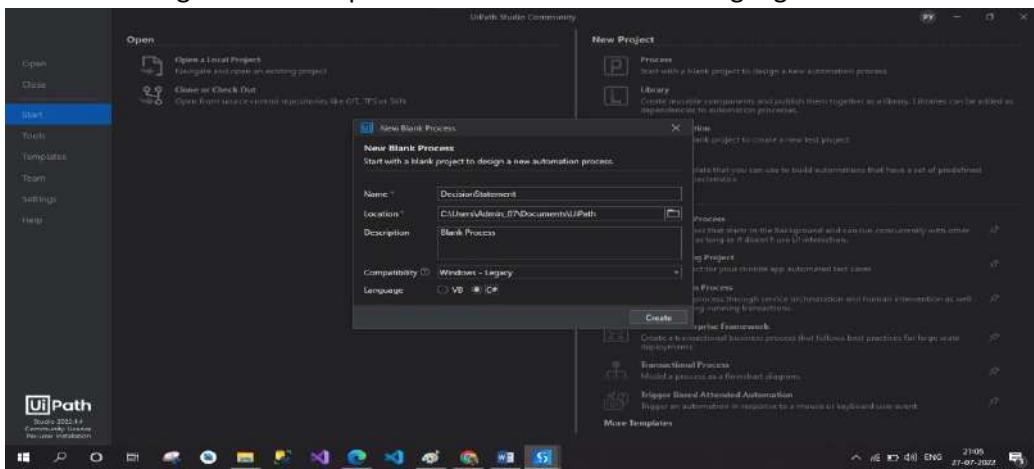
## Practical 3:

### A] Create an automation UI Path Project using decision statements.

- Click on the Process to New Project



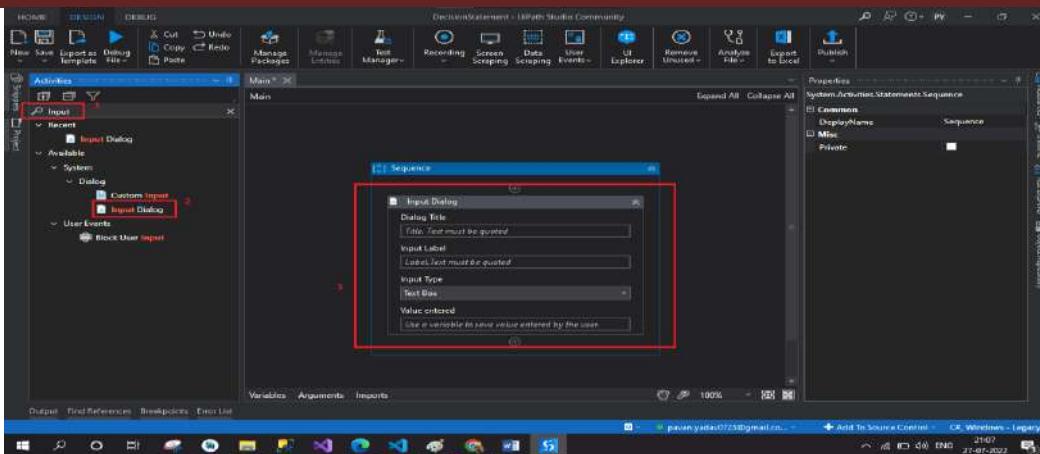
- Write following detail of the process. Note: Select the C# Language



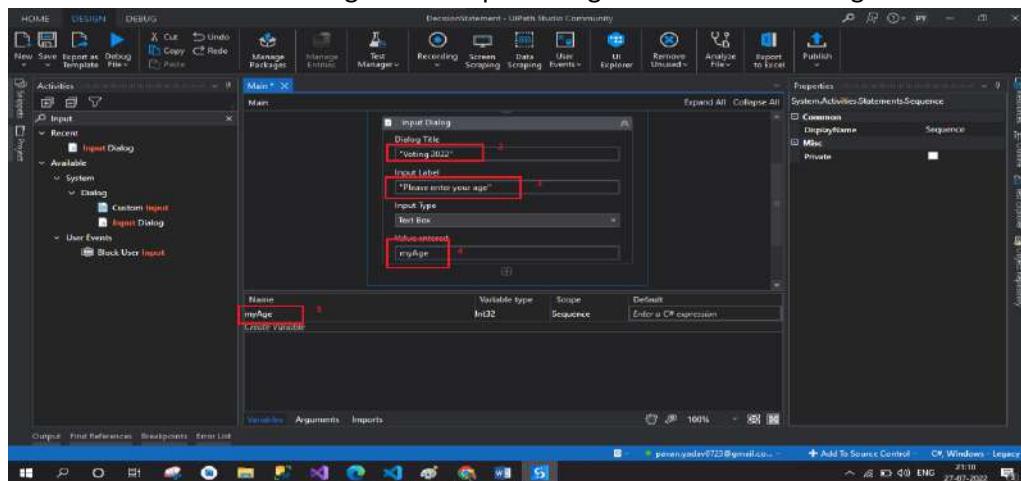
- Click on the Open Main Workflow



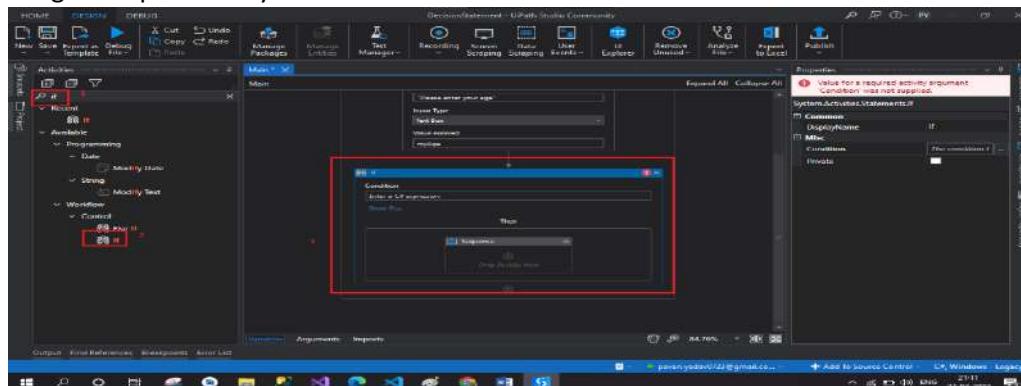
- Drag & Drop an Input dialog box



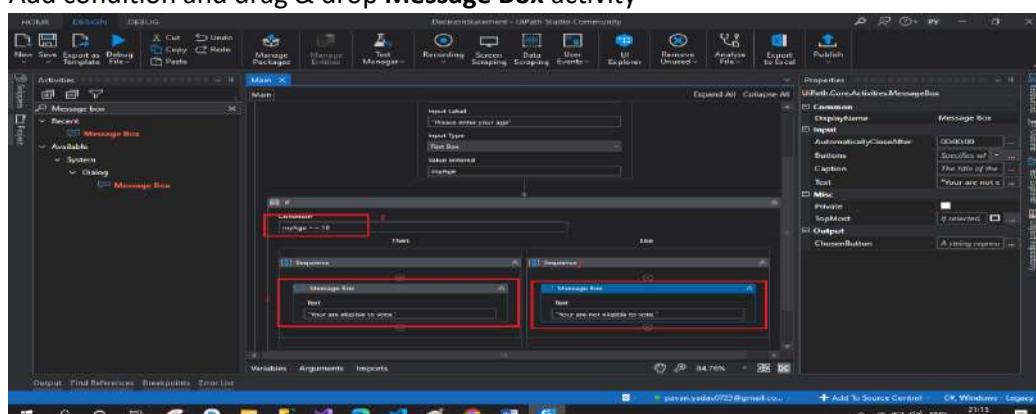
5. Create a new variable & assign to the Input dialog same like below image



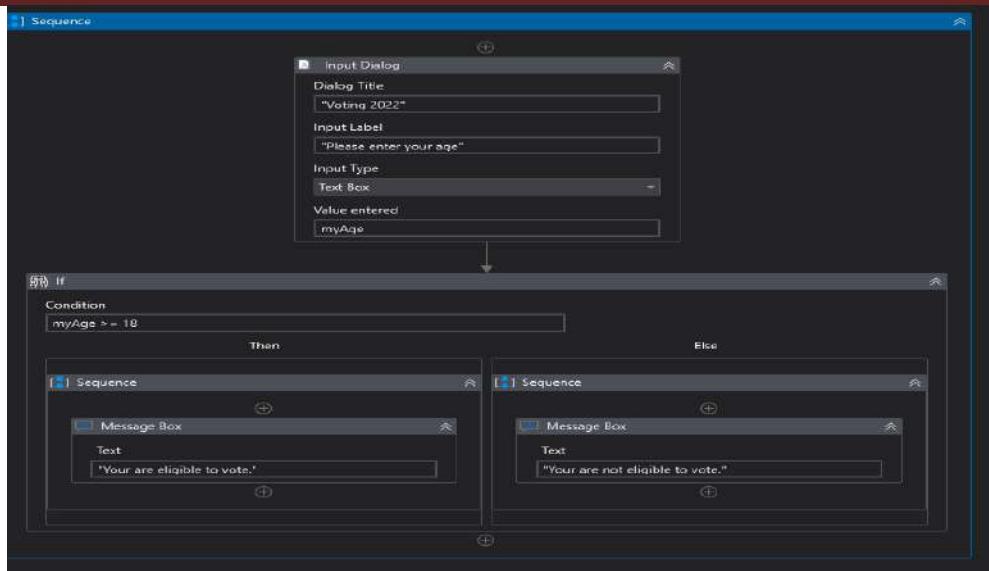
6. Drag & drop If activity



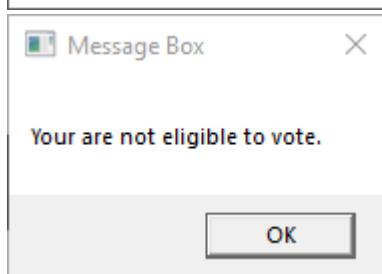
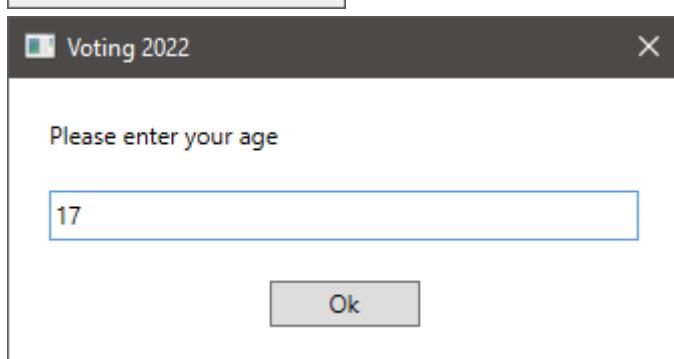
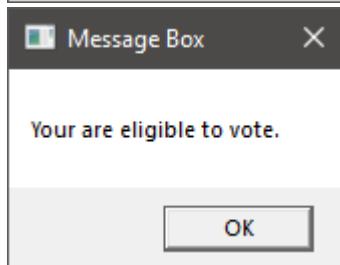
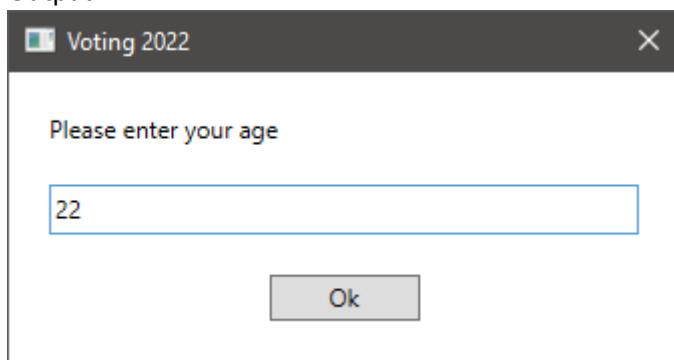
7. Add condition and drag & drop Message Box activity



8. Overview

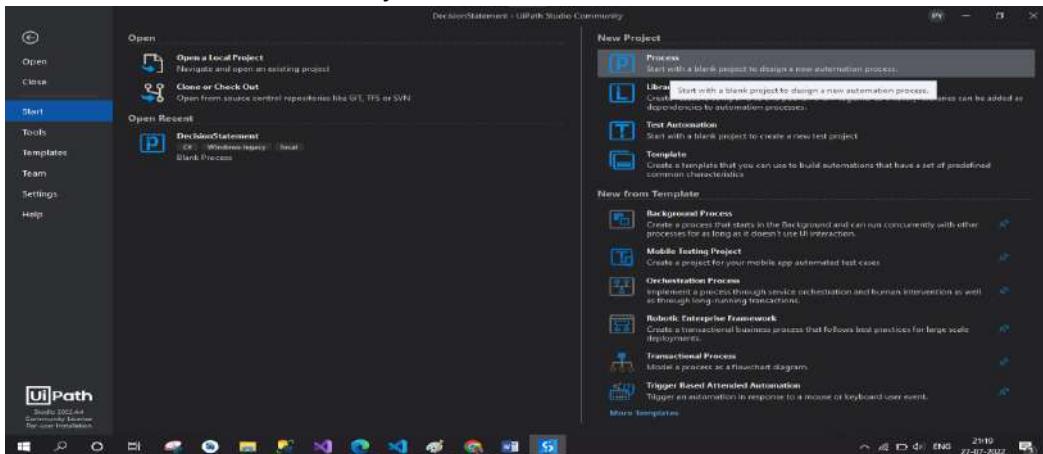


## 9. Output

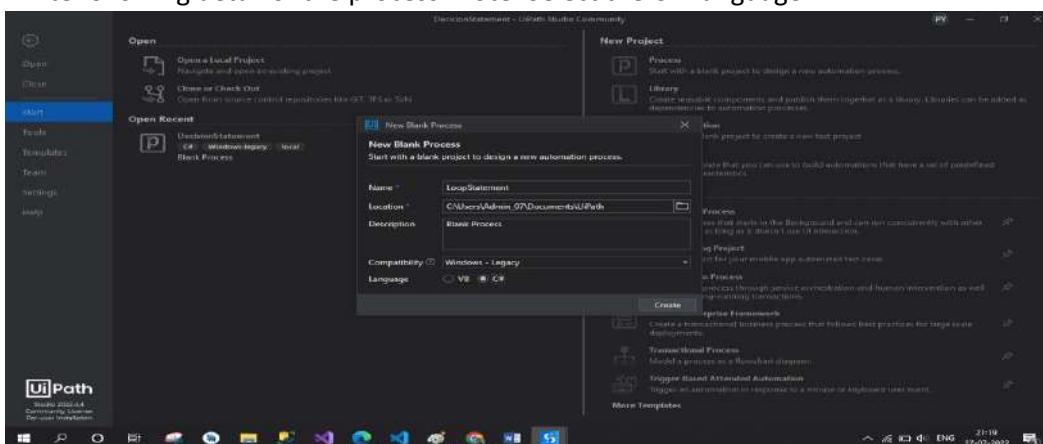


## B] Create an automation UI Path Project using looping statements.

- Click on the Process to New Project



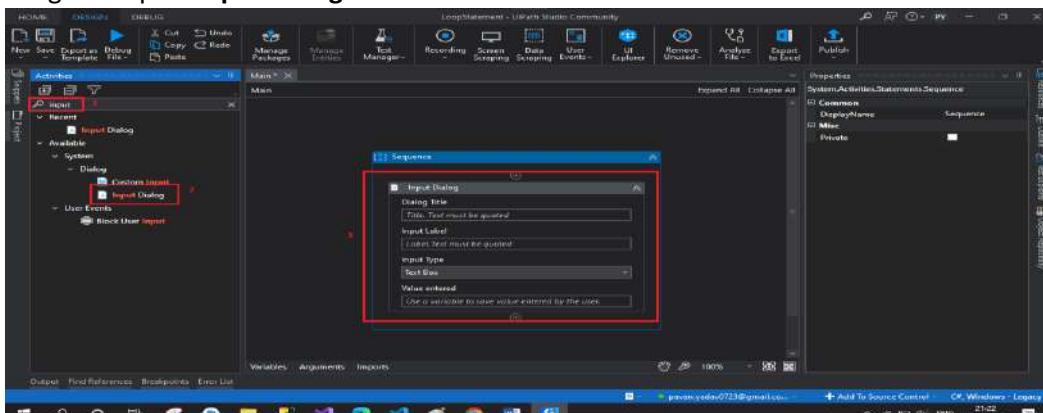
- Write following detail of the process. Note: Select the C# Language



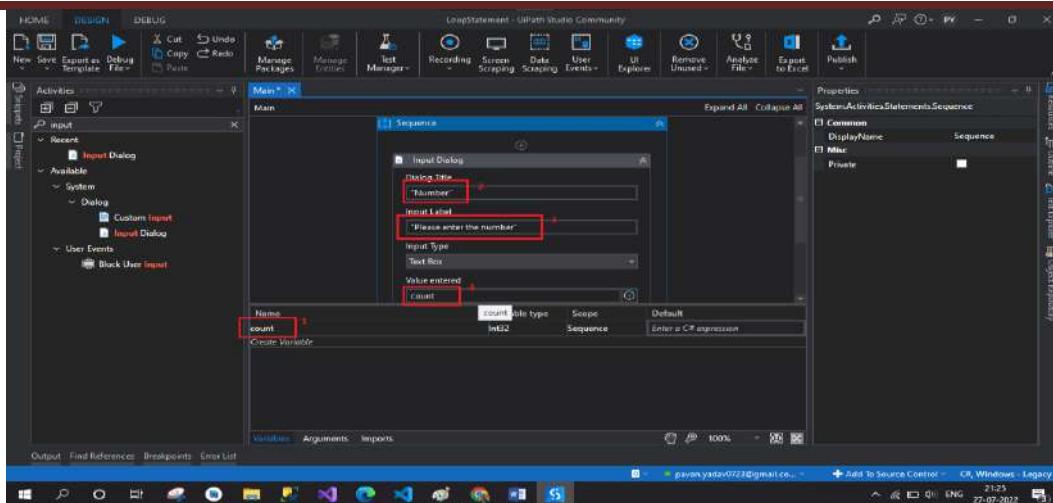
- Click on the Open Main Workflow



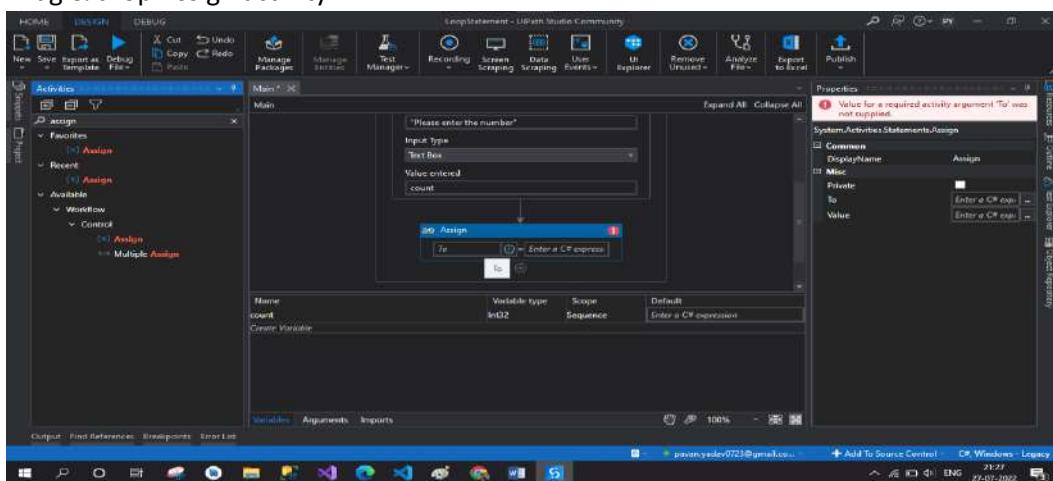
- Drag & Drop an Input dialog box



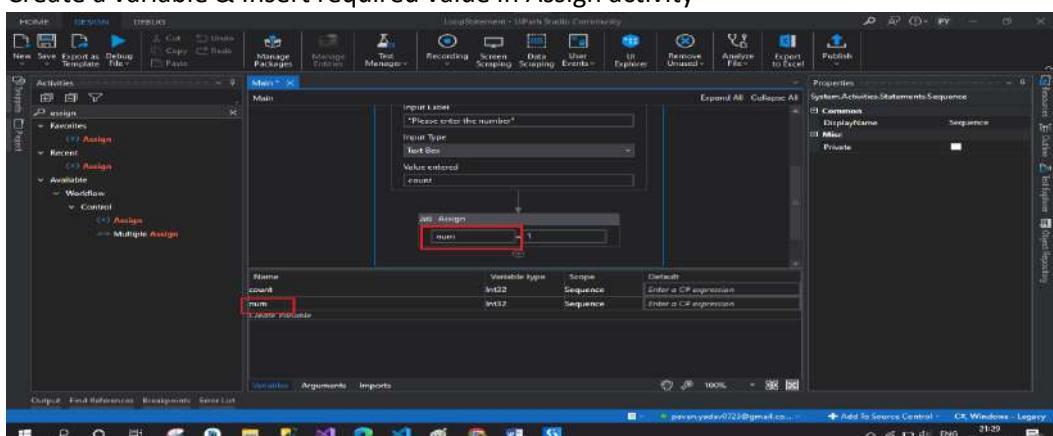
- Create a variable & assign to the Input Dialog activity with required detail



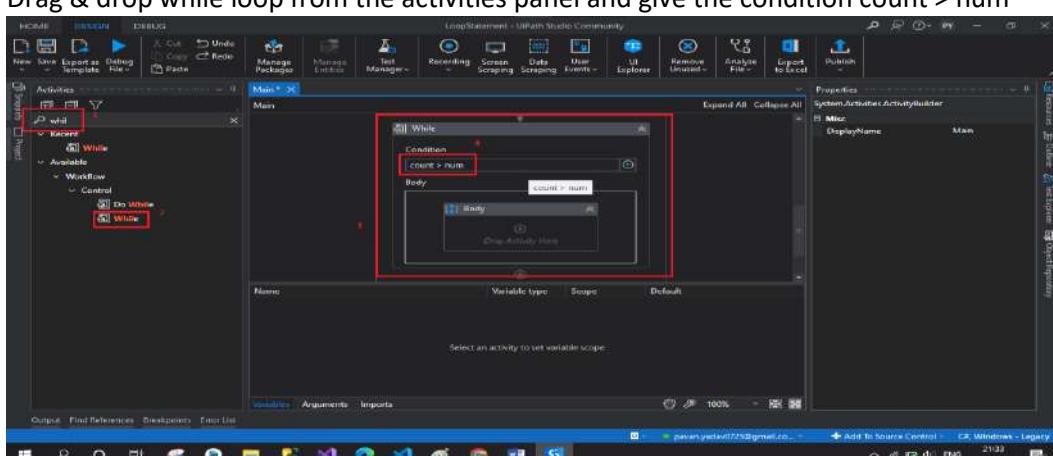
## 6. Drag & drop Assign activity



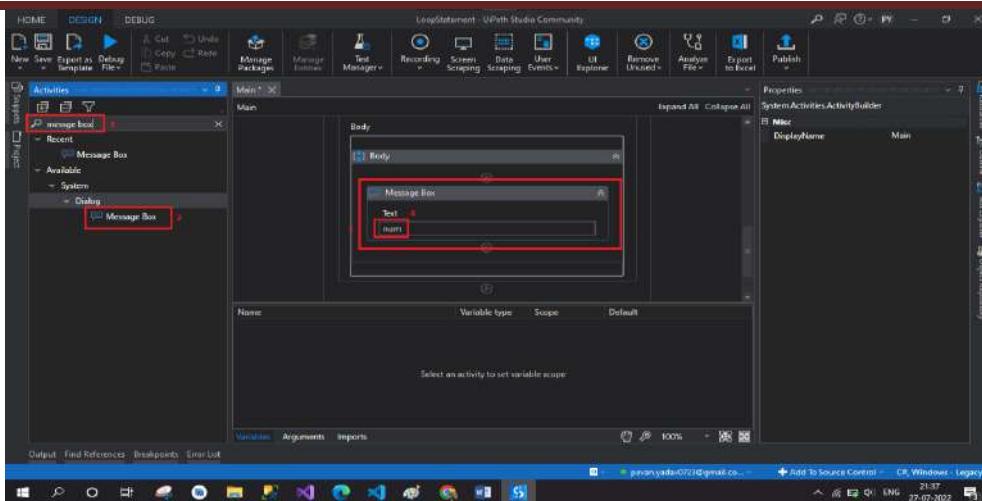
## 7. Create a variable & Insert required value in Assign activity



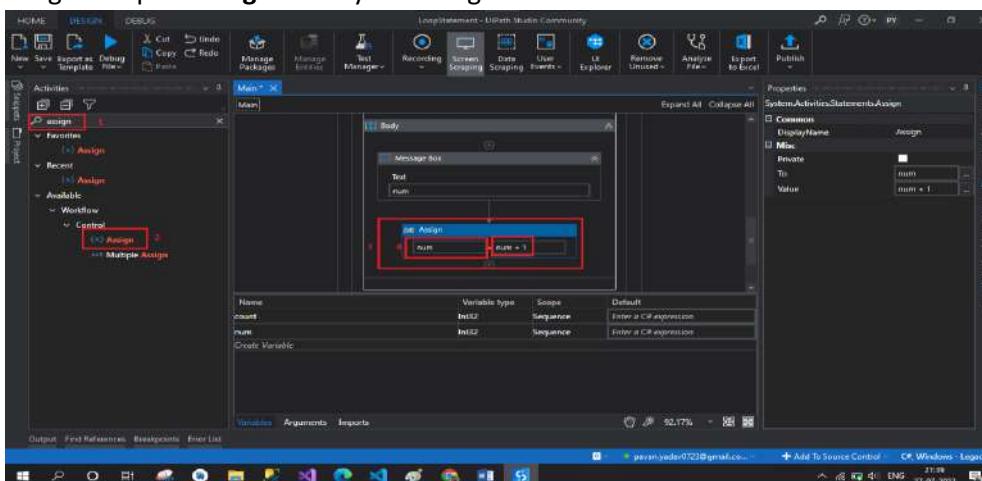
## 8. Drag & drop while loop from the activities panel and give the condition count > num



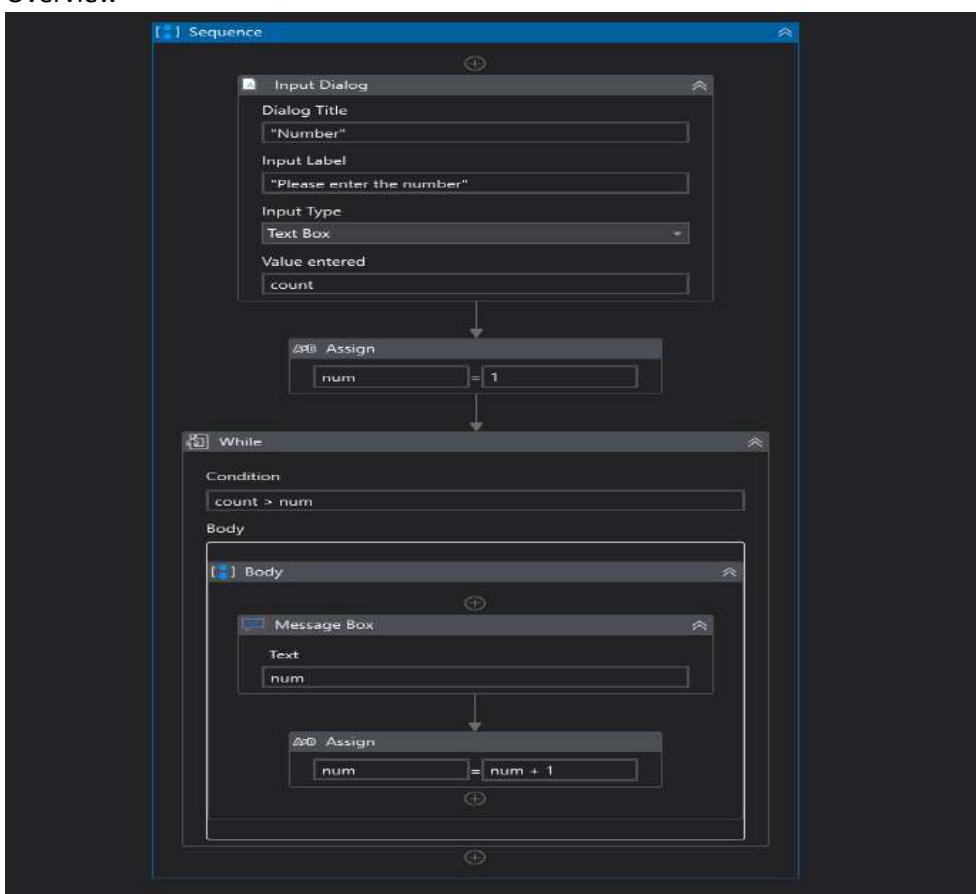
## 9. Drag & drop a Message box in the body section and add the previously created variable num



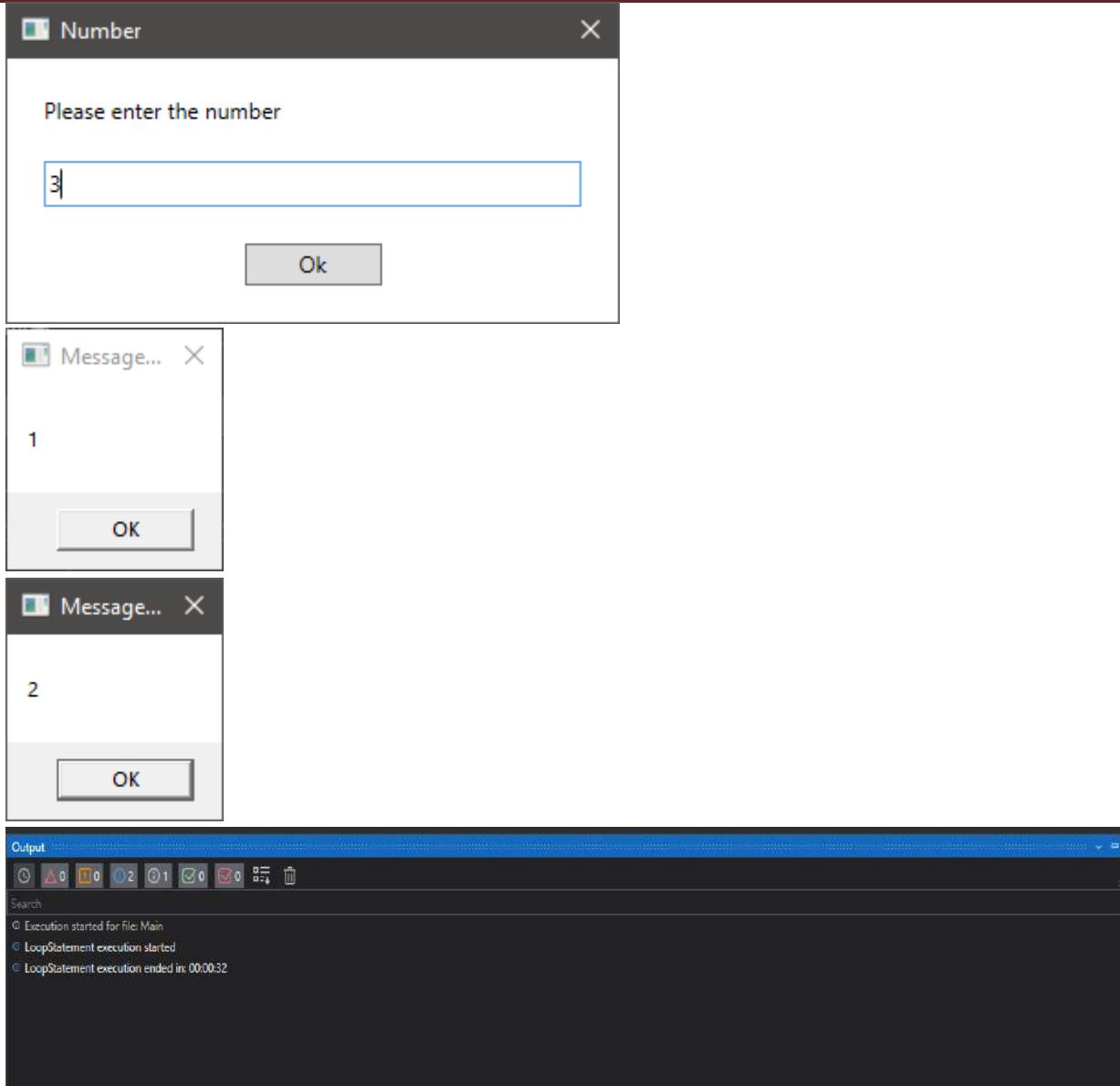
10. Drag & drop an **Assign** activity and assign num = num + 1



11. Overview

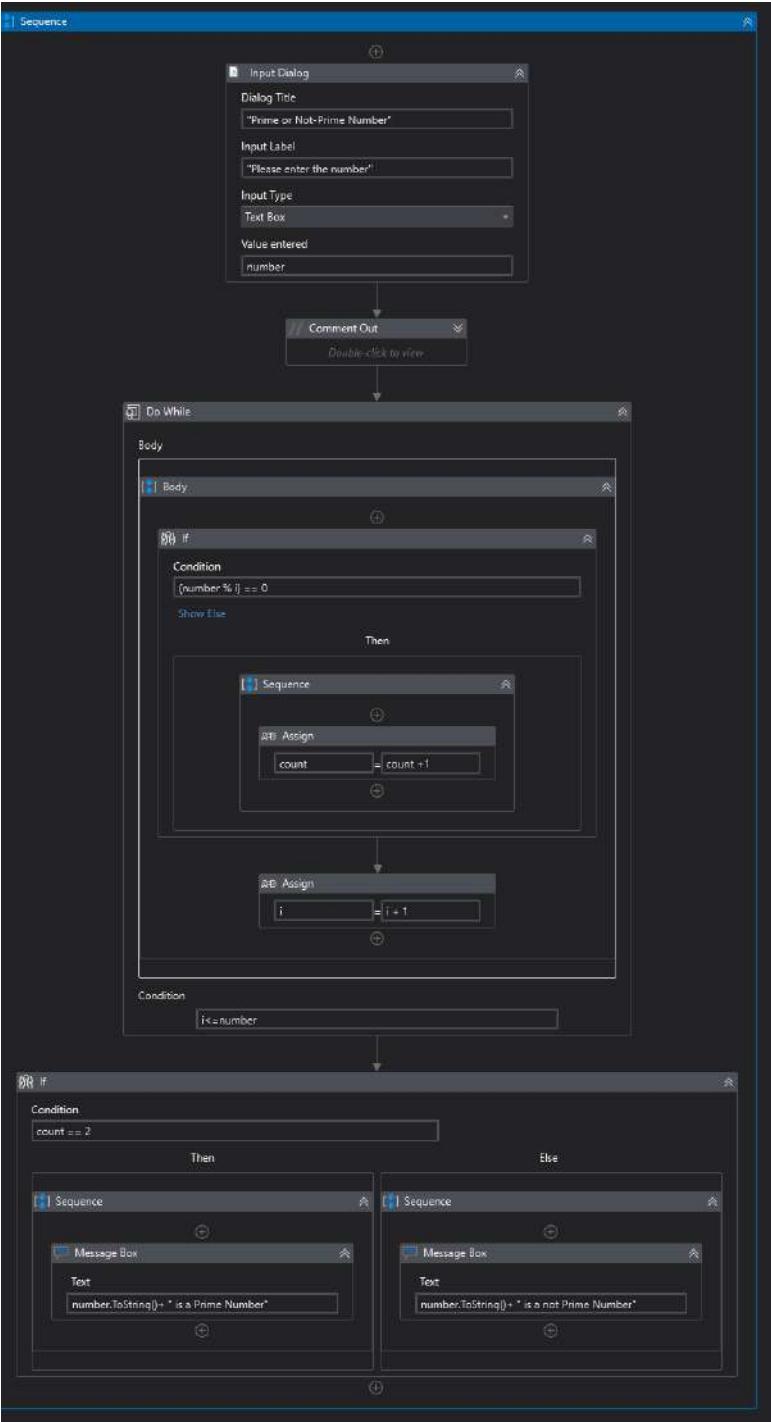


12. Output

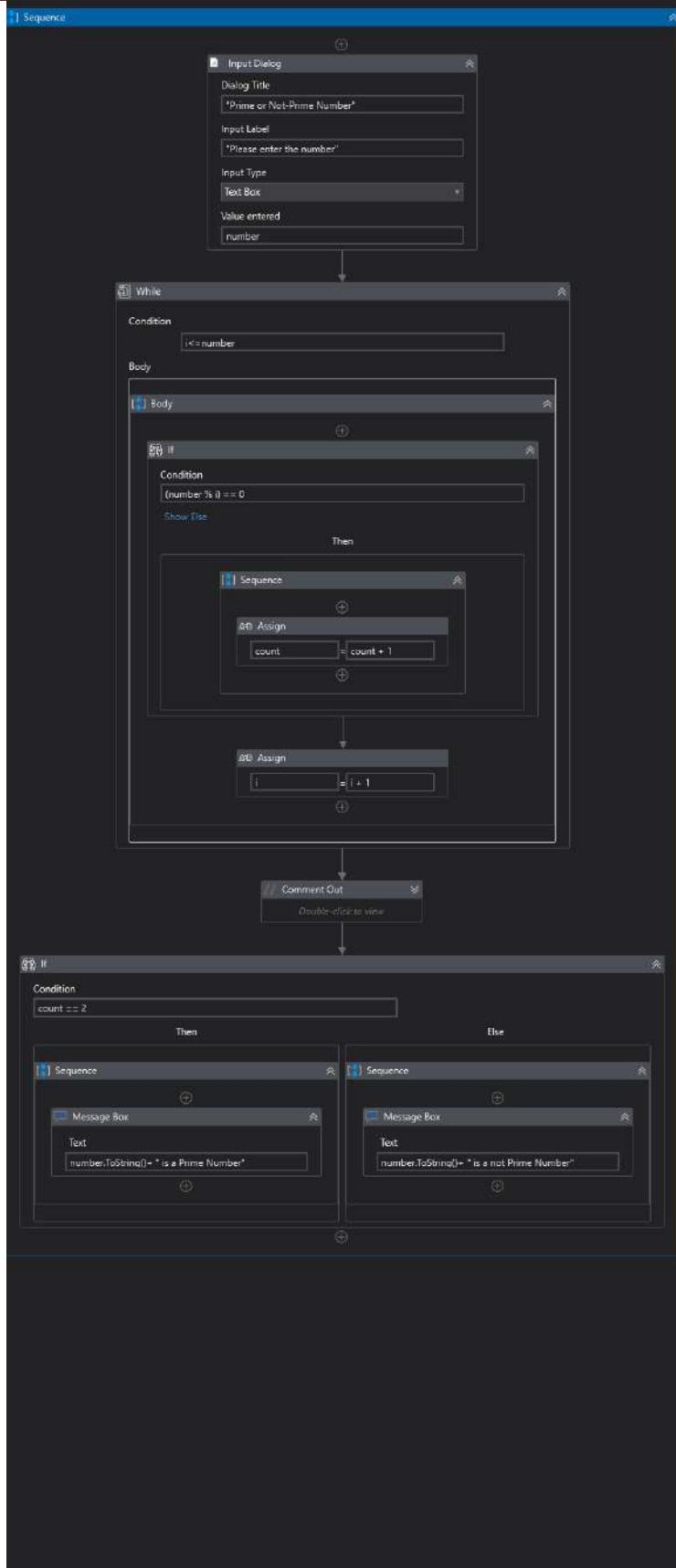


Name	Variable type	Scope	Default
number	Int32	Sequence	Enter a C# expression
count	Int32	Sequence	0
i	Int32	Sequence	1
<a href="#">Create Variable</a>			

### Prime Number or Not using Do – While loop



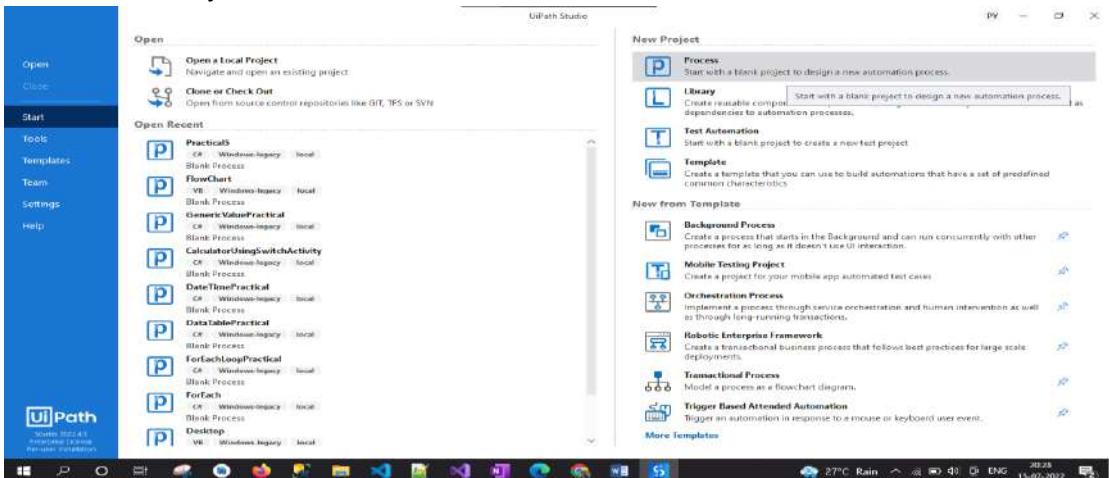
### Prime Number or Not using While loop



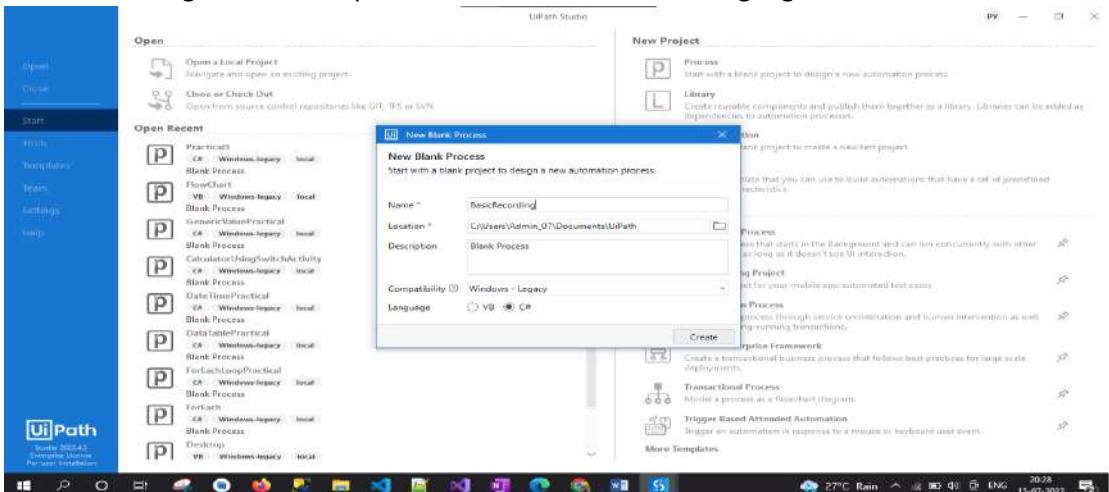
## Practical 4:

### A] Automate any process using basic recording.

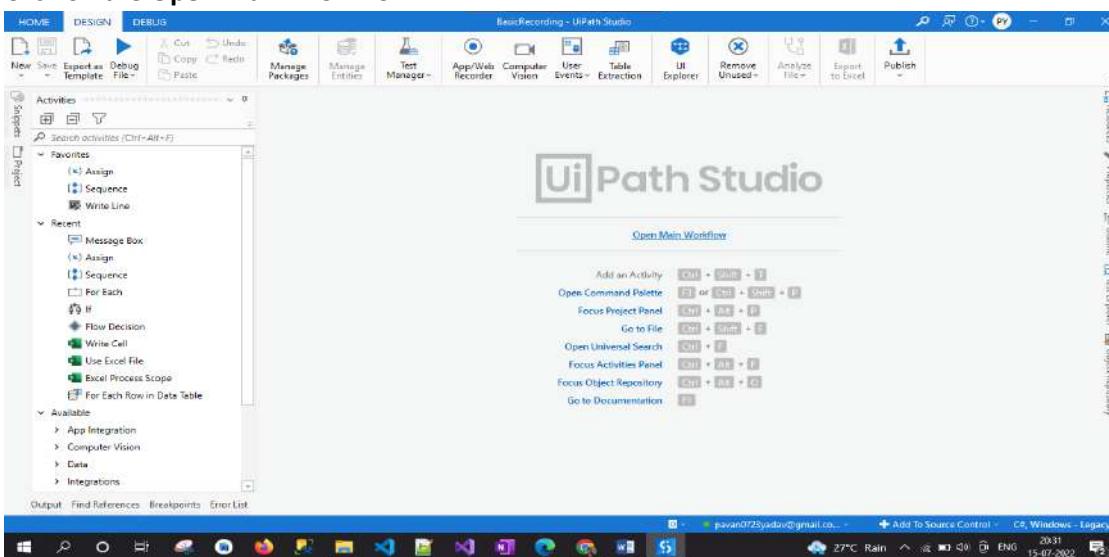
- Create a new Project then click on the Process

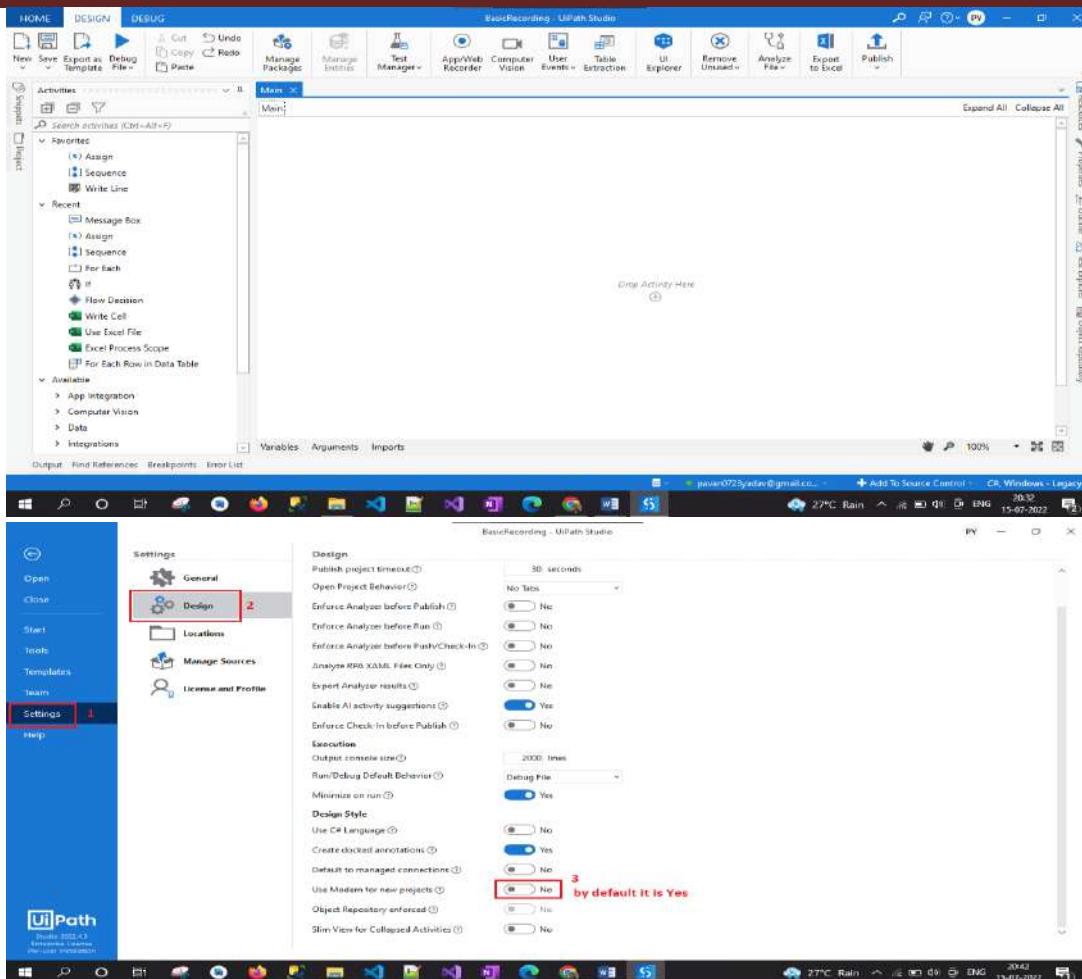


- Write following detail of the process. Note: Select the C# Language

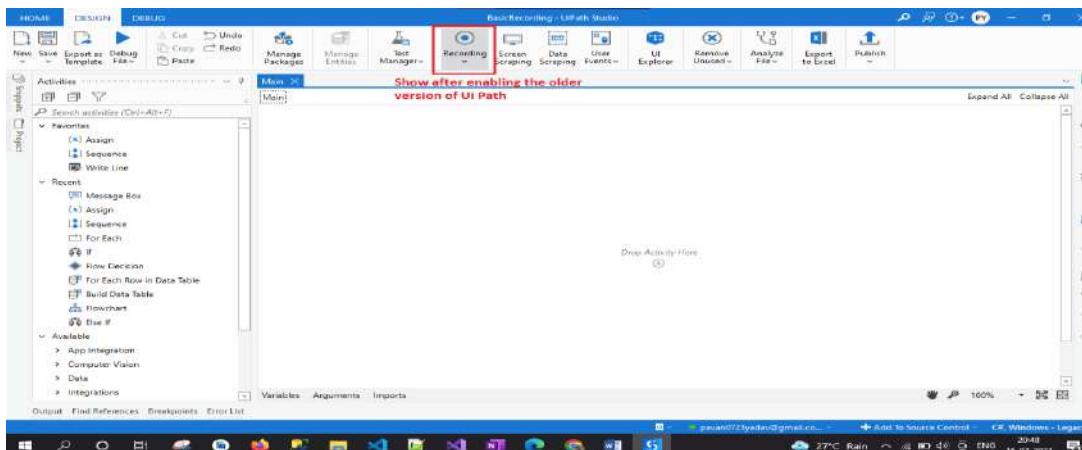


- Click on the Open Main Workflow

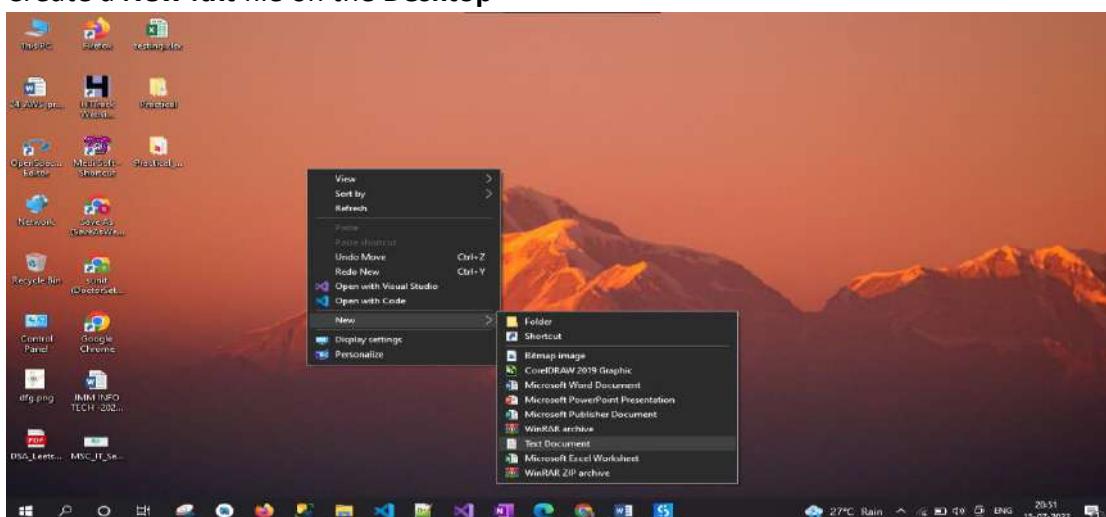


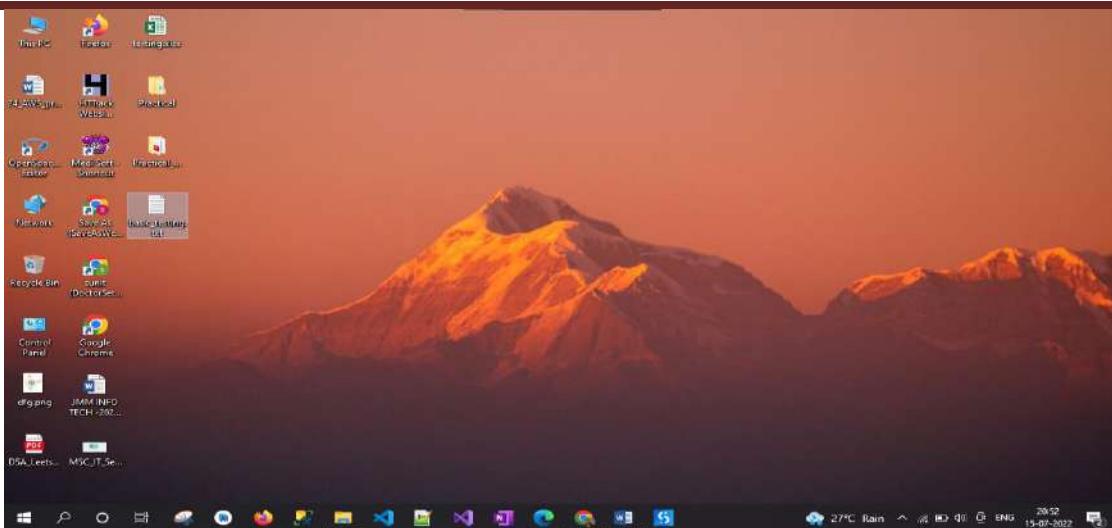


#### Delete process or create a new Process

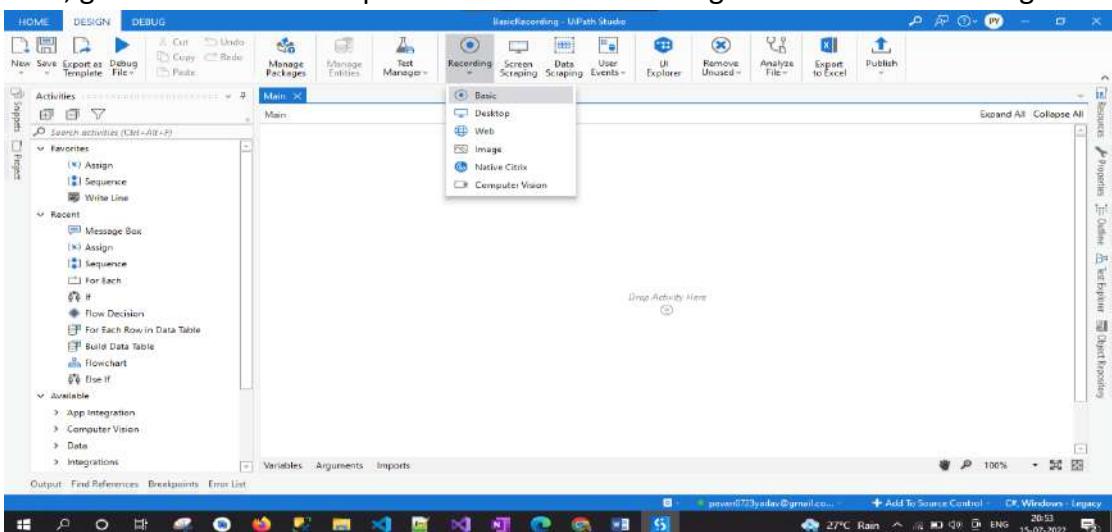


#### 4. Create a New .txt file on the Desktop

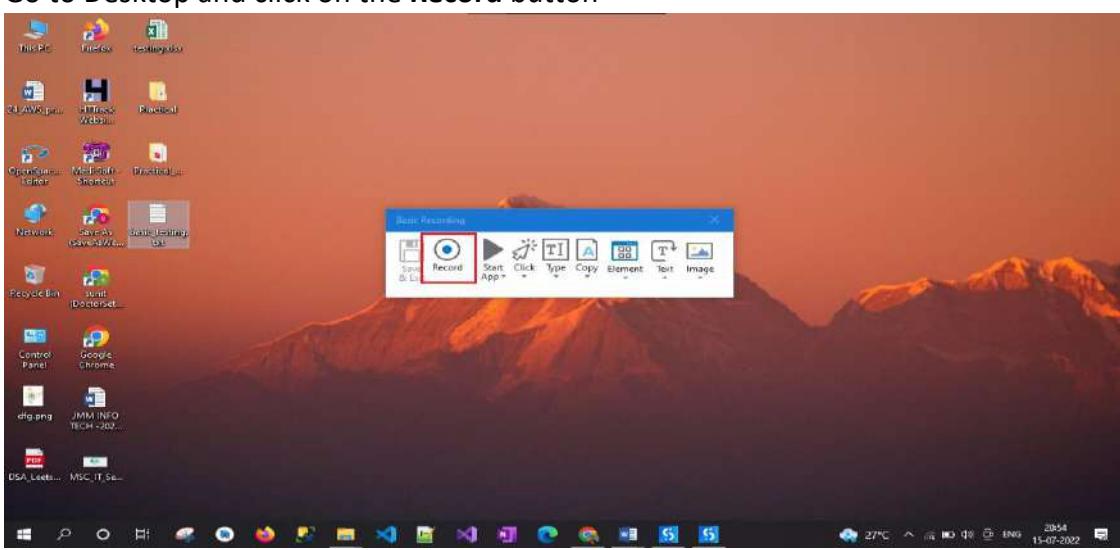


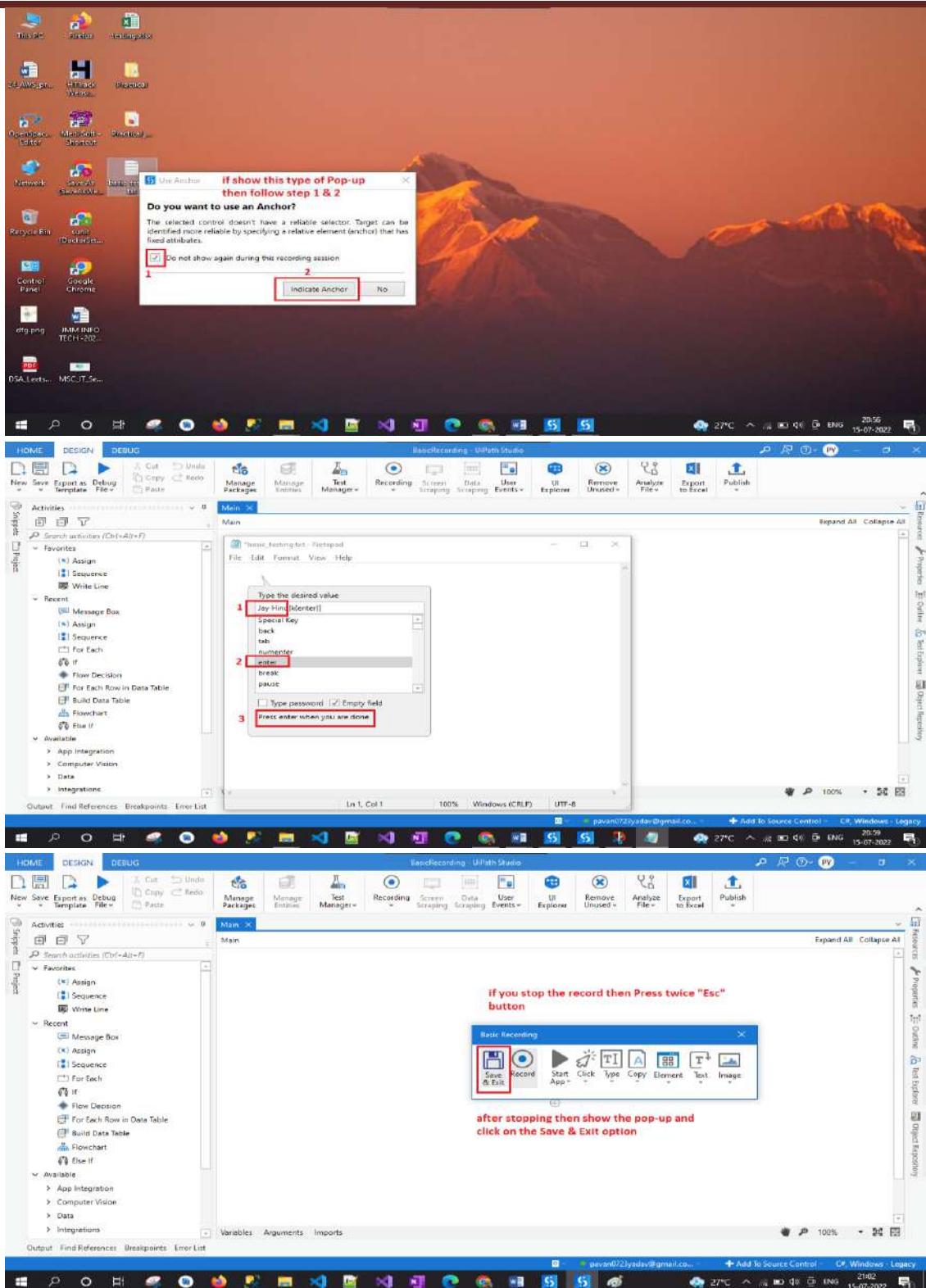


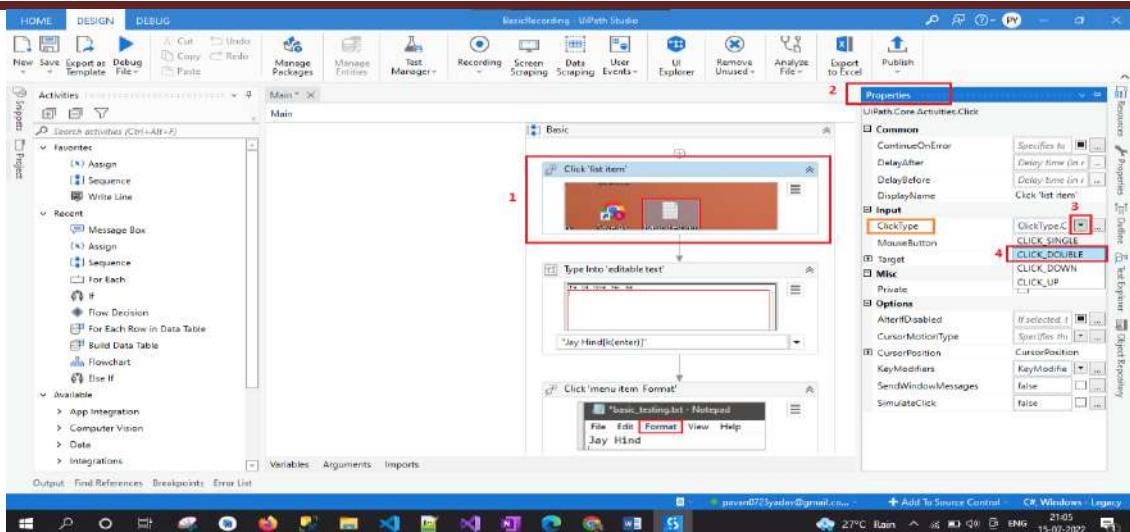
5. Now, go to the Ui Path and process the Basic Recording. Follow the below image



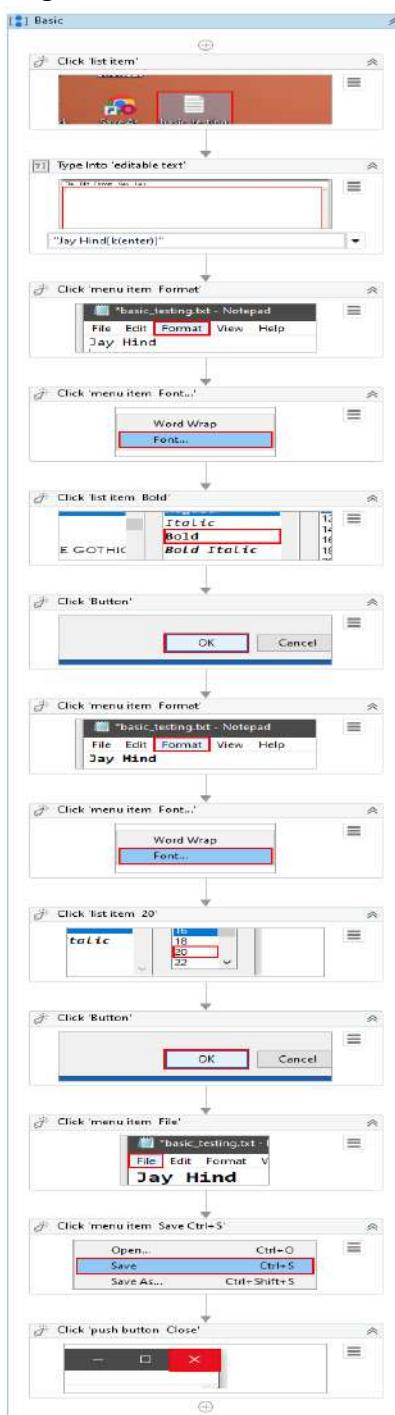
6. Go to Desktop and click on the Record button



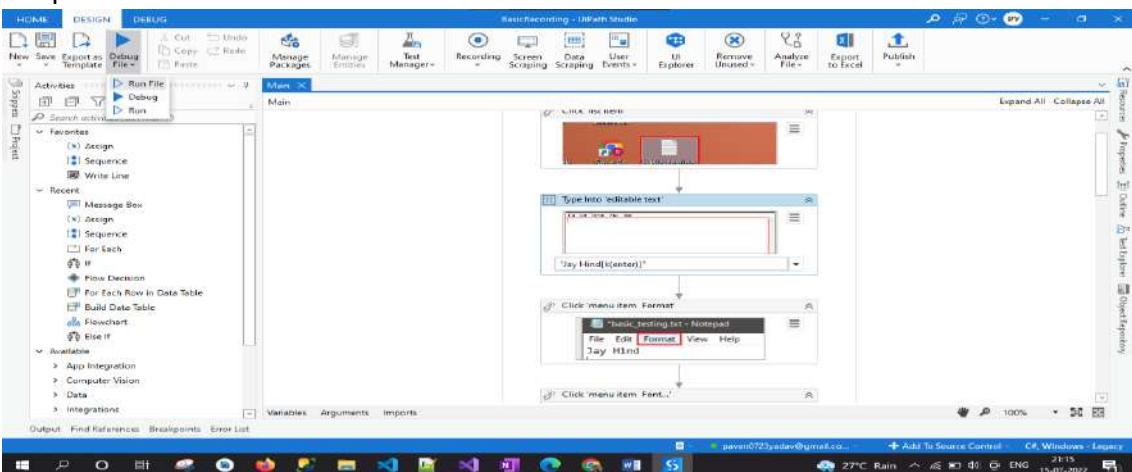




## 7. Flow of the Basic Recording



## 8. Output

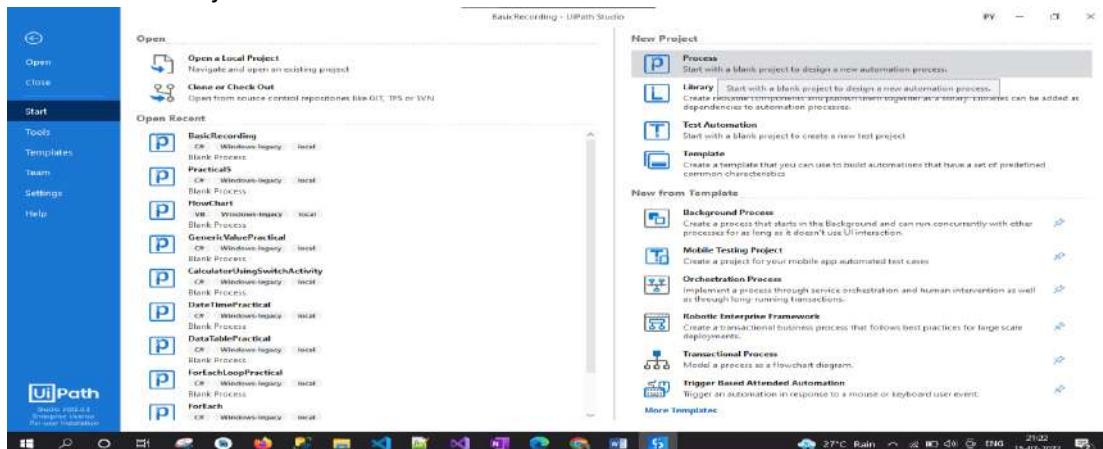


## 9. Video Link

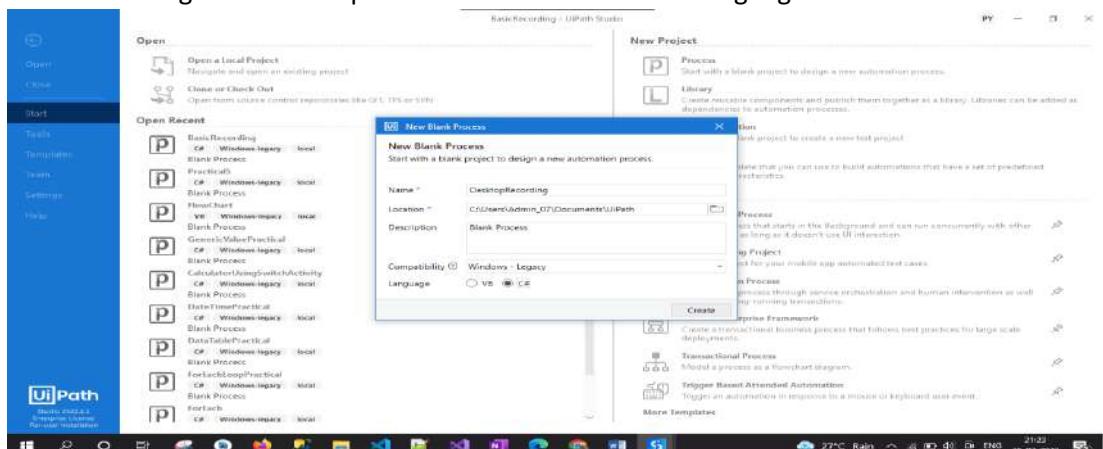
<https://drive.google.com/file/d/145jCJPY7uz1oW3cJ4mBiE4utMElwctiW/view?usp=sharing>

## B] Automate any process using desktop recording.

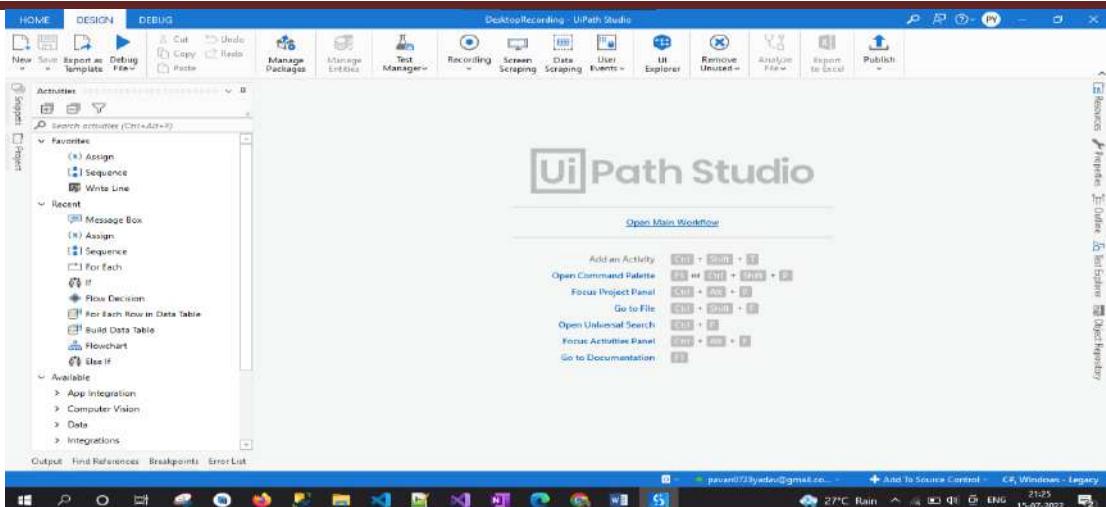
### 1. Create a new Project then click on the Process



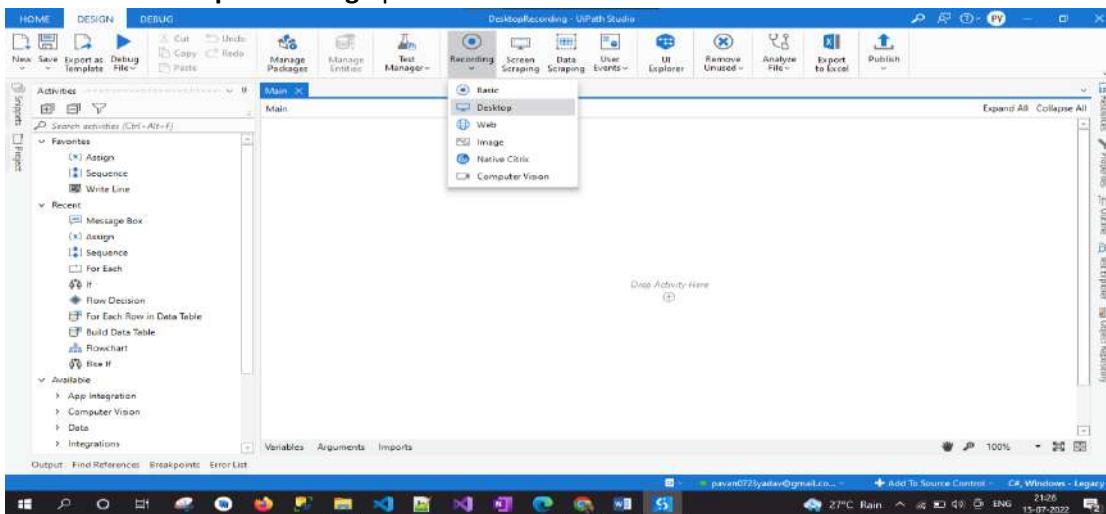
### 2. Write following detail of the process. Note: Select the C# Language



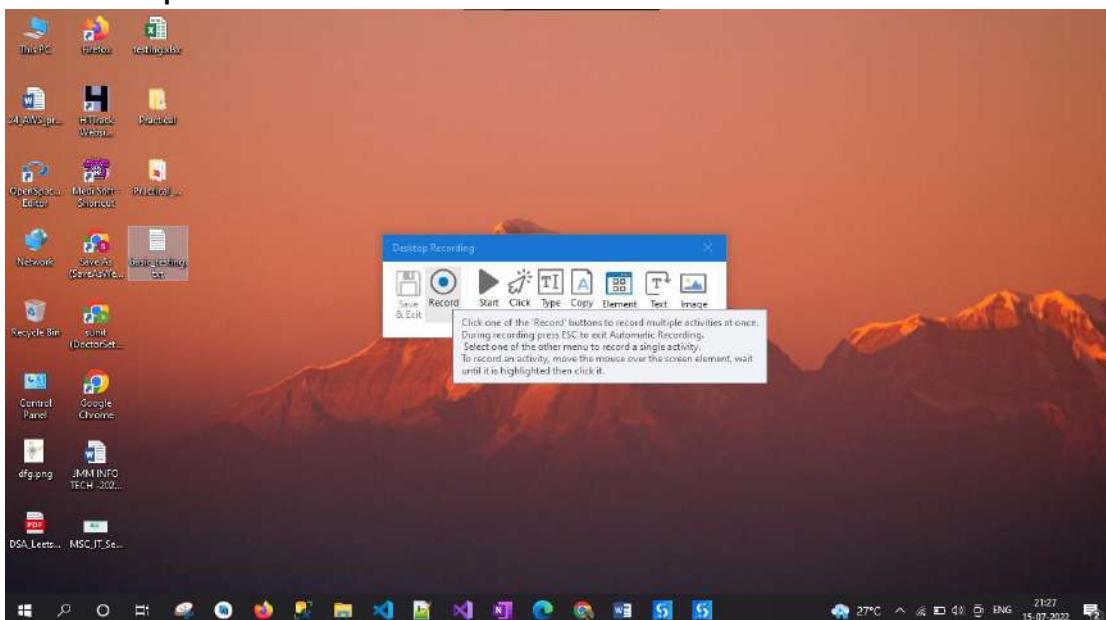
### 3. Click on the Open Main Window



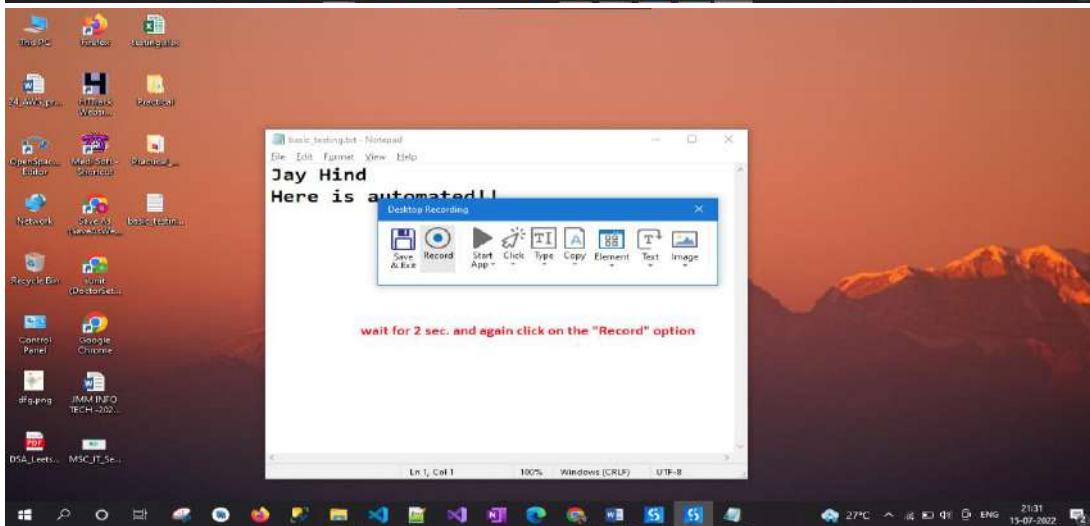
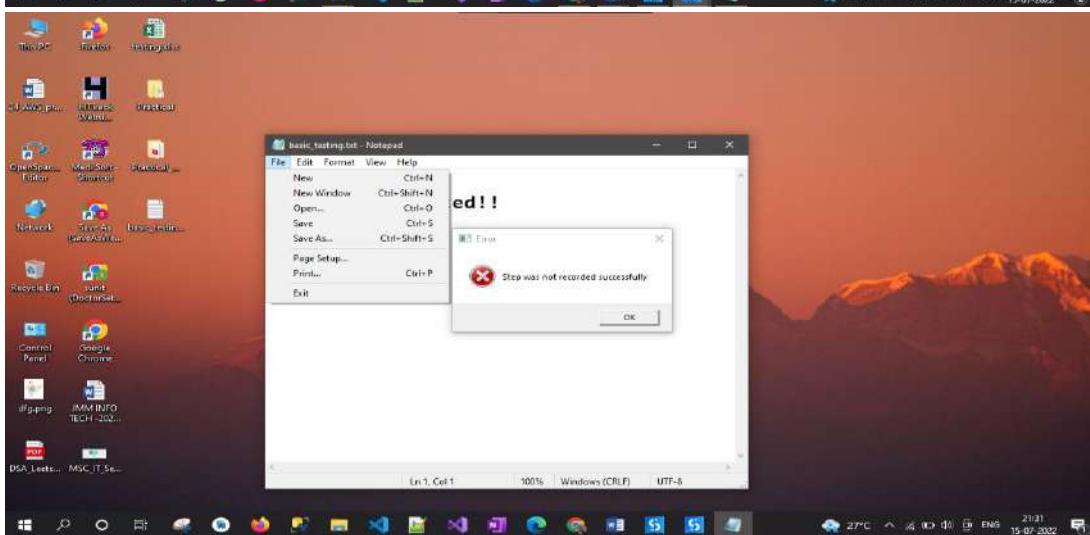
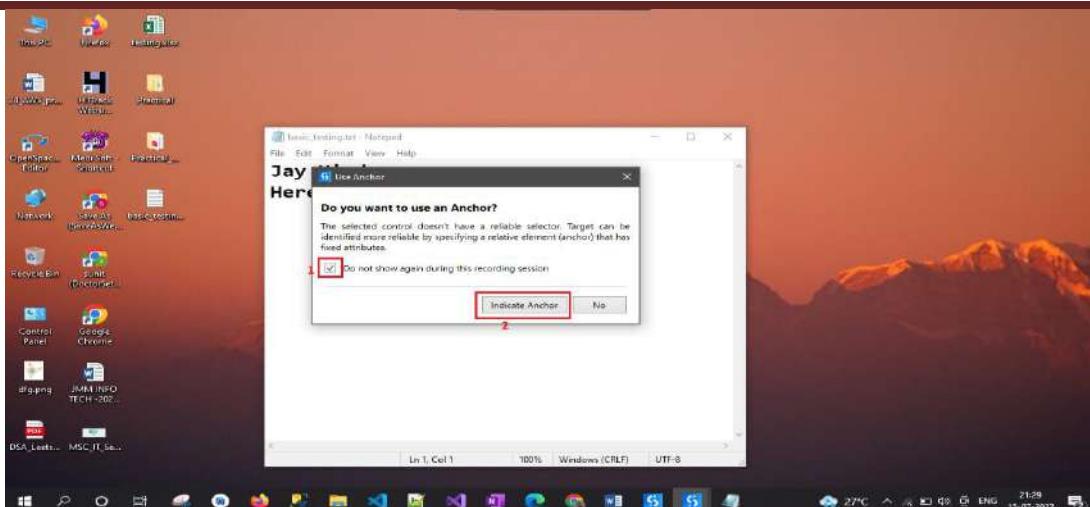
#### 4. Start with Desktop Recording option

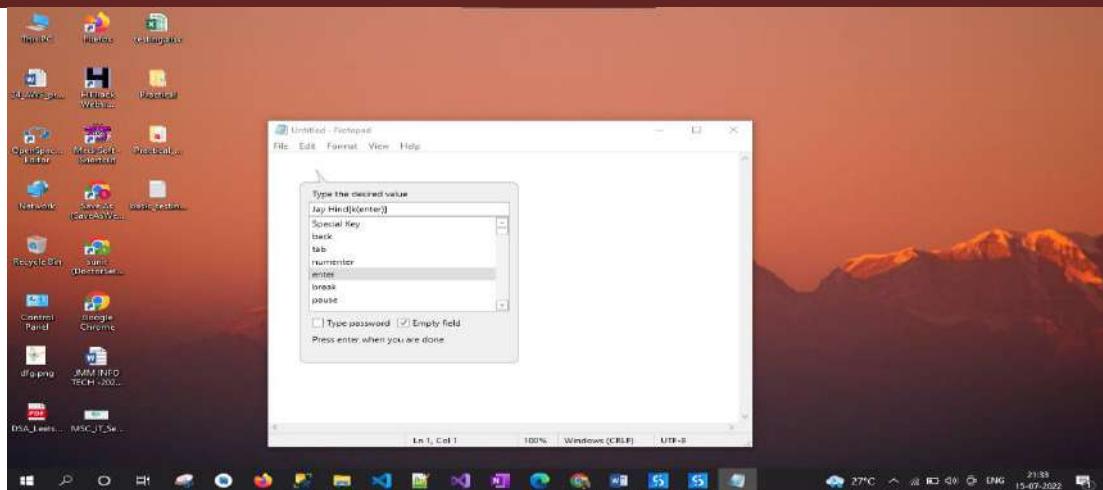


#### 5. Go to Desktop and click on the Record button

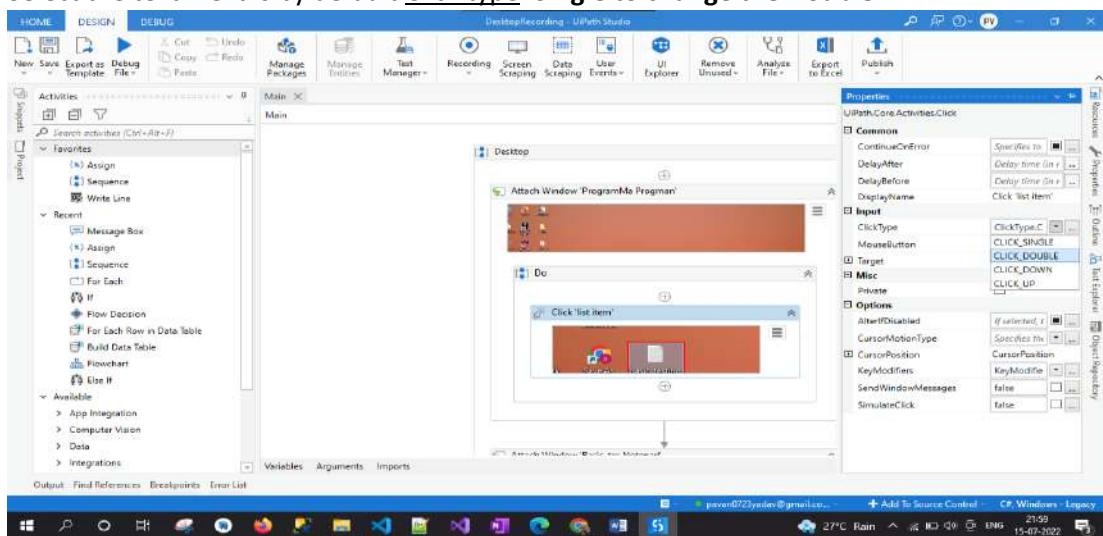


#### 6. Follow the image steps

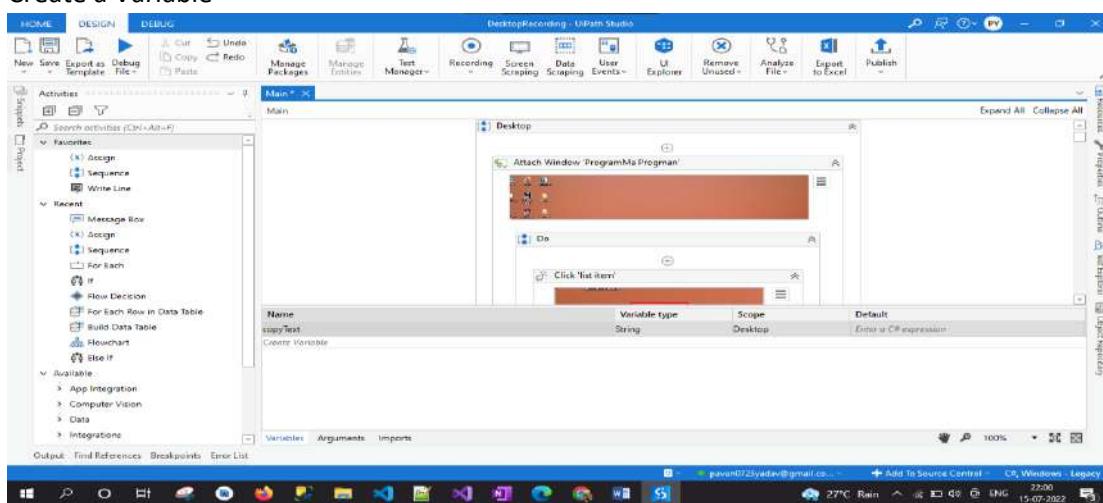




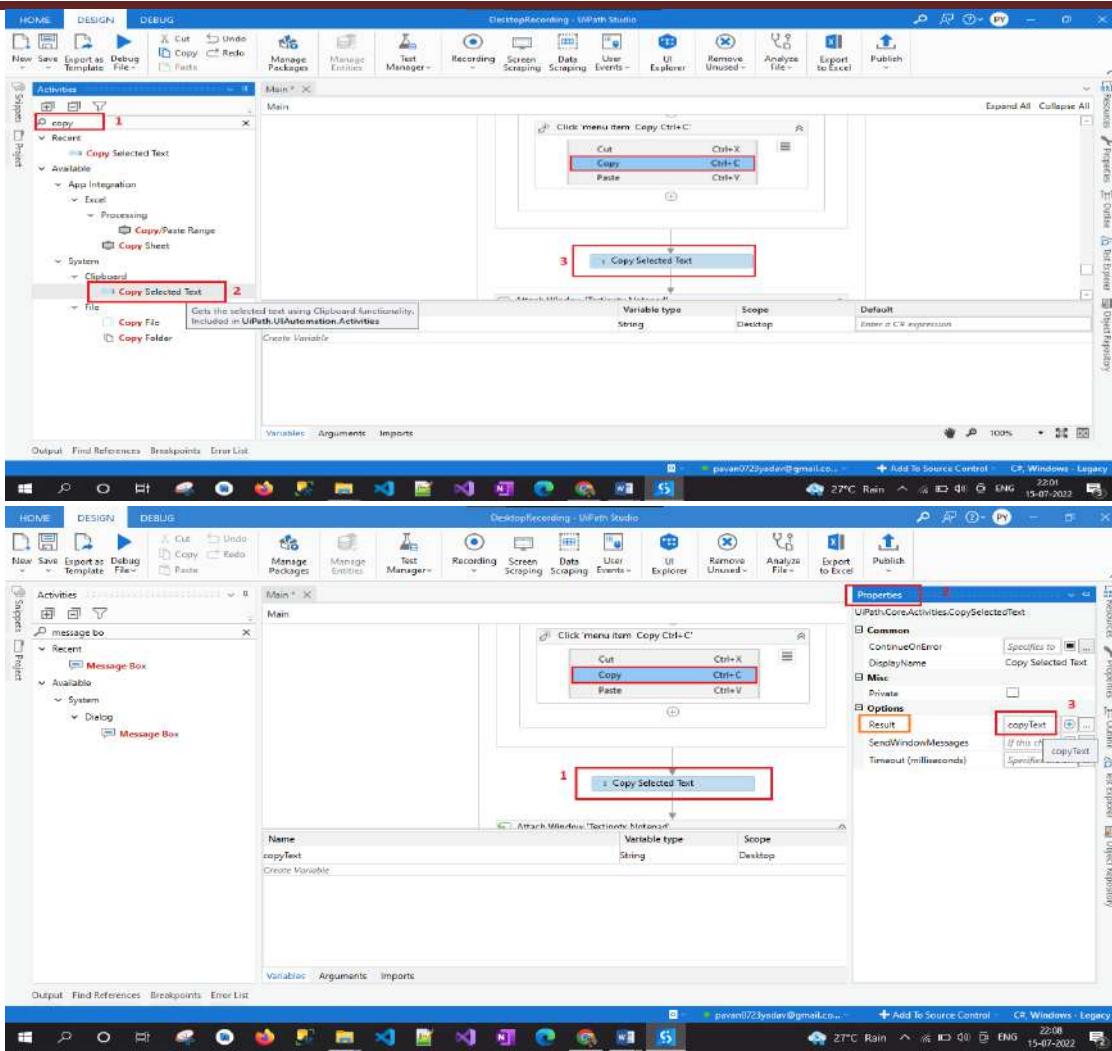
7. Select the text file it is by default Click type: Single to change the Double



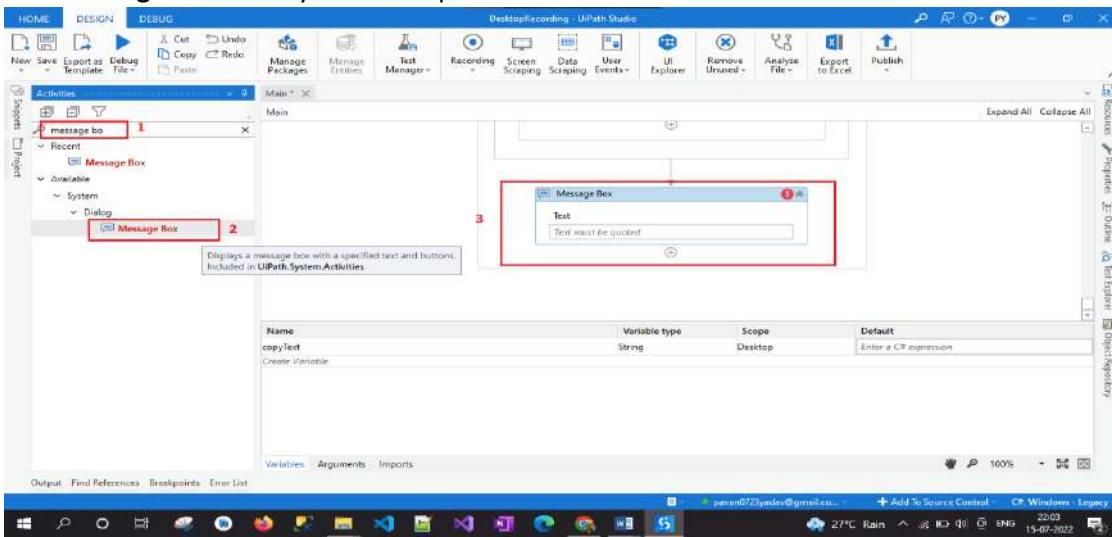
8. Create a Variable

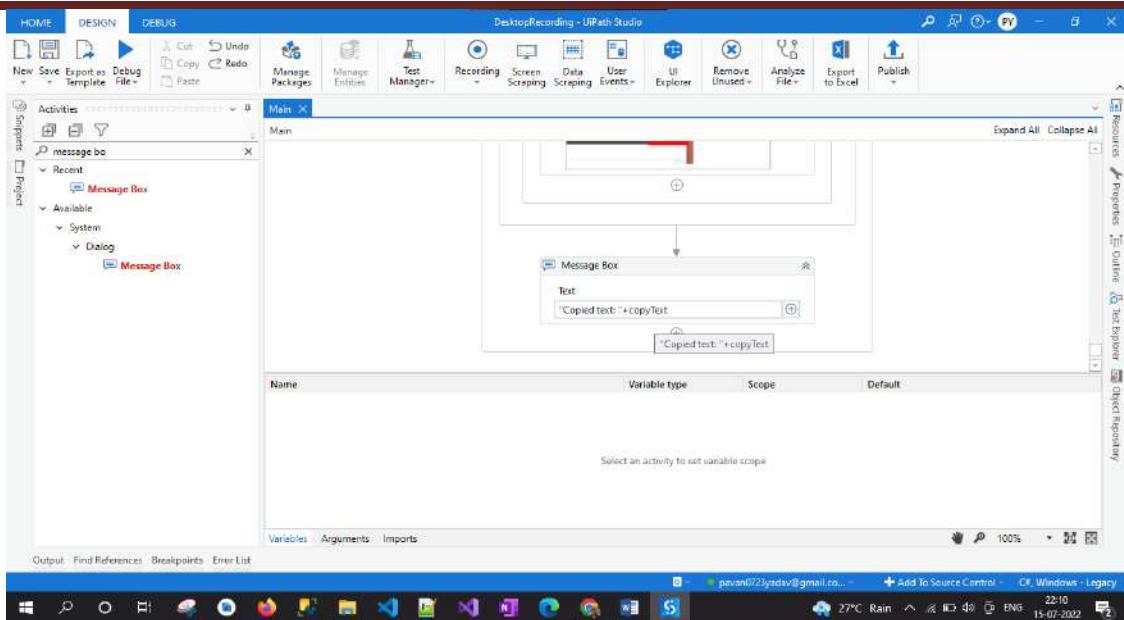


9. Add **Copy Selected Text** activity after the Copy text in recording

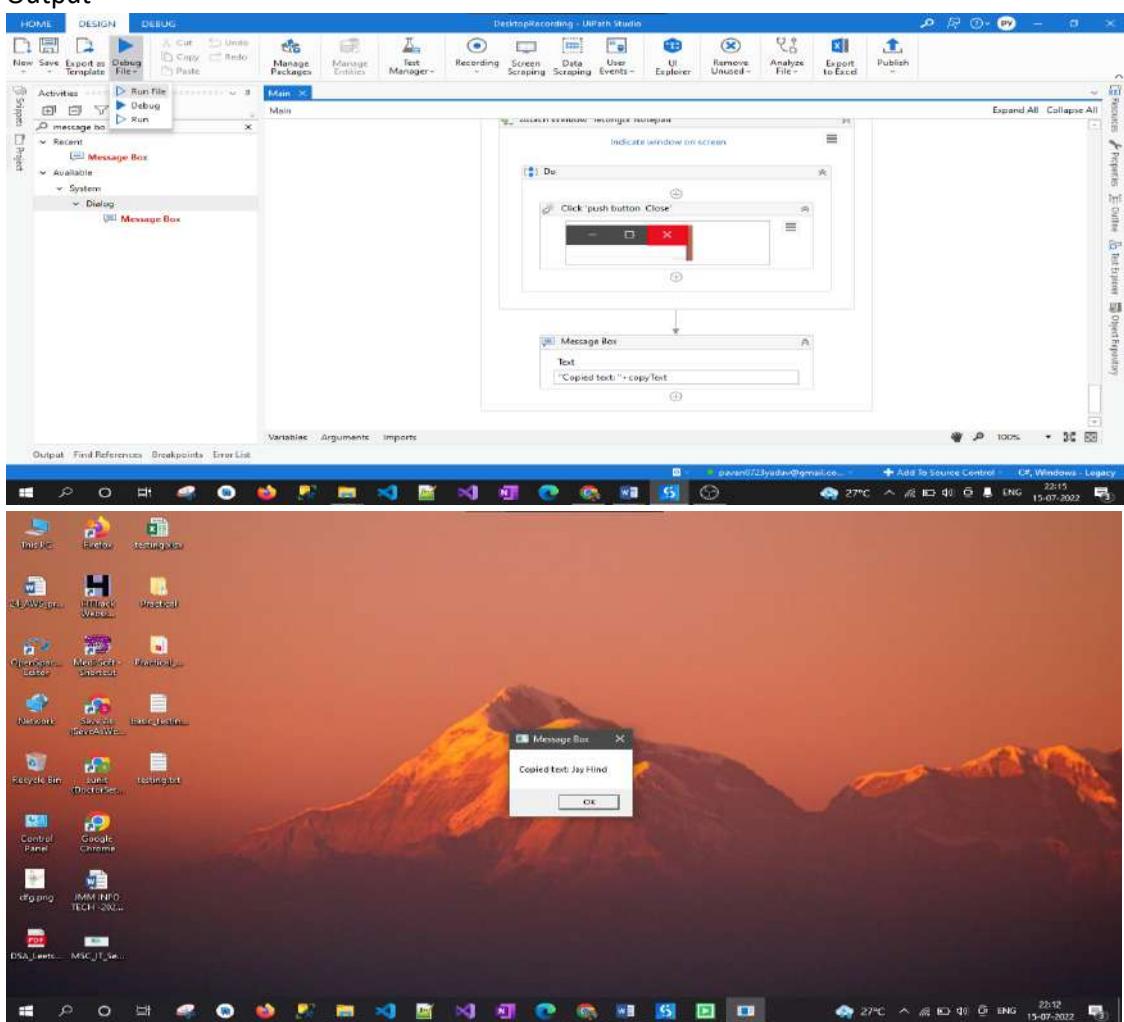


#### 10. Add Message Box activity on the Sequence





## 11. Output

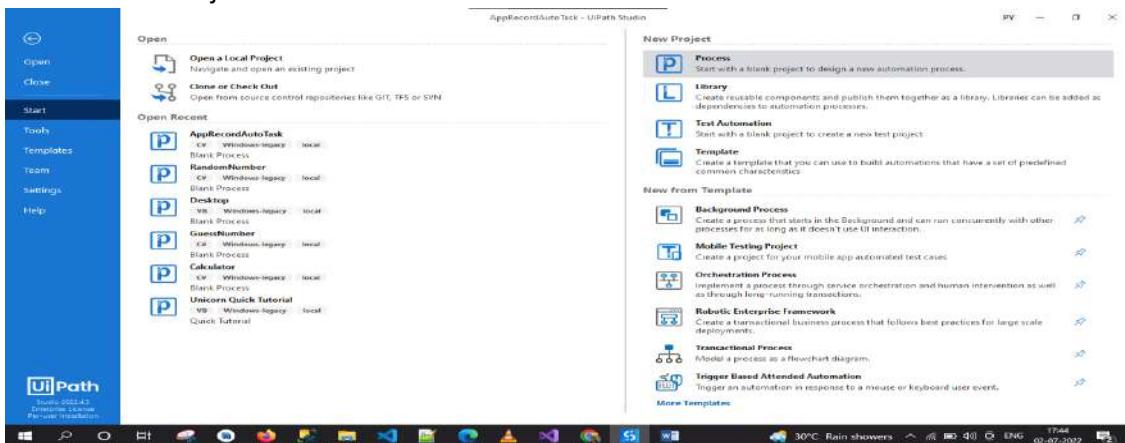




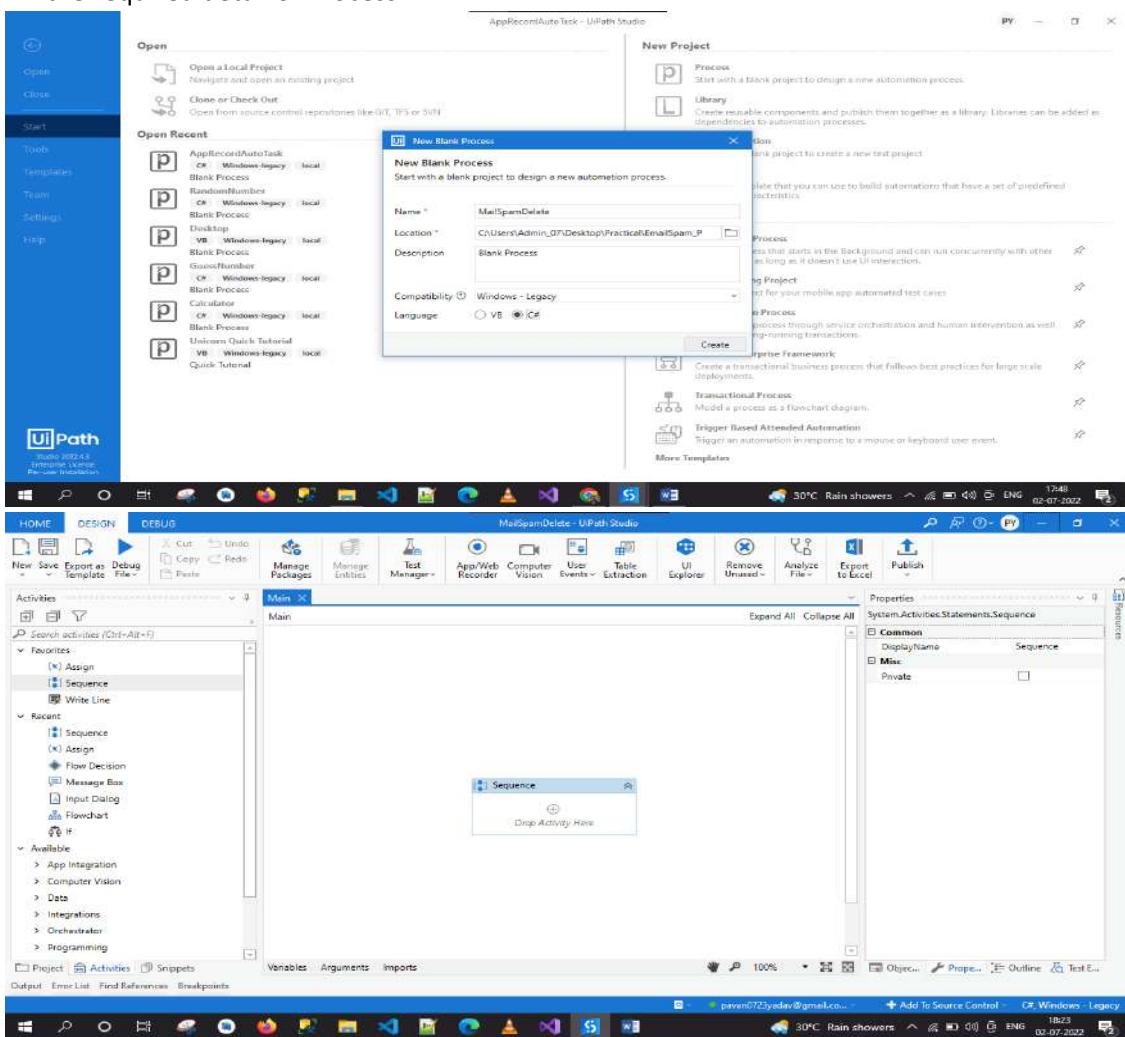
12. Video Link <https://drive.google.com/file/d/19ePSL0eyHHCbavFFEyq5mftu1CfzEHpf/view?usp=sharing>

## C] Automate any process using web recording.

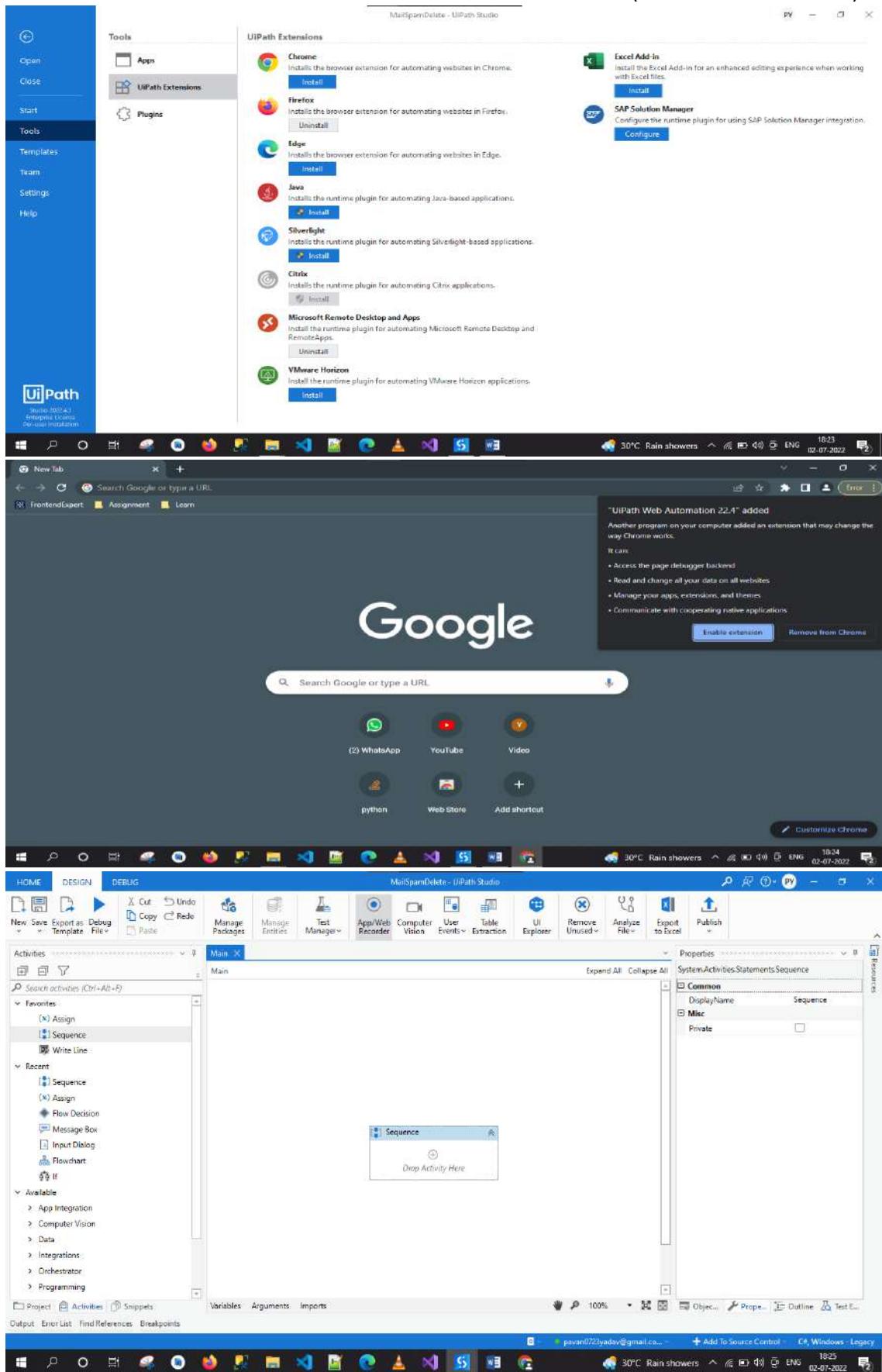
- Create a new Project then click on the Process

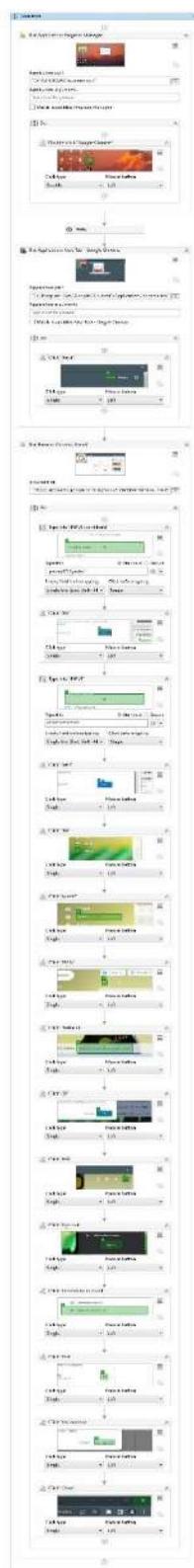


- Fill the required detail of Process



3. Note: Install the extension of UI Path to comfortable Web Browser (recommended Chrome)





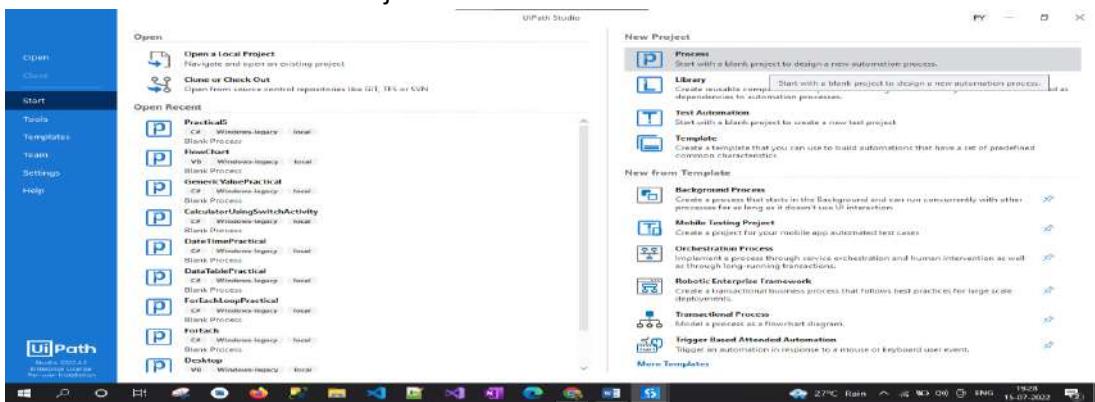
### Video Demo

<https://drive.google.com/file/d/1F1sDy6t3FyqRwTFy4xsu4tLveGGwp01n/view?usp=sharing>

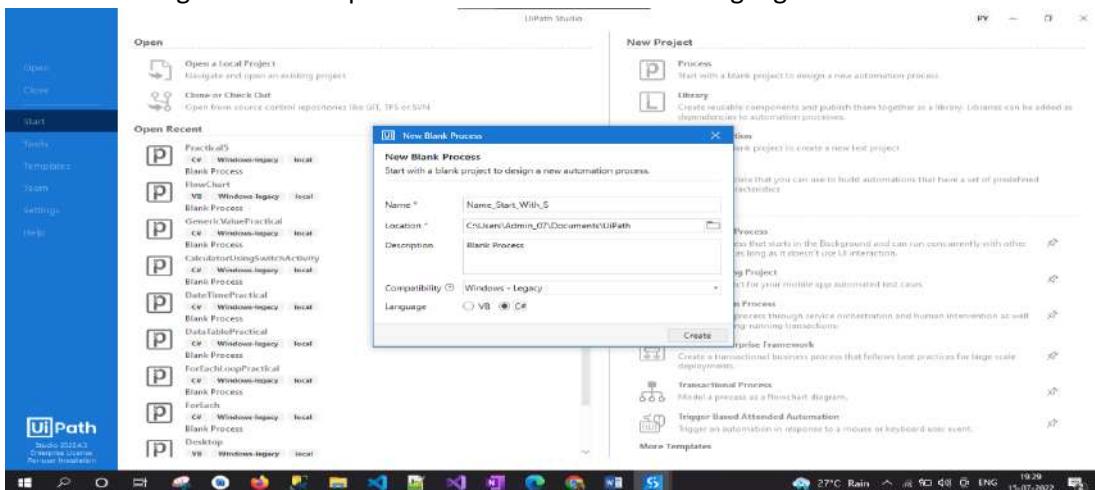
## Practical 5:

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

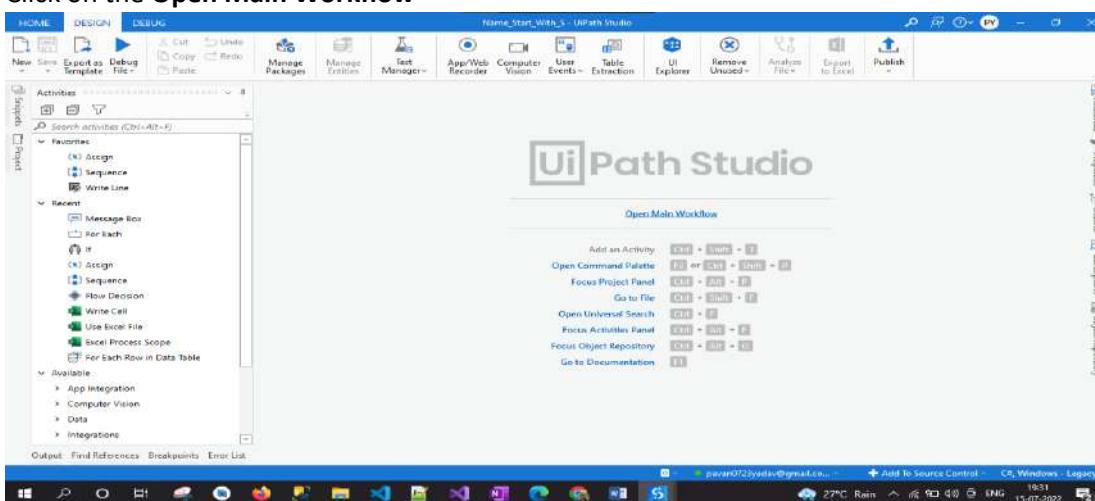
- Click on the Process to New Project



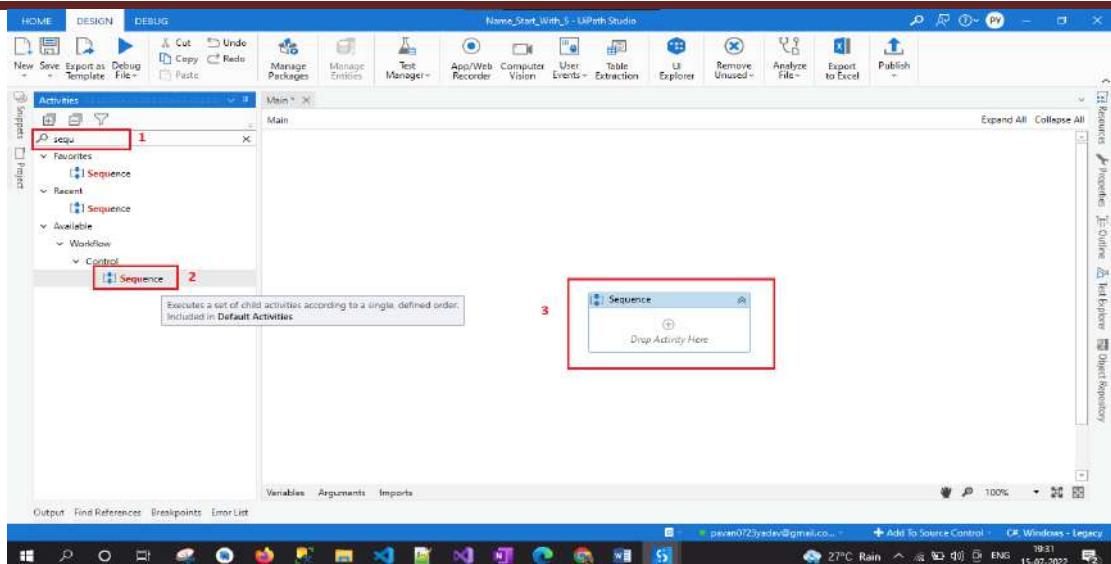
- Write following detail of the process. Note: Select the C# Language



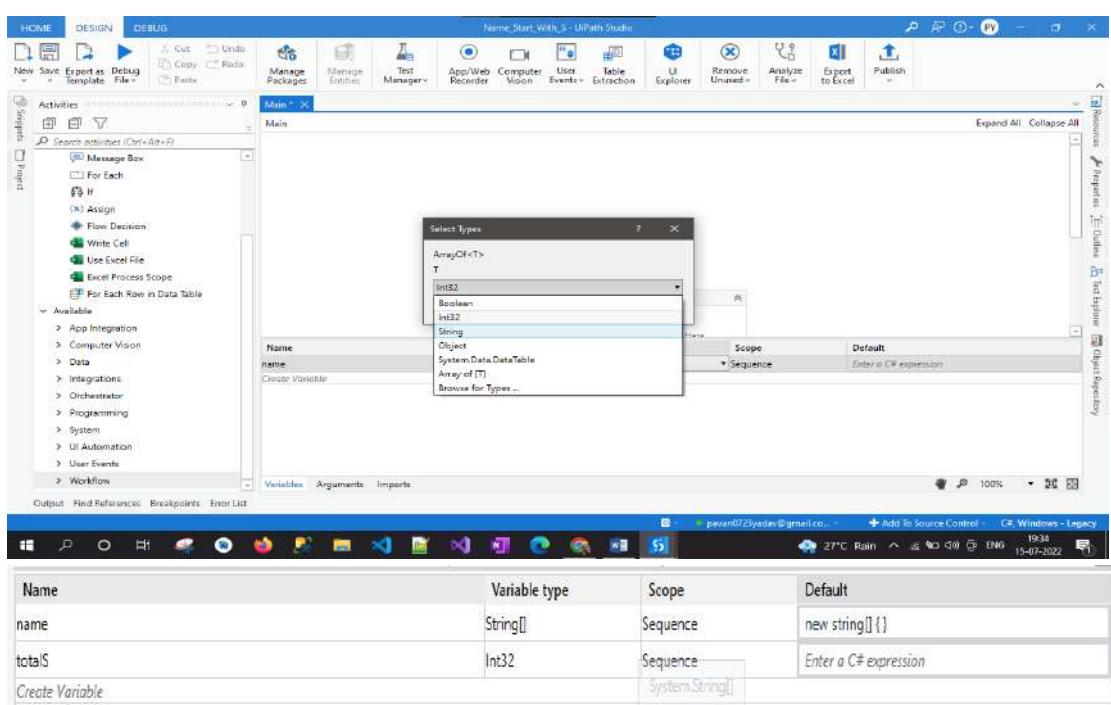
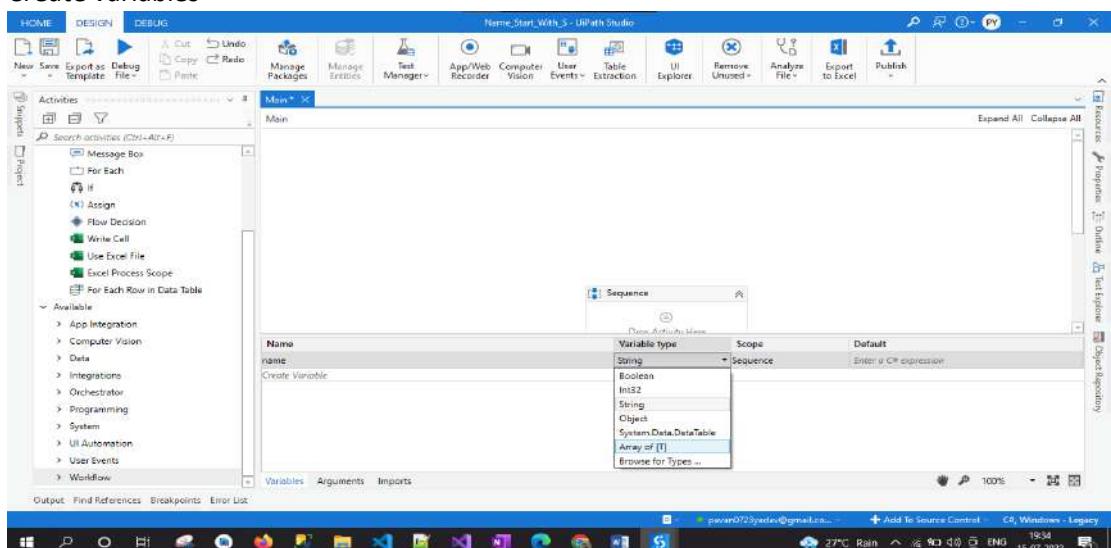
- Click on the Open Main Workflow



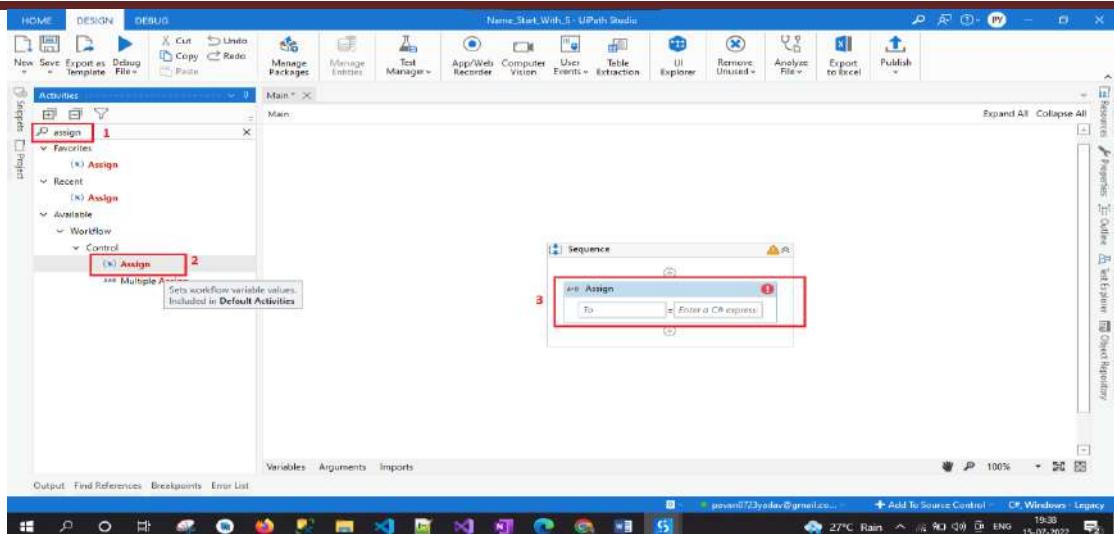
- Follow the step of below image



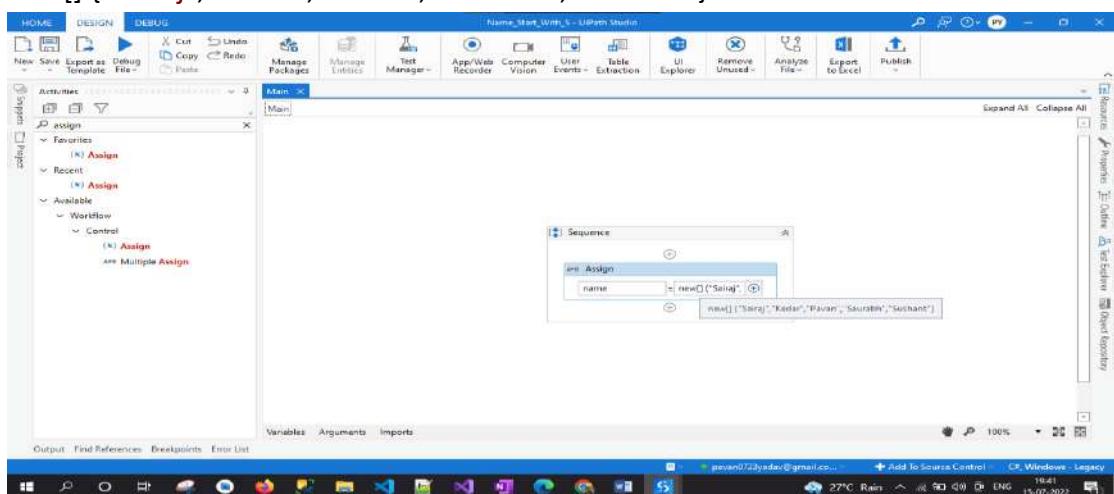
## 5. Create variables



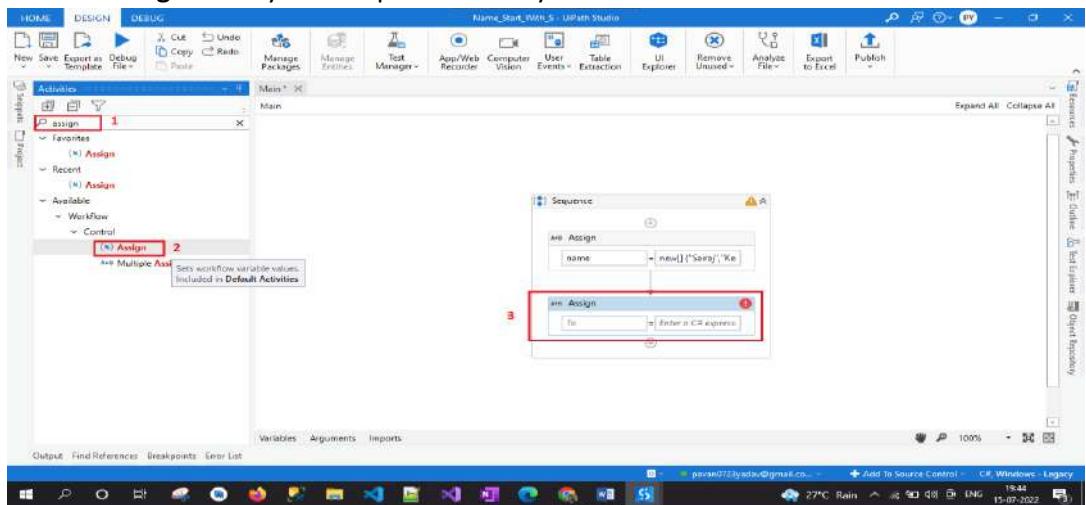
## 6. Add the Assign activity into Sequence activity



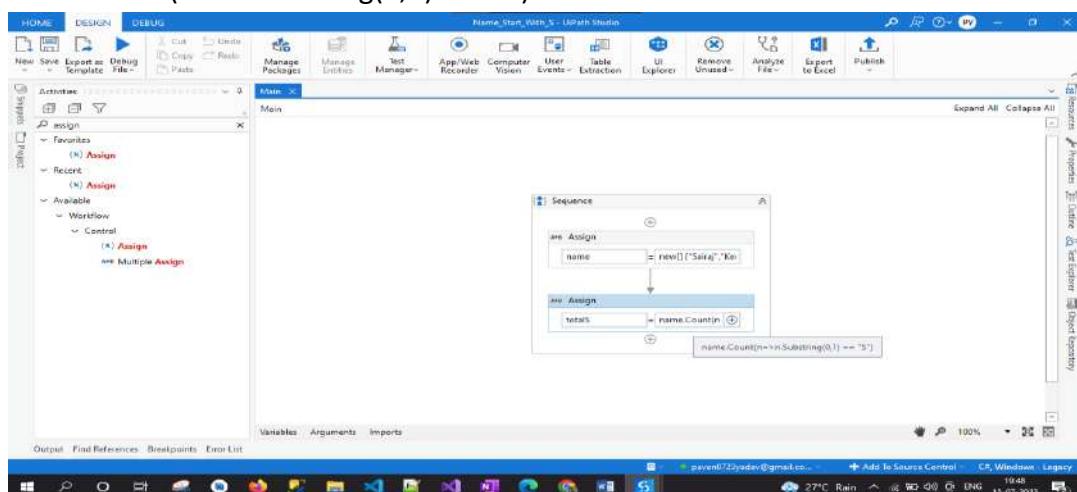
`new[] {"Sairaj", "Kedar", "Pavan", "Saurabh", "Sushant"}`



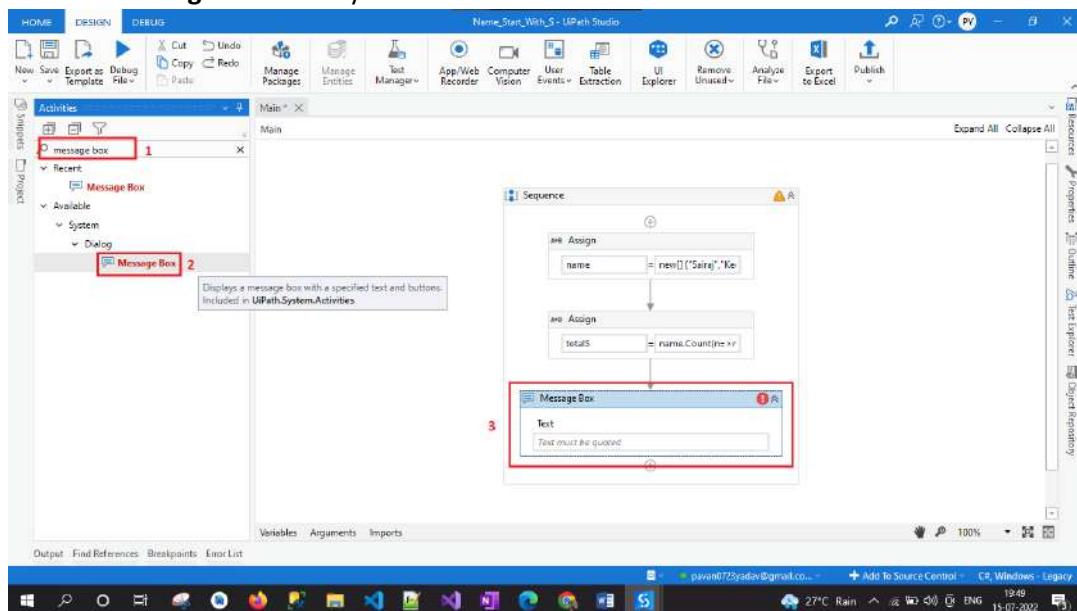
## 7. Add the Assign activity into Sequence activity



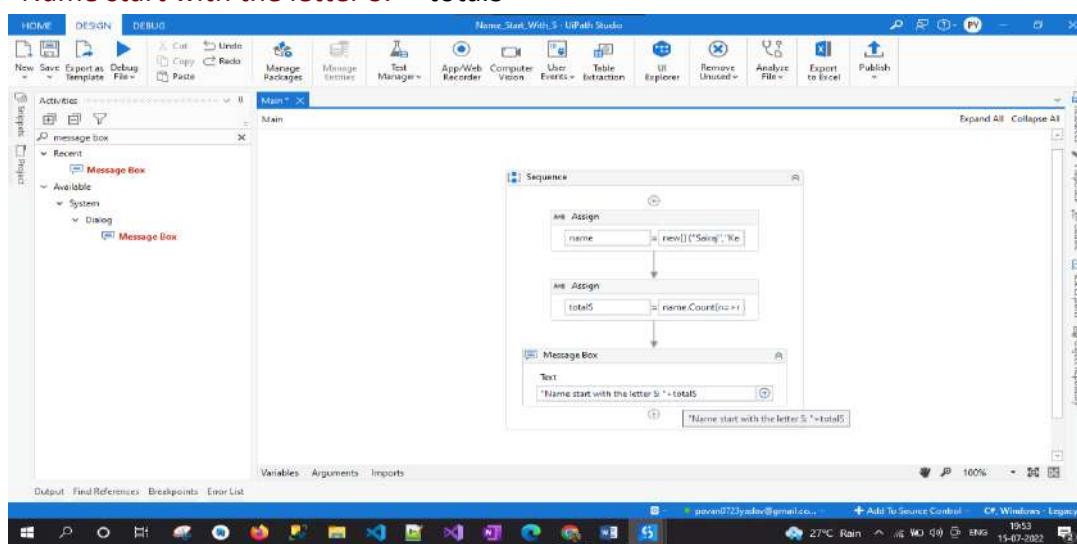
name.Count(n=>n.Substring(0,1) == "S")

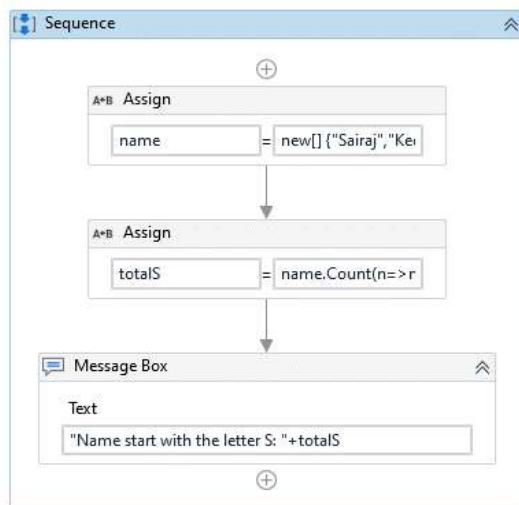


### 8. Add the Message Box activity

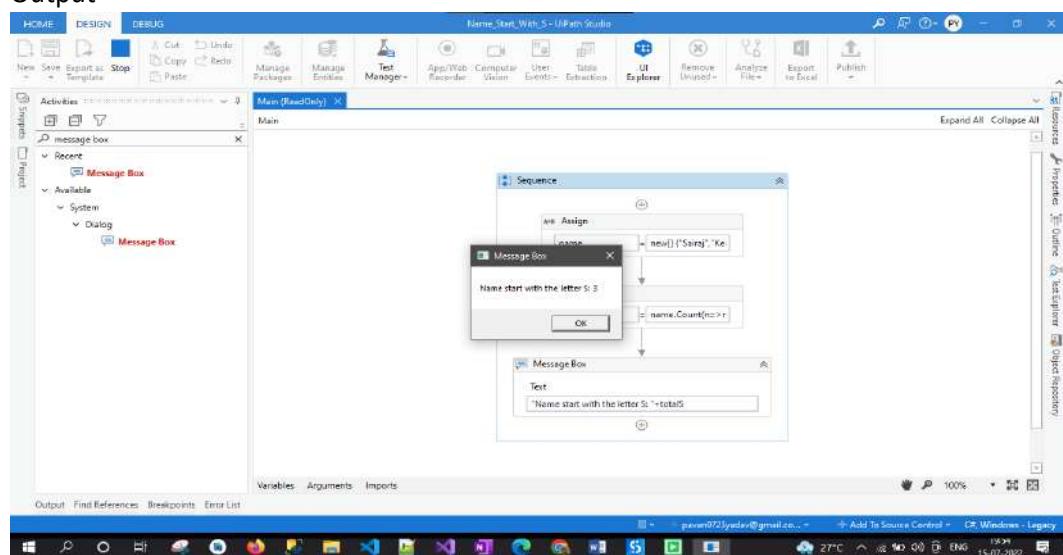


"Name start with the letter S: "+totals





## 9. Output

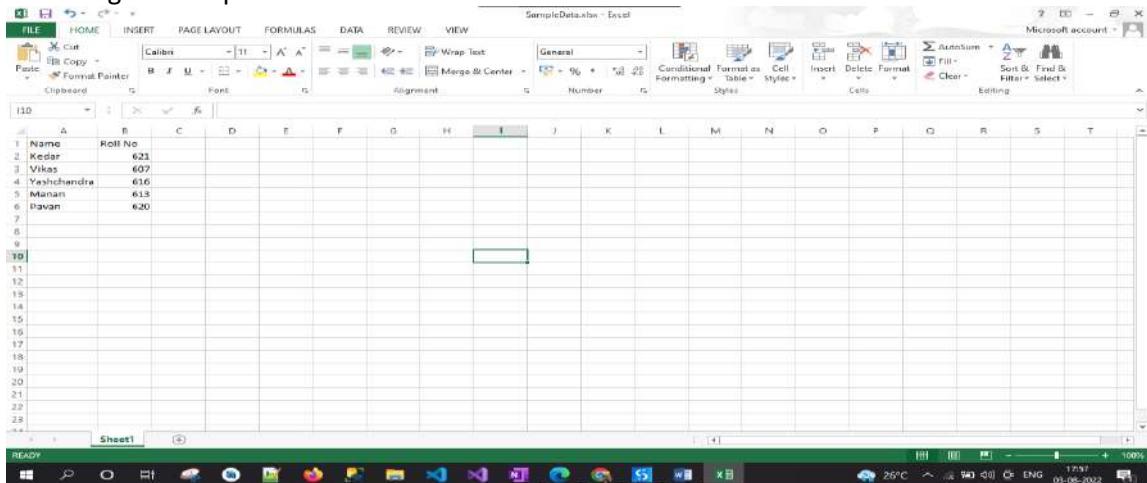


## Practical 6:

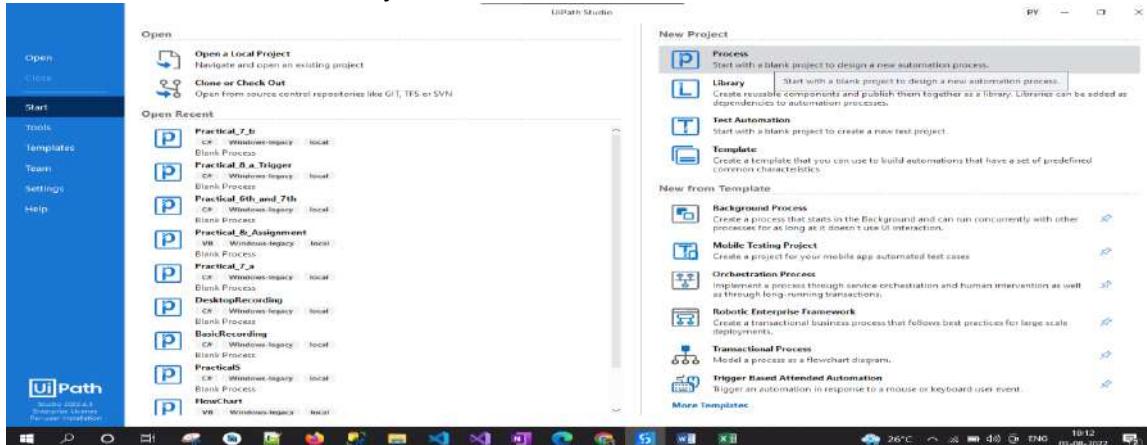
### A] Create an application automating read, write and append operation on excel file the following are the methods that are frequently used with an Excel file

- a. Read cell
- b. Write cell
- c. Read Range
- d. Write Range
- e. Append Range

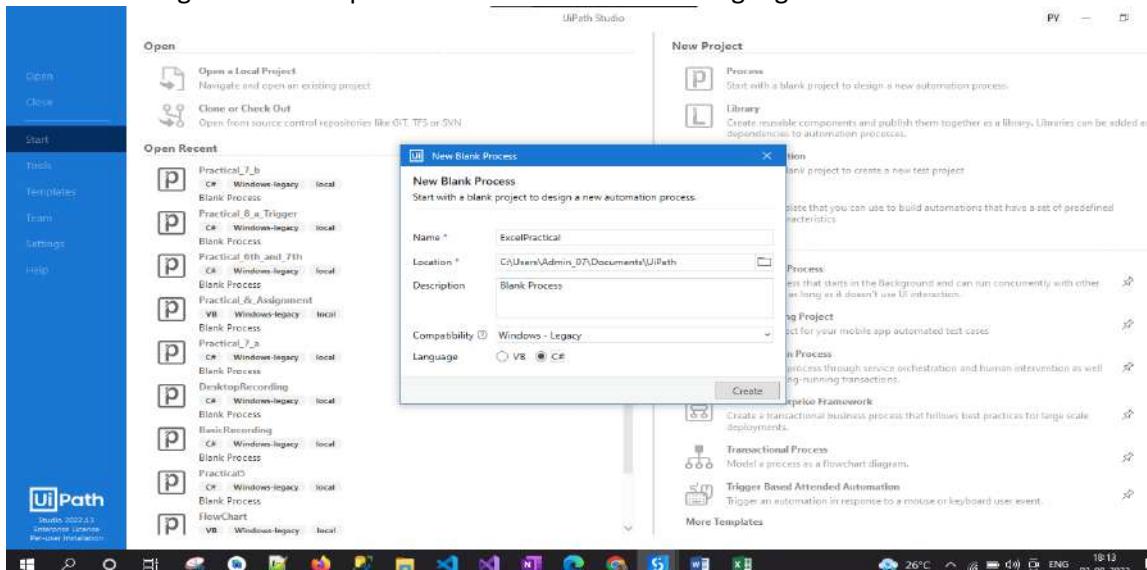
#### 1. Following is a sample file of excel



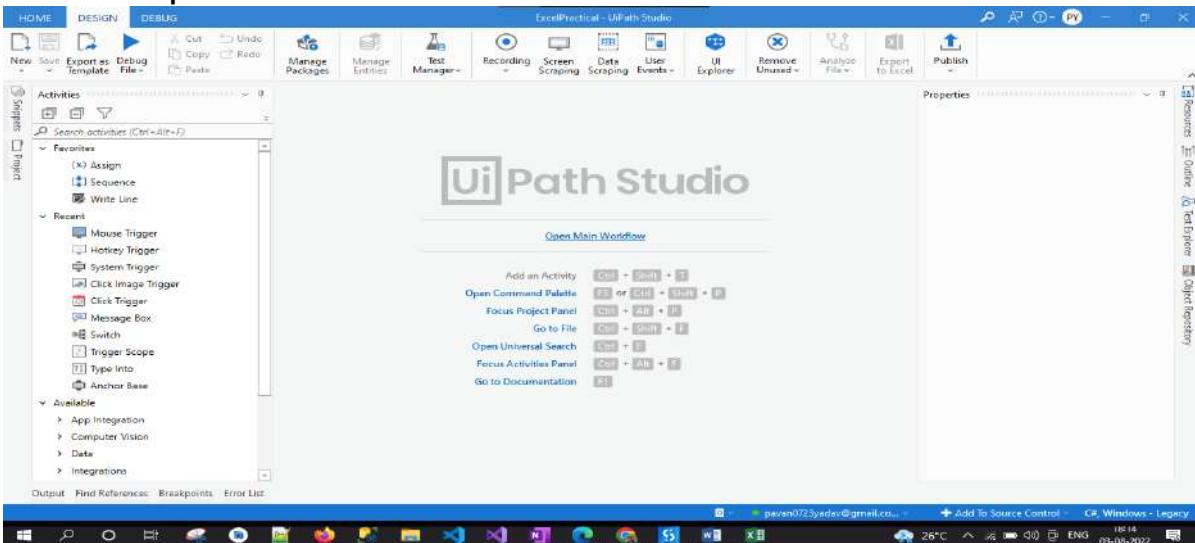
#### 2. Click on the Process to New Project



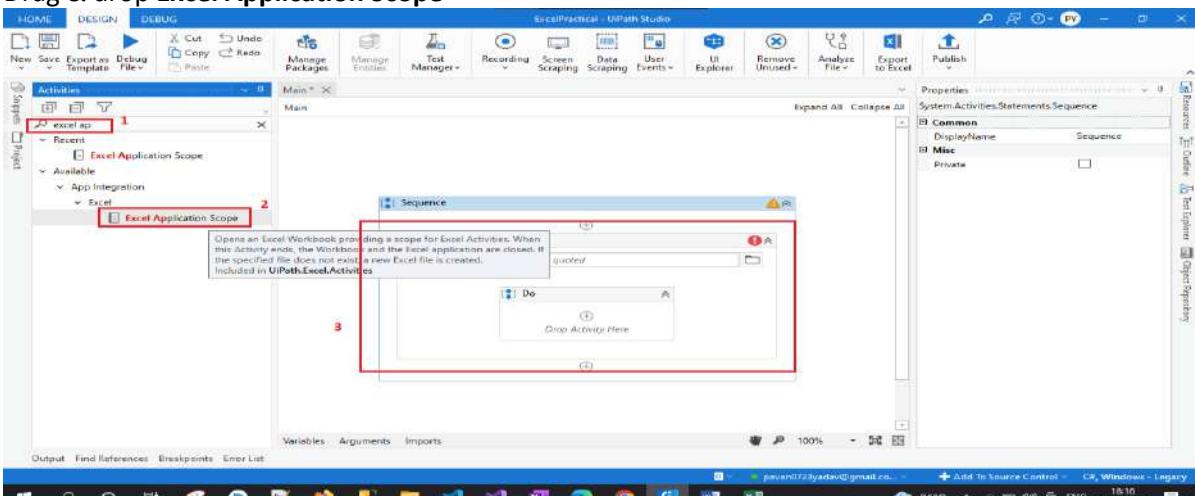
#### 3. Write following detail of the process. Note: Select the C# Language



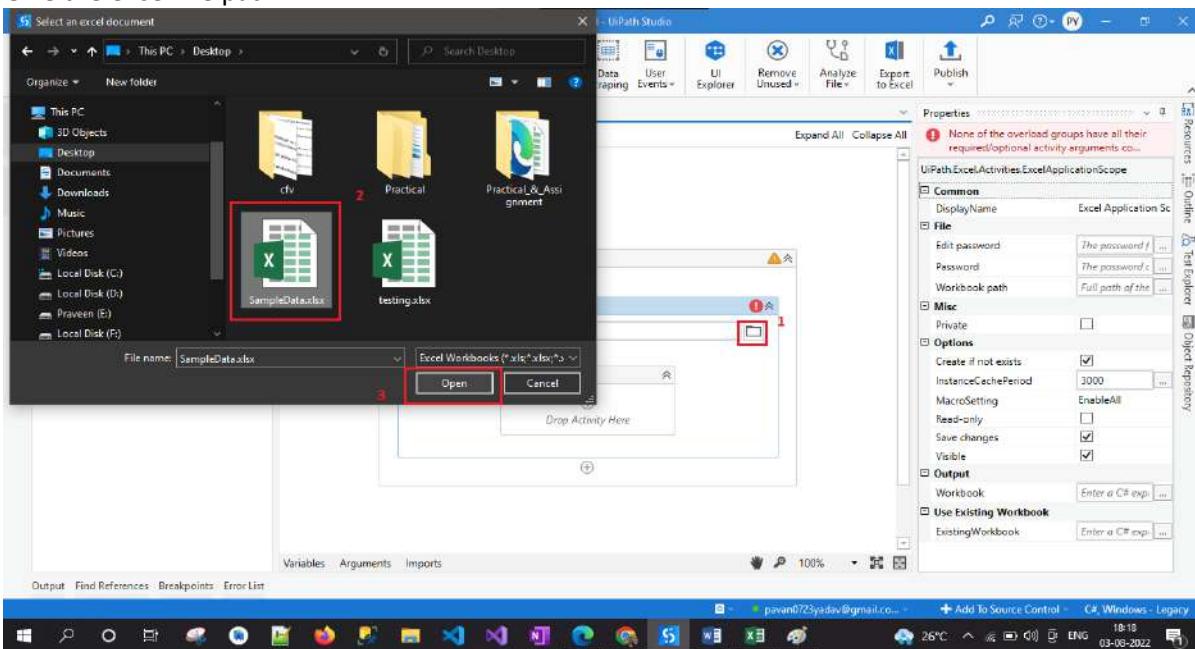
**4. Click on the Open Main Workflow**

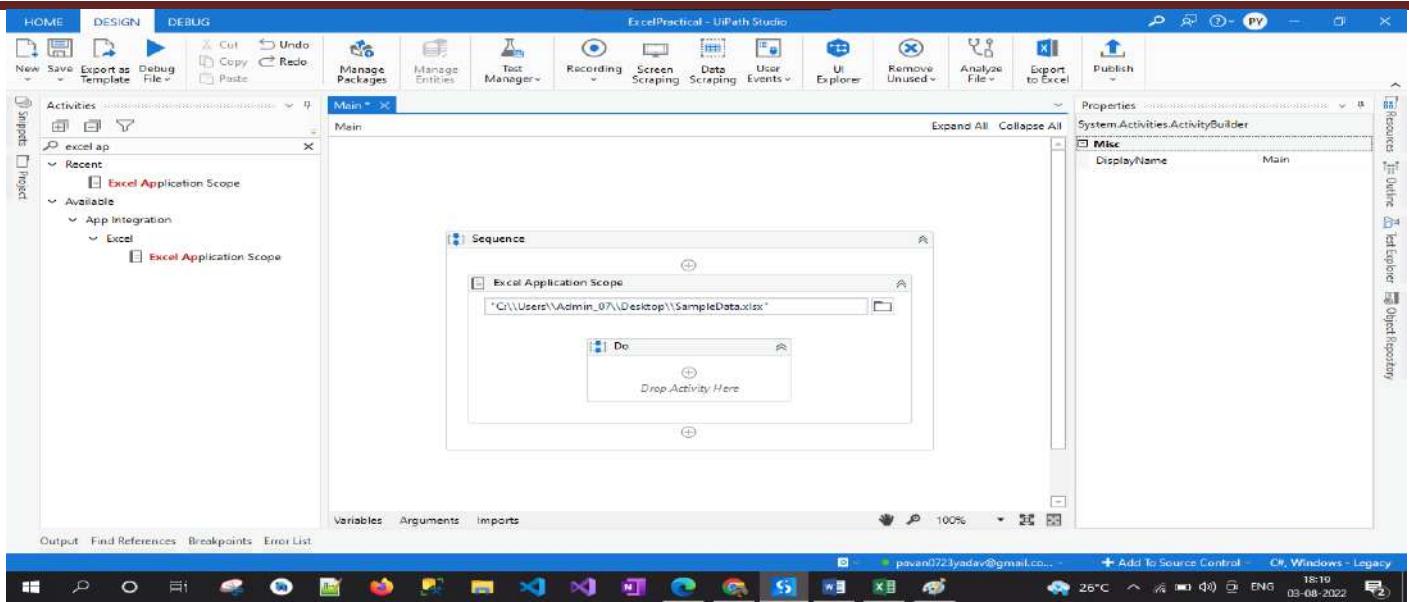


**5. Drag & drop Excel Application Scope**



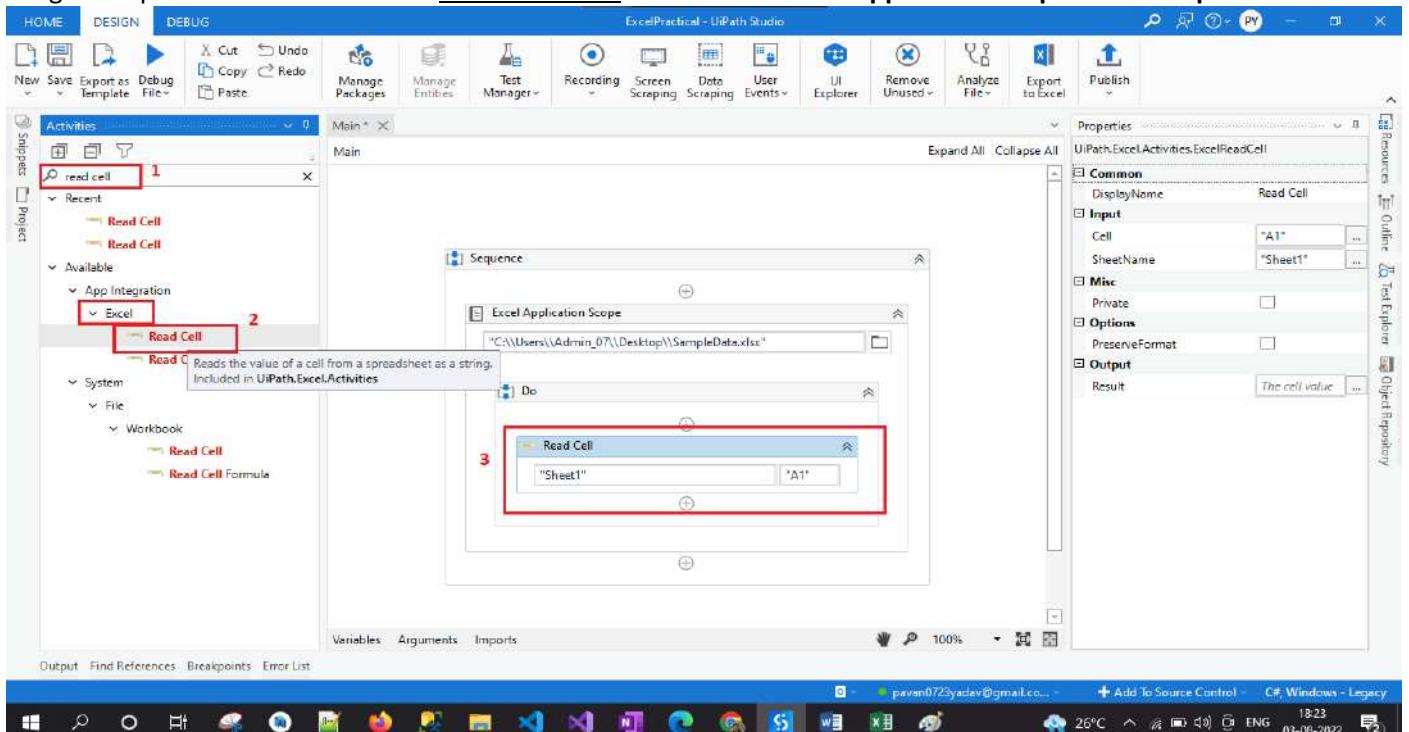
**6. Give the excel file path**



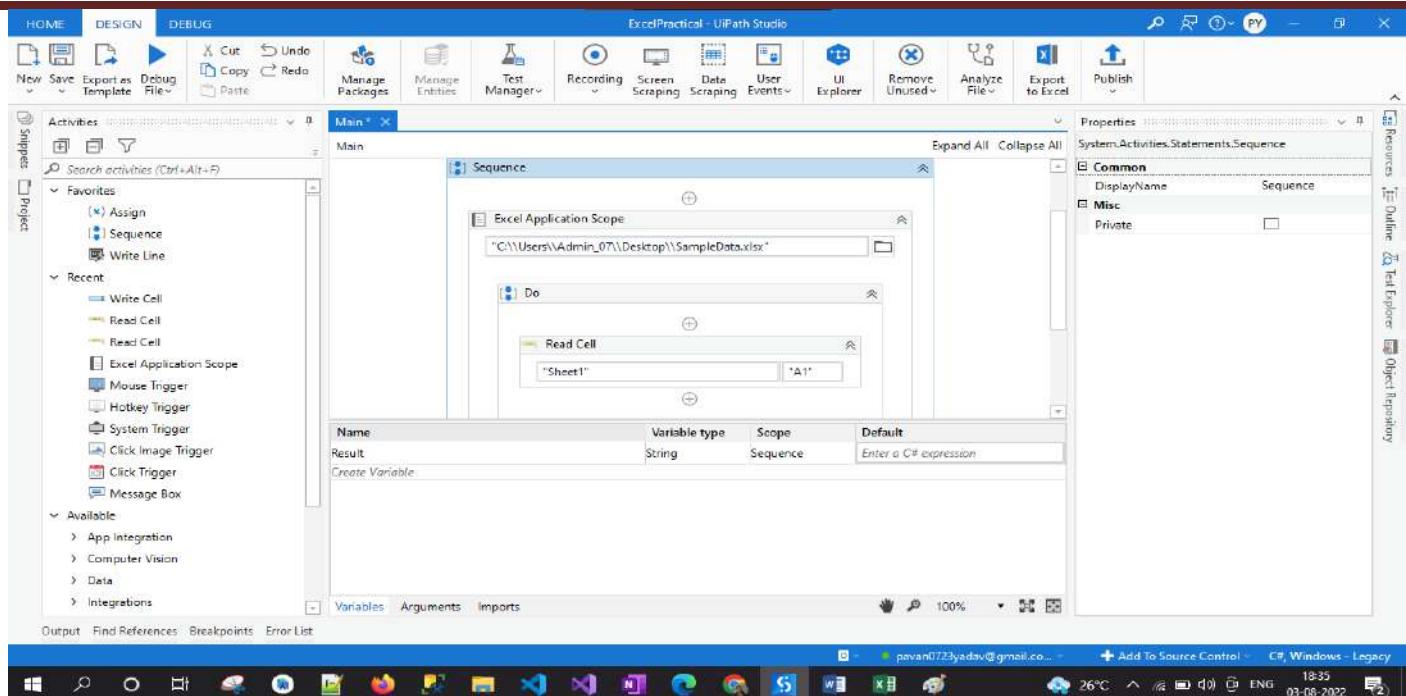


**Read cell:** This is used to read the value of a cell from an Excel

#### 7. Drag & Drop the Read Cell from the Activities Panel to inside the Excel Application Scope for Do Sequence



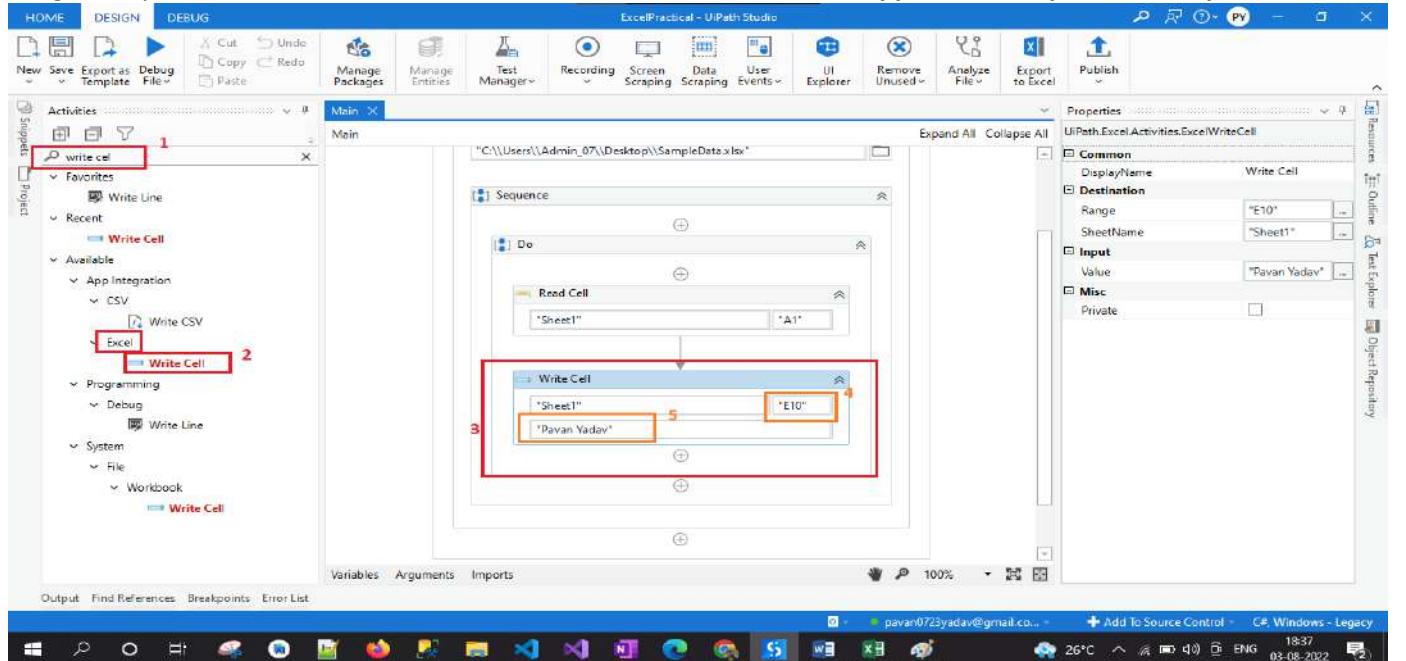
#### 8. Create a Variable



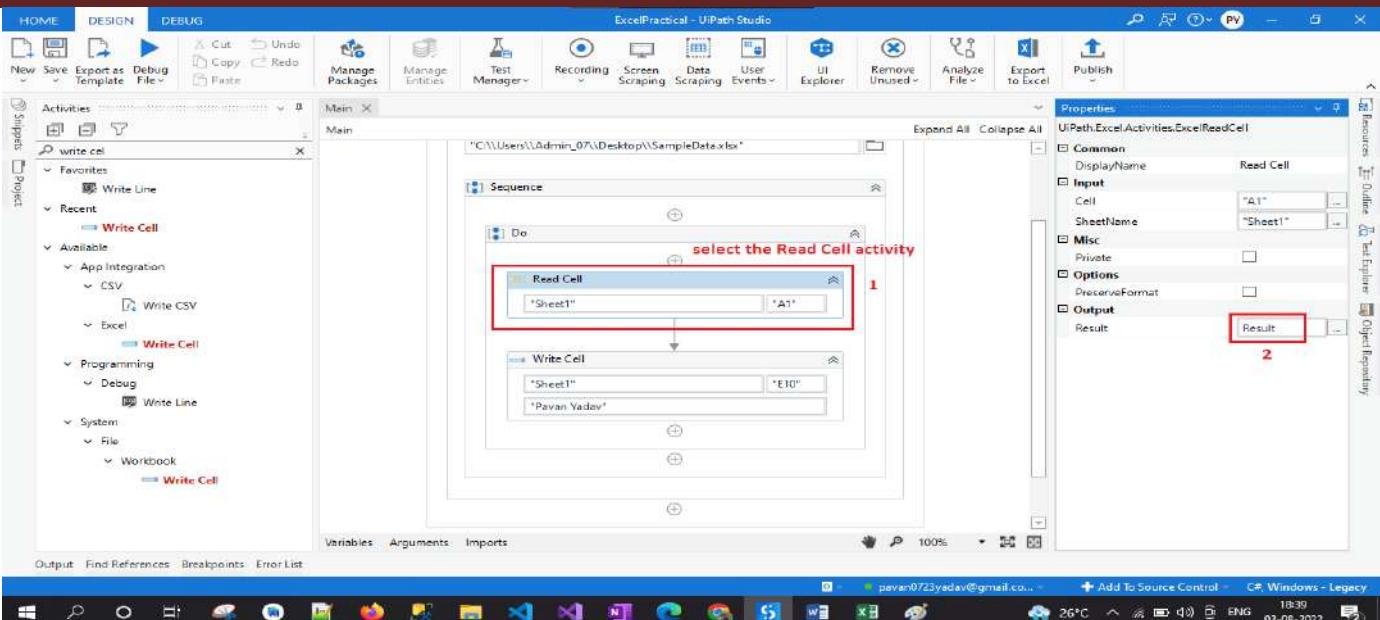
Output Find References Breakpoints Error List pavan0725yadav@gmail.co... Add To Source Control C#, Windows - Legacy 26°C ENG 03-08-2022

**Write cell:** This activity is used to write a value in each cell of an Excel file

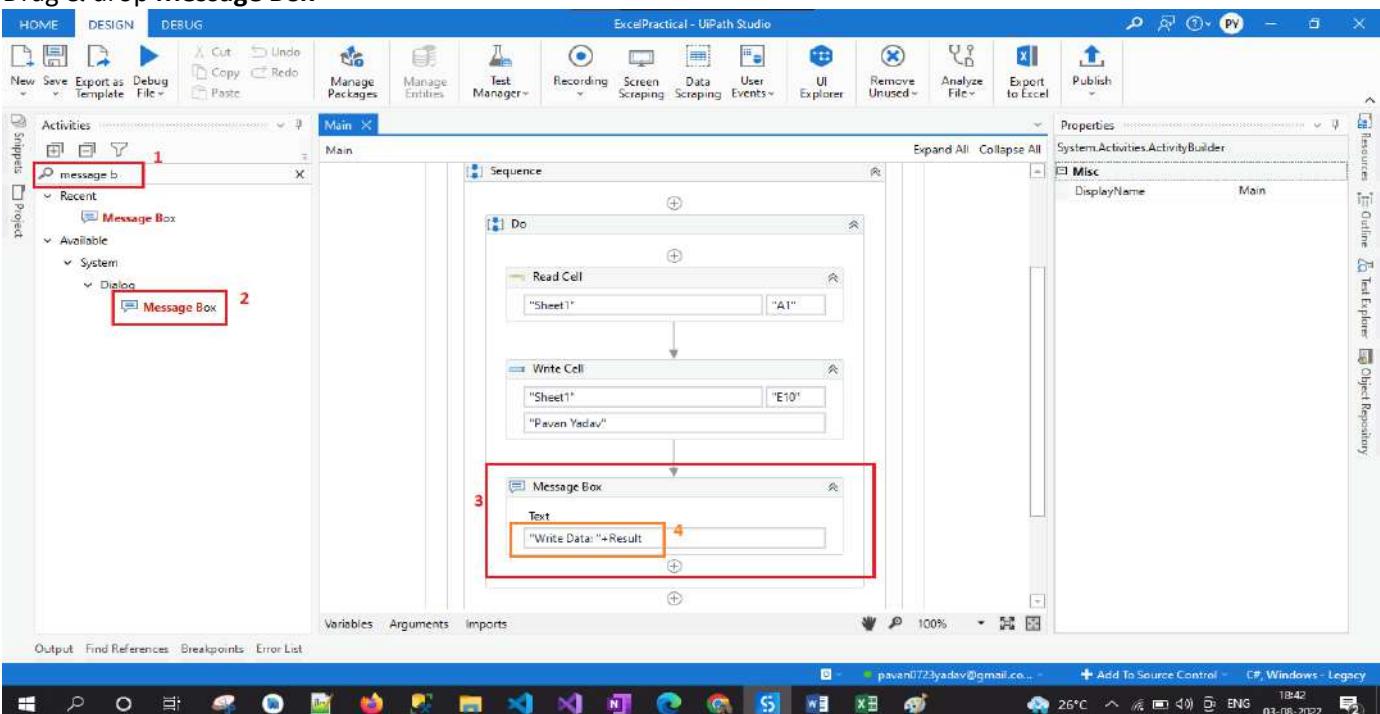
- Drag & Drop the Write Cell from the Activities Panel to inside the Excel Application Scope for Do Sequence



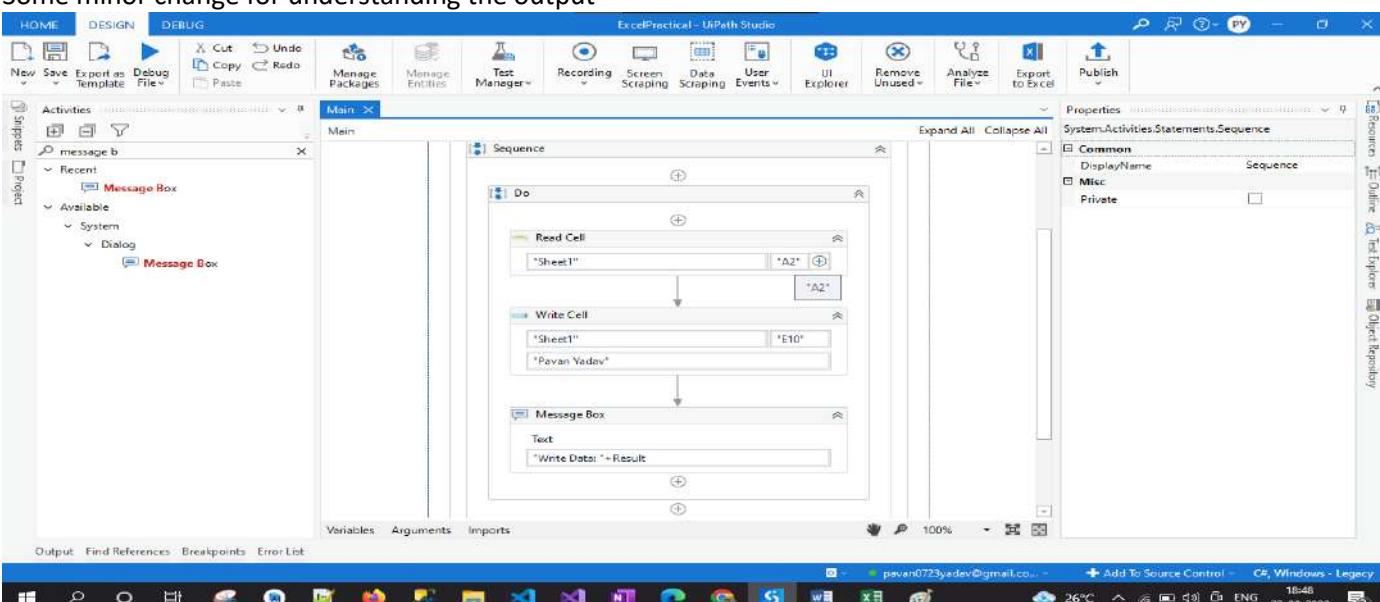
- Assign a variable mention in the below image



## 11. Drag & drop Message Box



## 12. Some minor change for understanding the output



## 13. Output:

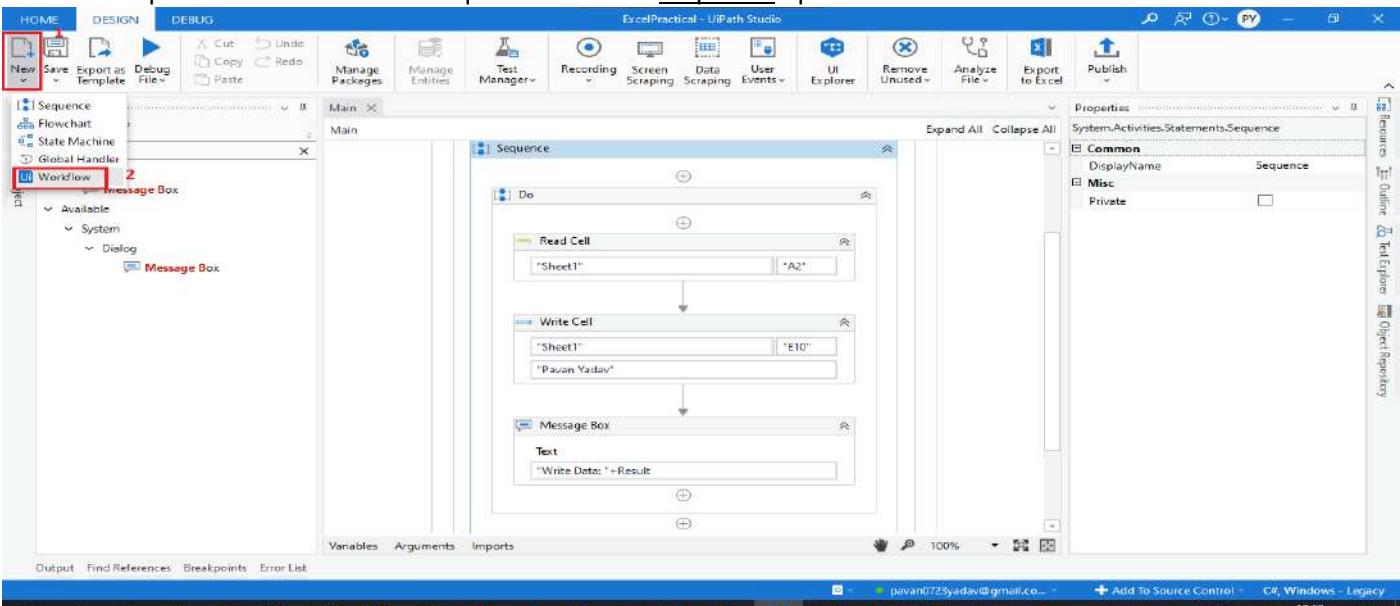
The screenshot shows a Microsoft Excel spreadsheet titled "SimpleData.xlsx - Excel". The data is organized in a table with columns for Name and Roll No. The table contains the following data:

	Name	Roll No.
1	Kedar	621
2	Vikas	607
3	Yashchandra	616
4	Manan	613
5	Pavan	620

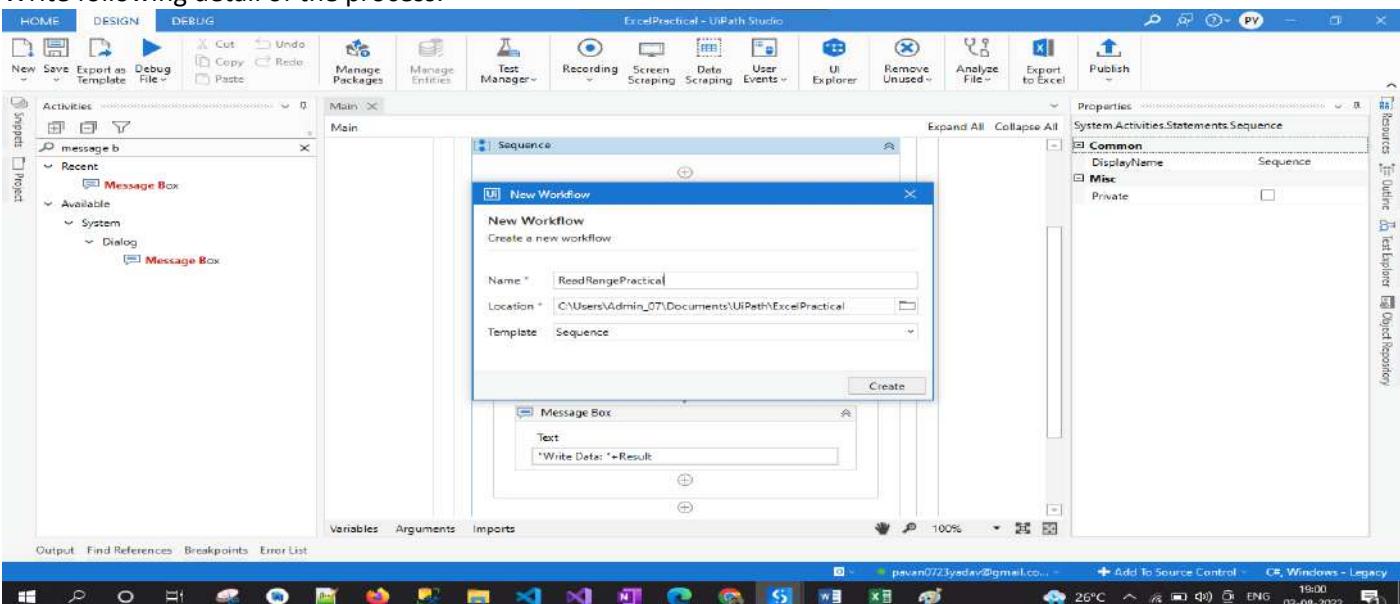
A message box titled "Message Box" is displayed in the center of the screen. It contains the text "Write Data: Kedar" and has an "OK" button. The message box is annotated with red text: "Write cell" above it and "Read Cell" to its right.

**Read Range**

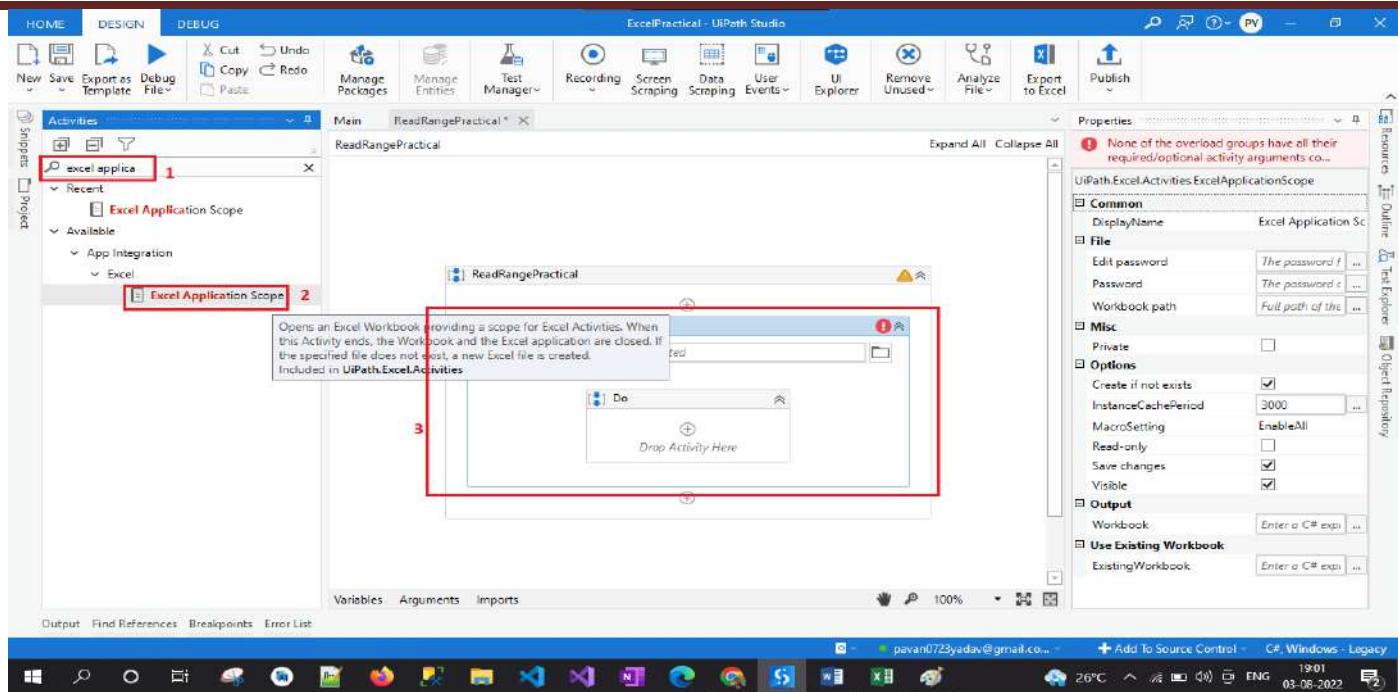
1. Go to new option and create a new sequence to select Sequence option



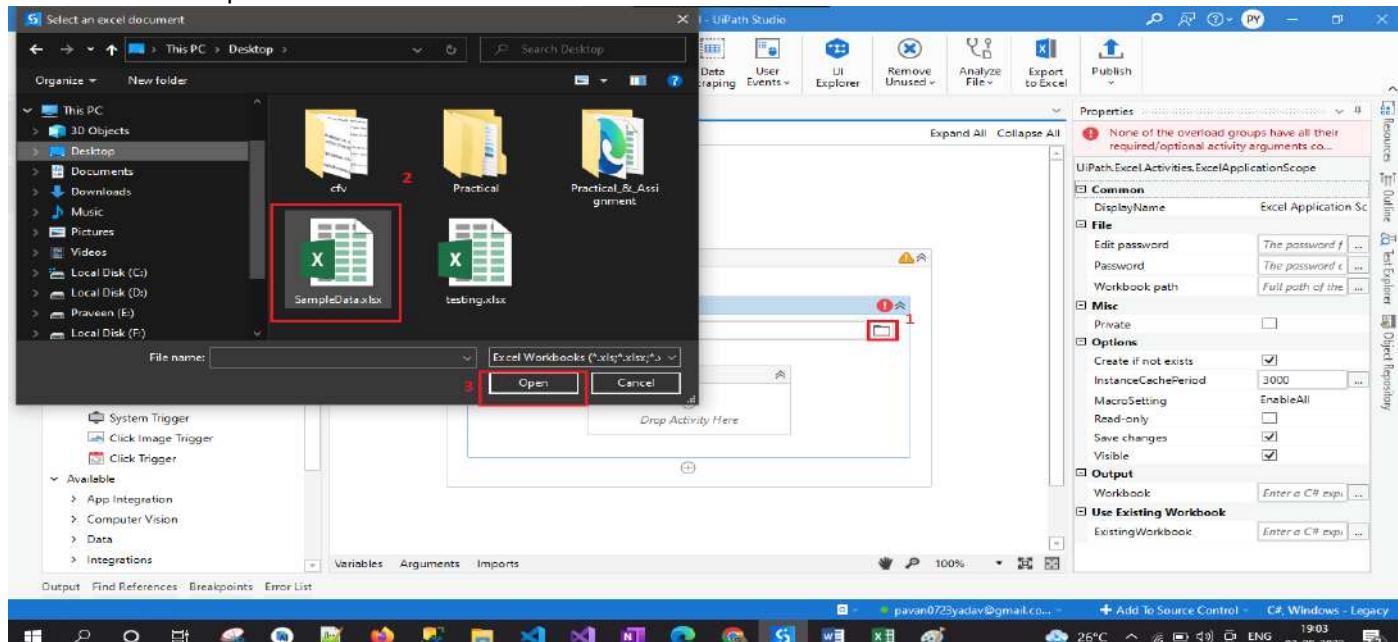
2. Write following detail of the process.



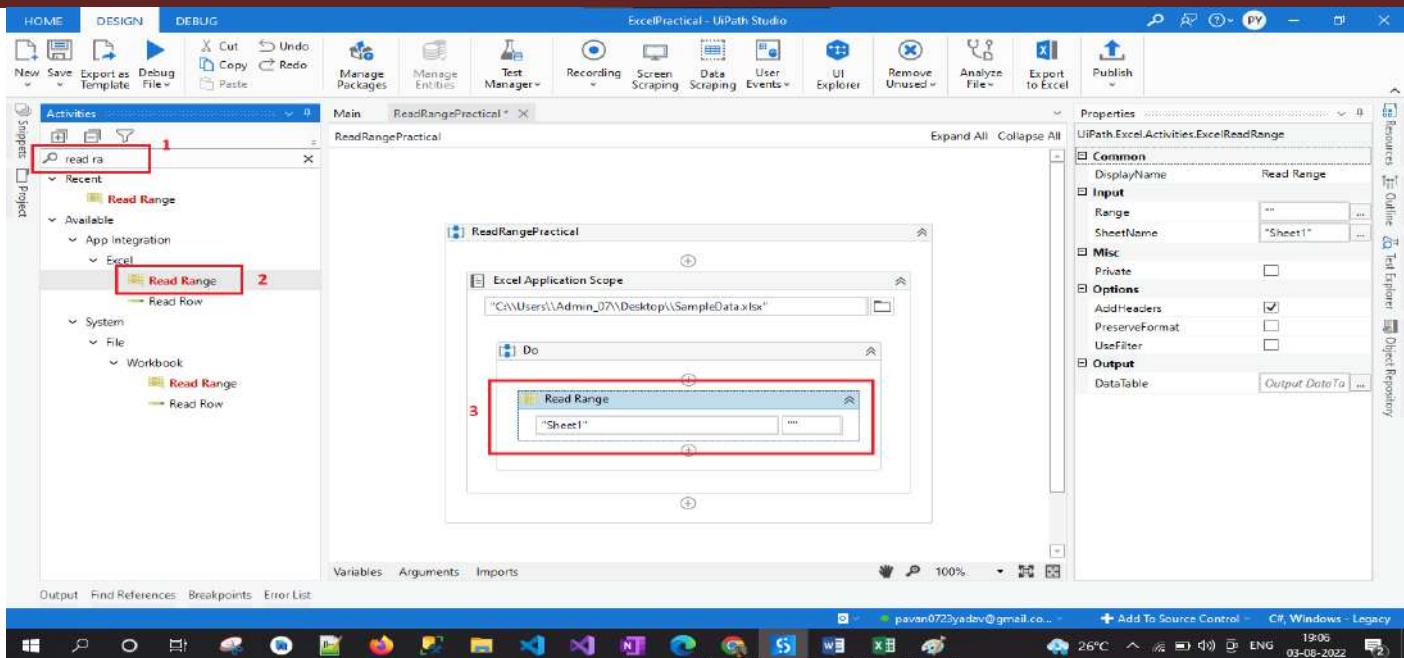
3. Drag & drop Excel Application Scope



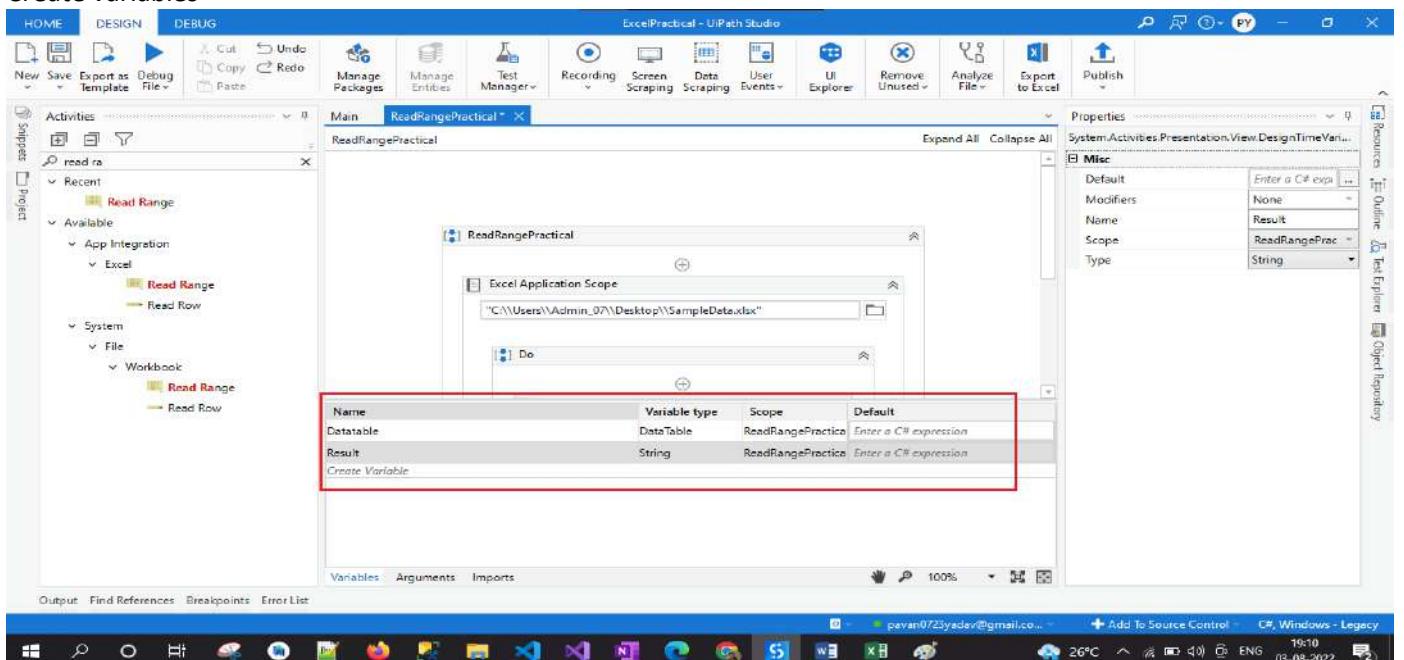
#### 4. Give the excel file path



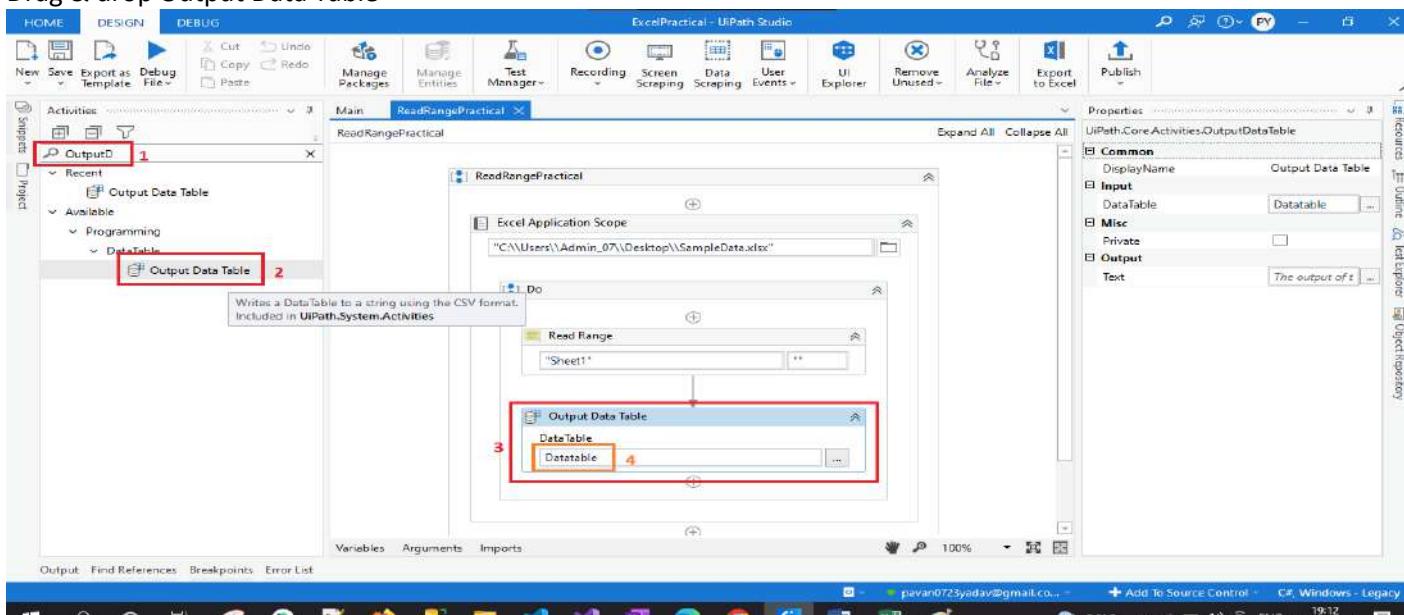
#### 5. Drag & Drop the Read Cell from the Activities Panel to inside the Excel Application Scope for Do Sequence



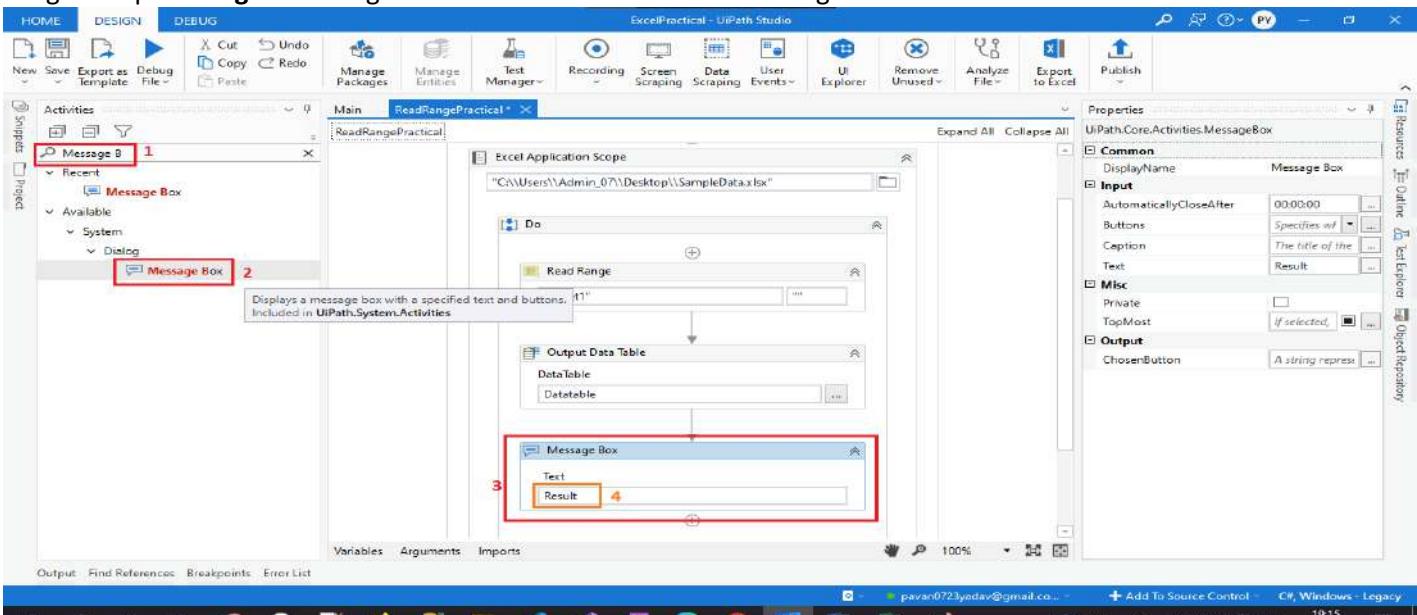
## 6. Create variables



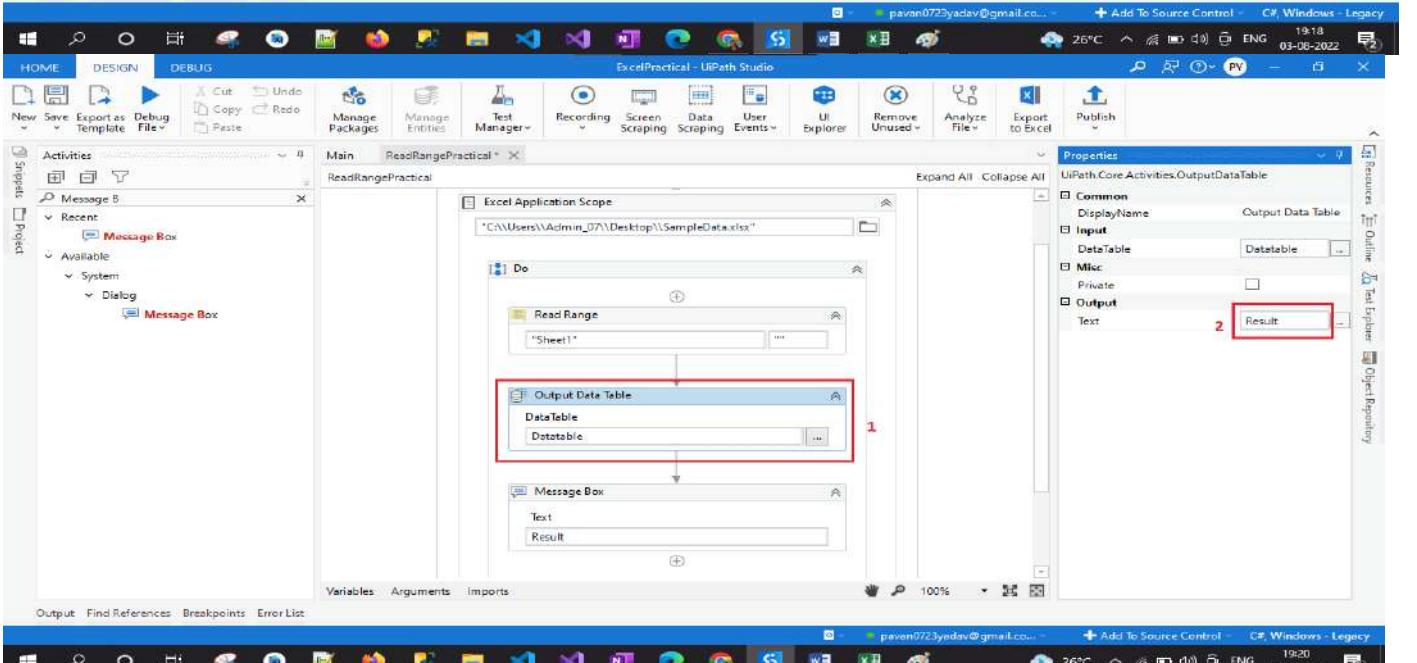
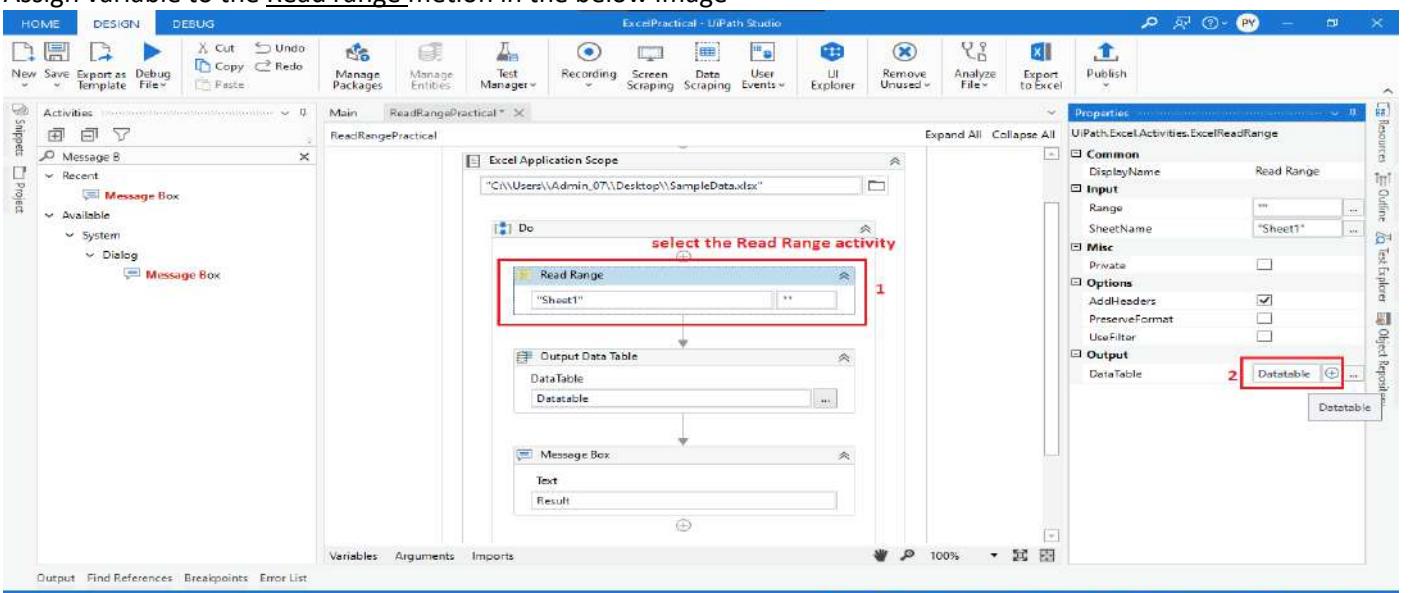
## 7. Drag & drop Output Data Table



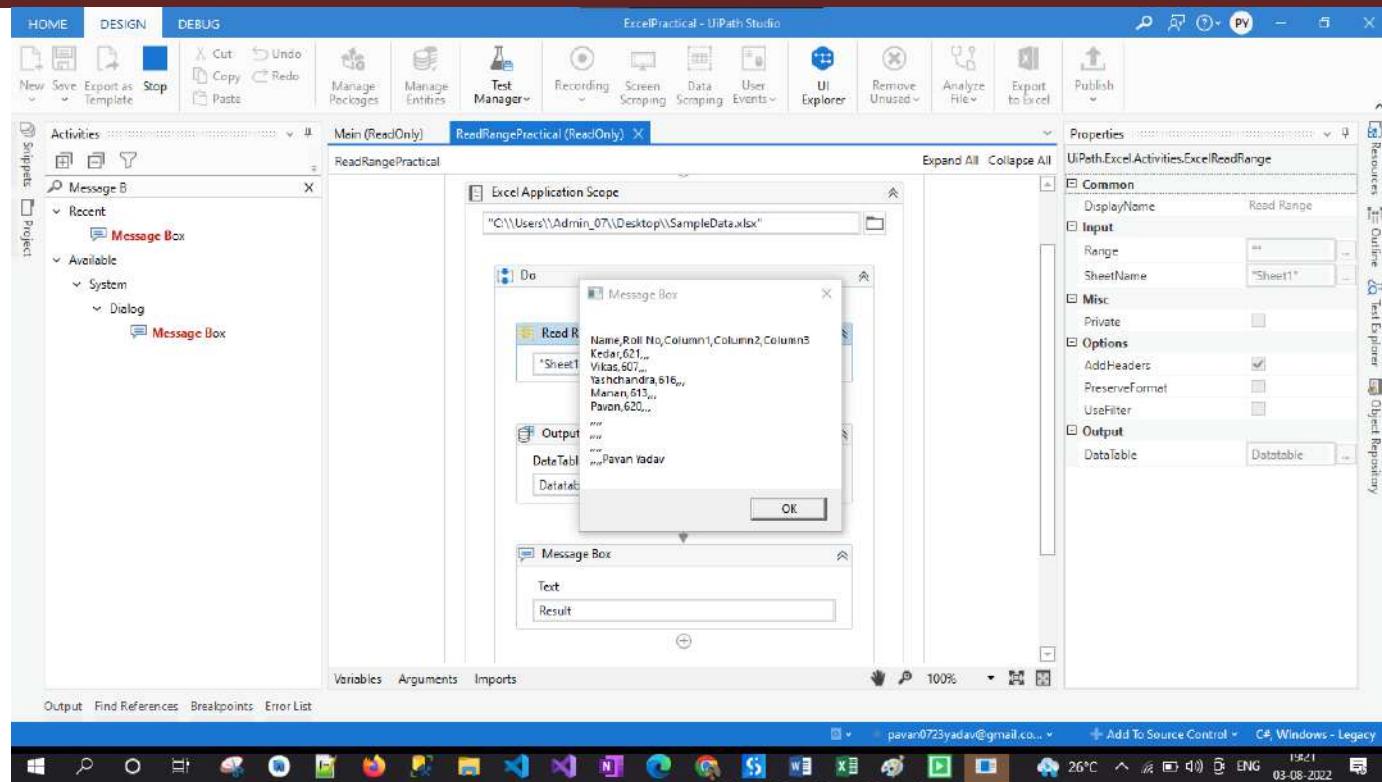
## 8. Drag &amp; drop Message Box assign a variable motion in the below image



## 9. Assign variable to the Read range motion in the below image

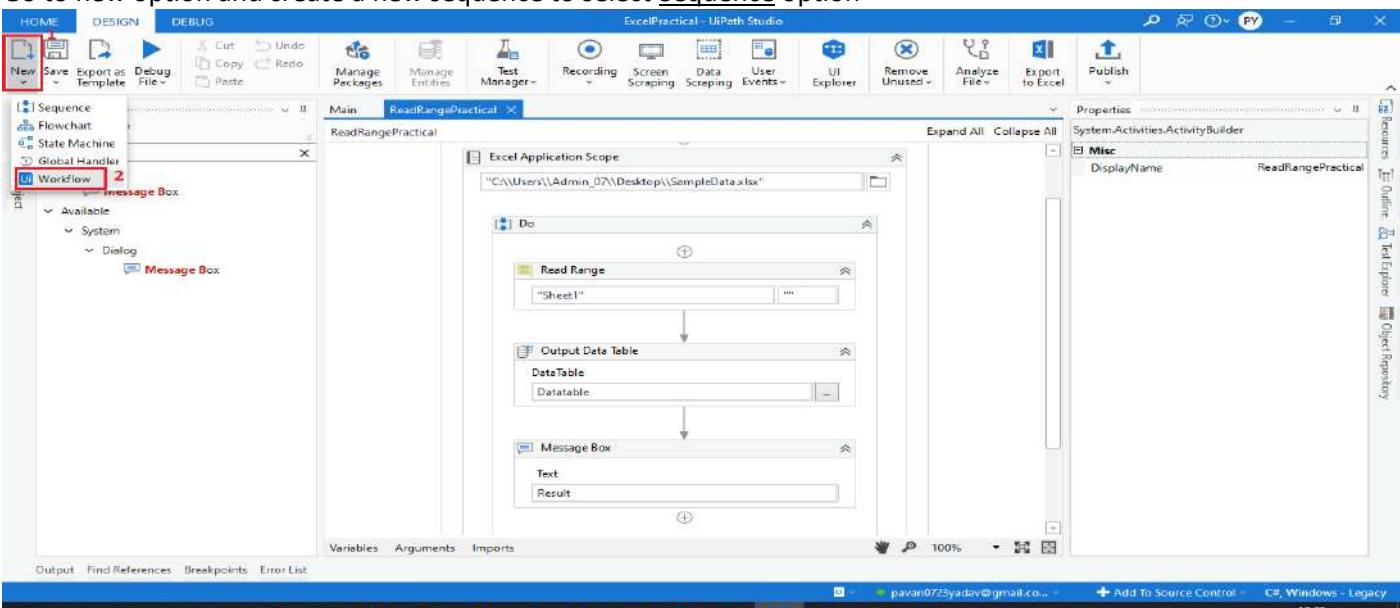


## 10. Output:

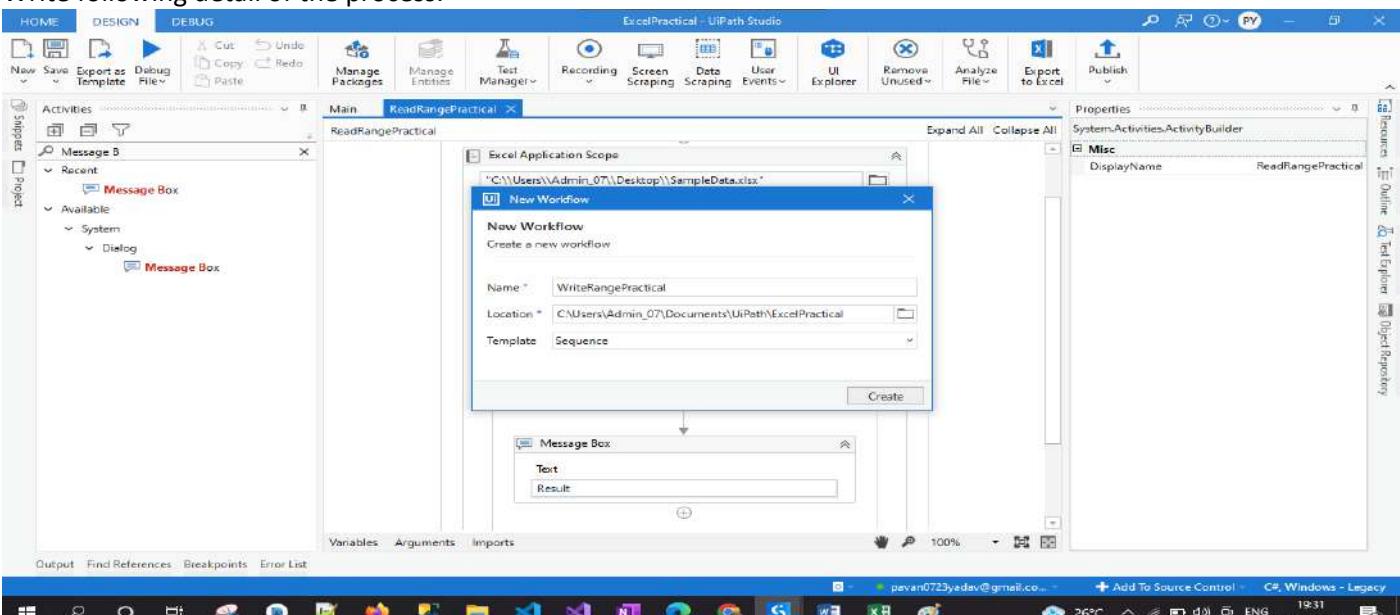


**Write Range**

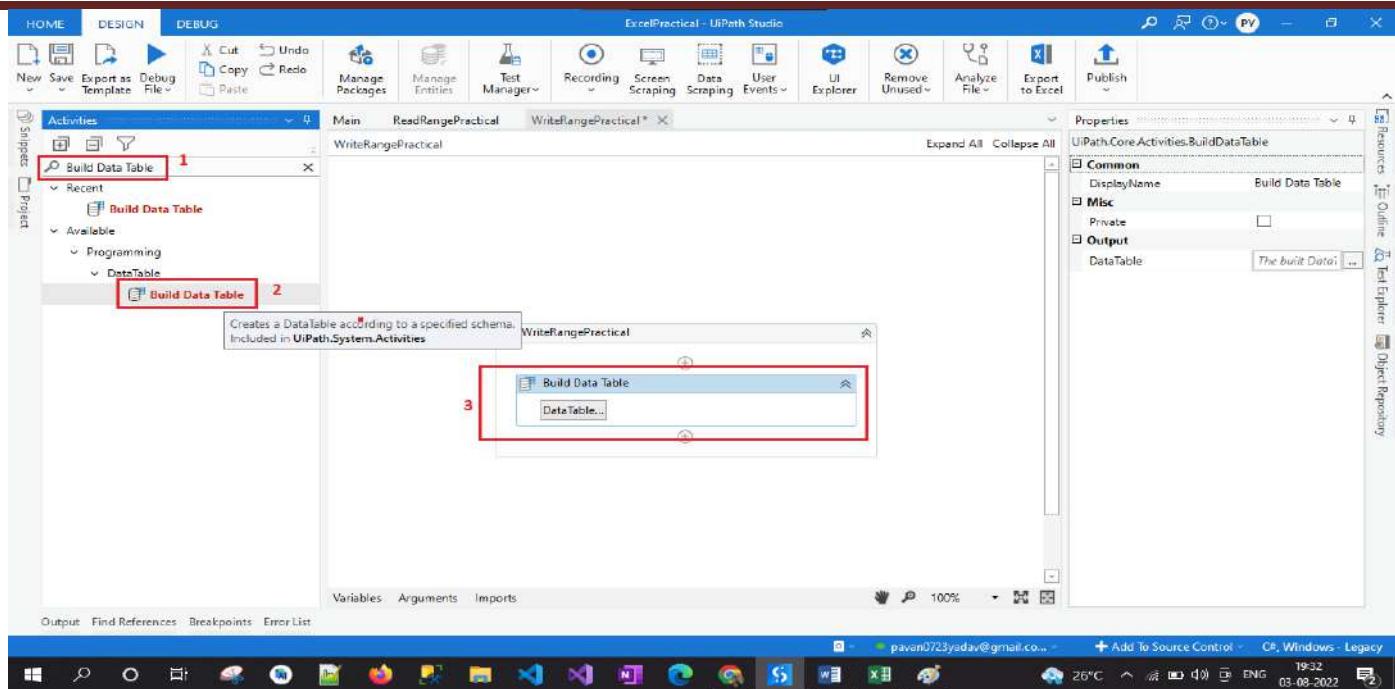
1. Go to new option and create a new sequence to select Sequence option



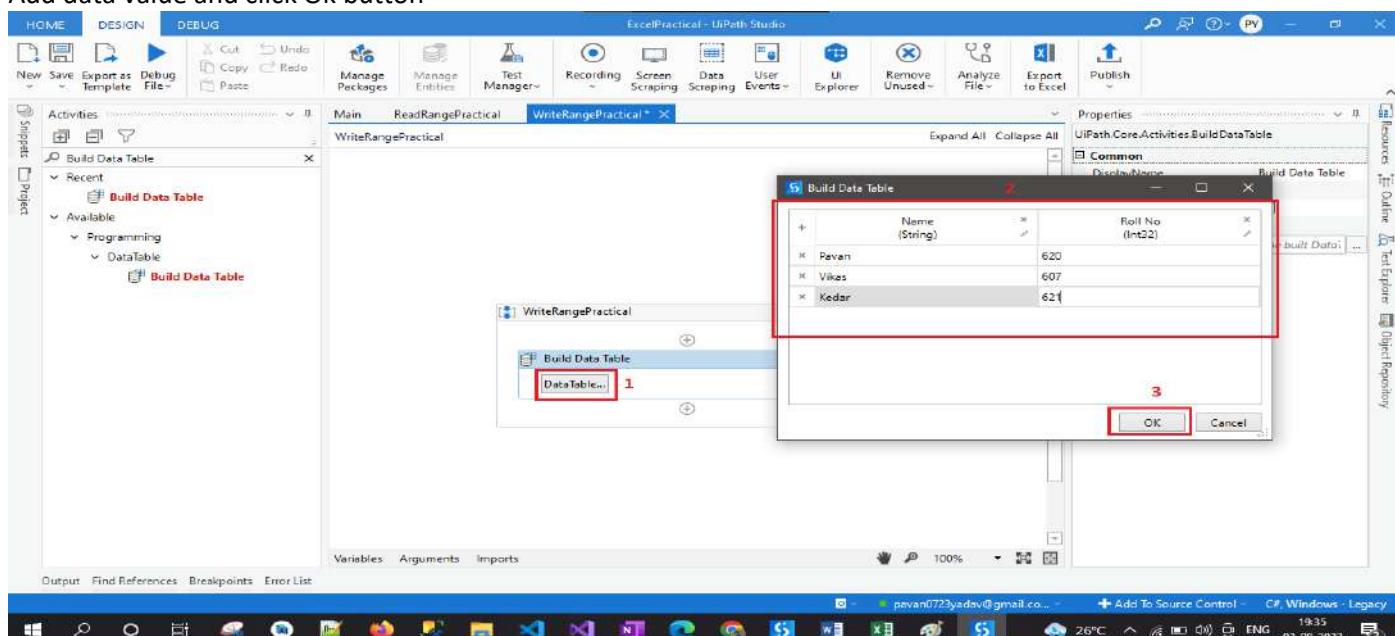
2. Write following detail of the process.



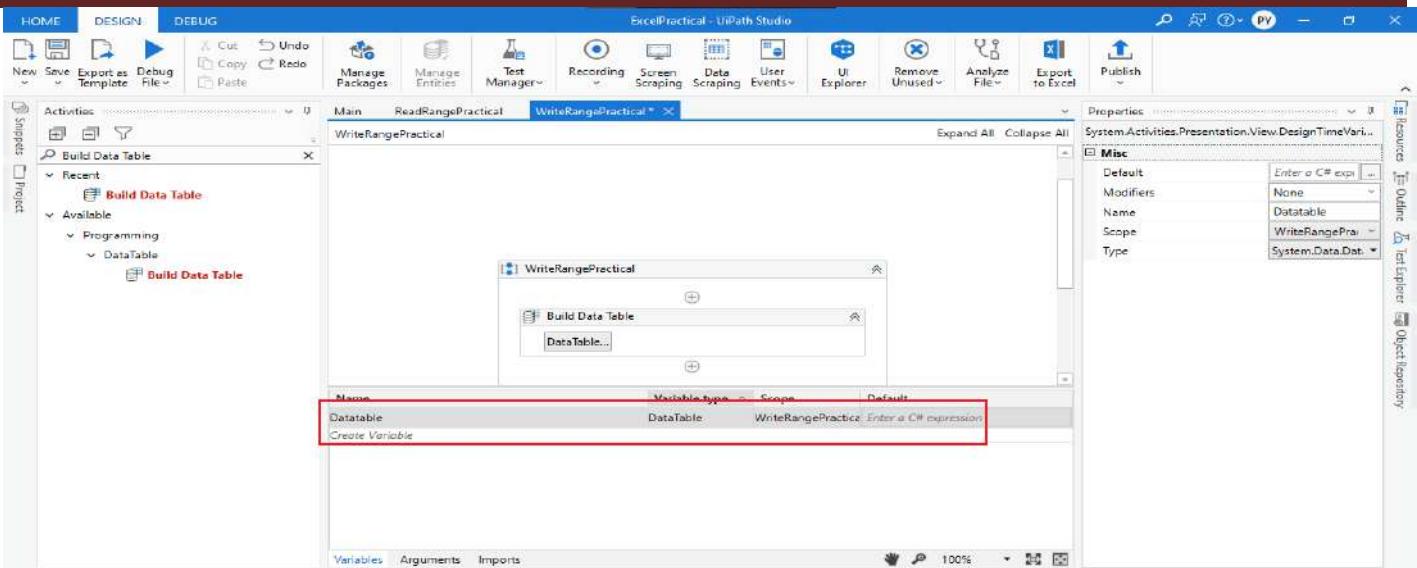
3. Drag & drop Build Data Table



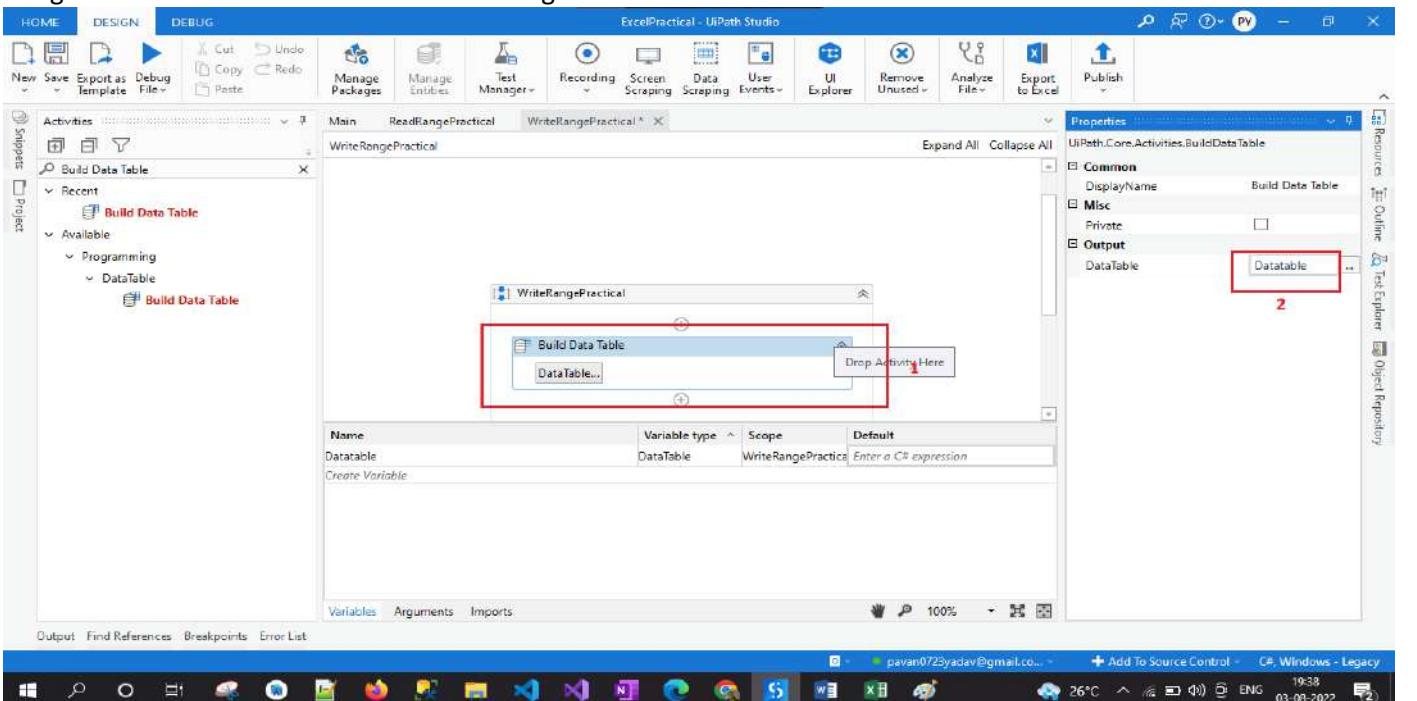
#### 4. Add data value and click Ok button



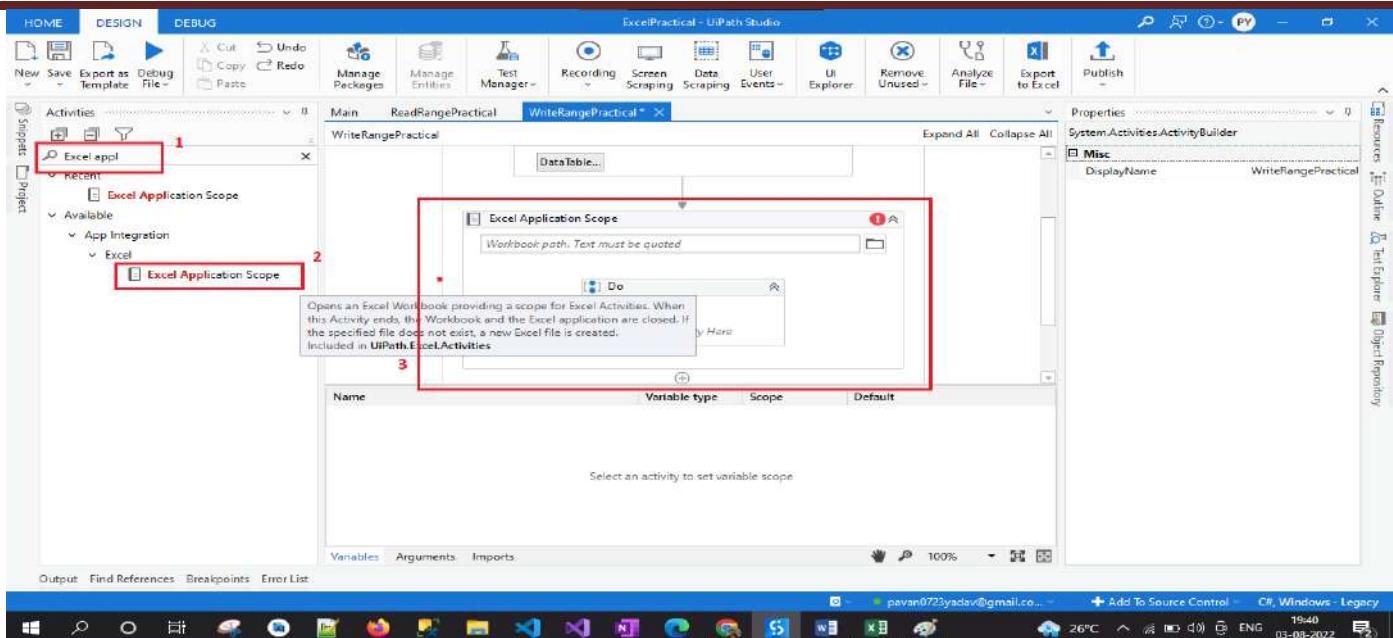
#### 5. Create a variable



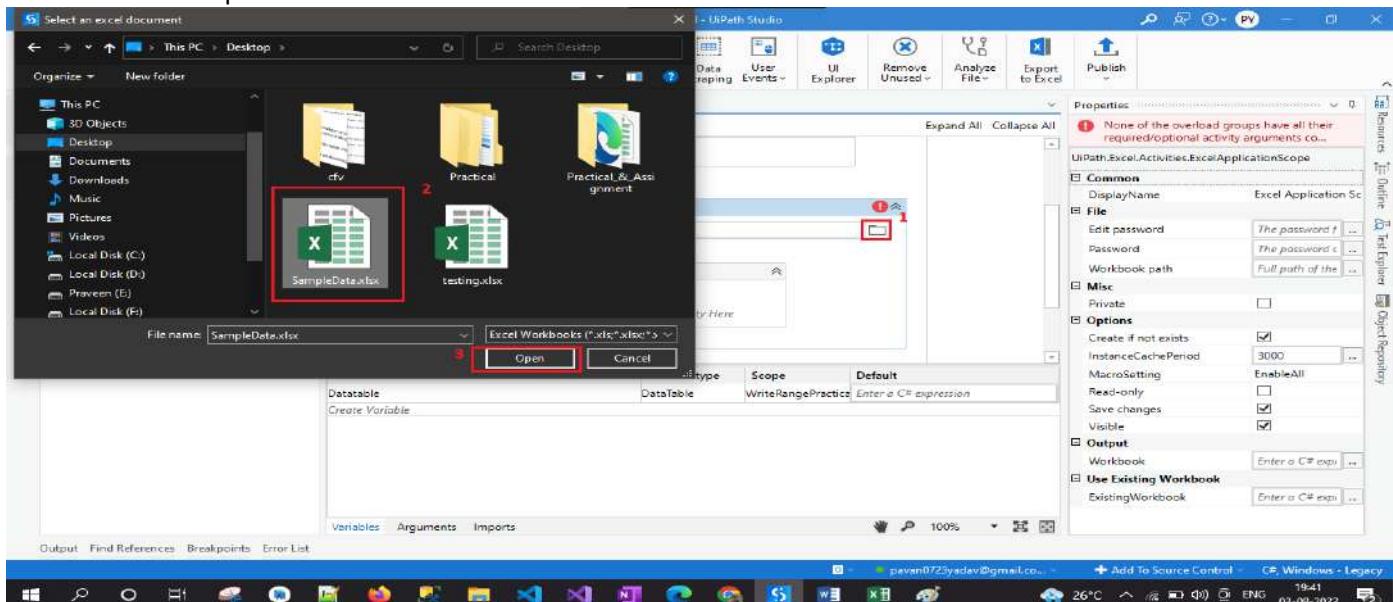
#### 6. Assign the variable mention in the below image



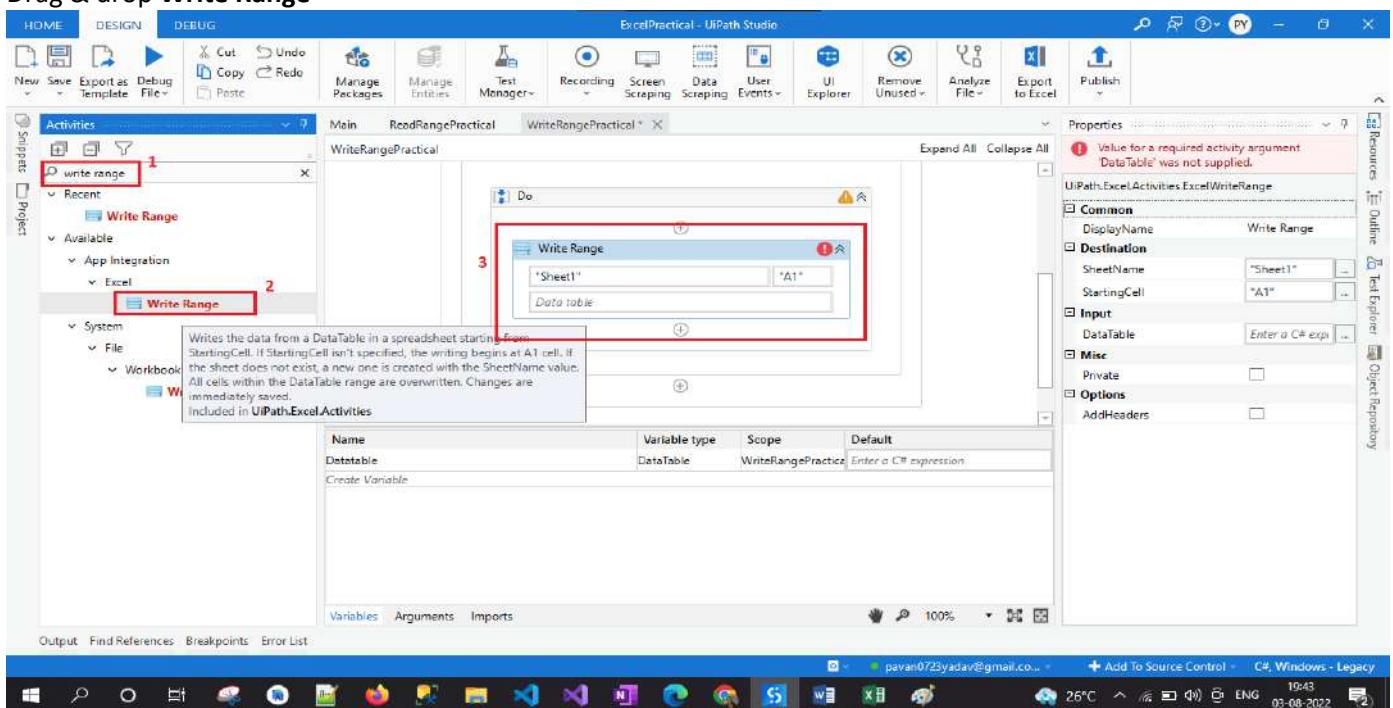
#### 7. Drag & drop Excel Application Scope



### 8. Give the excel file path



### 9. Drag & drop Write Range



**10. Go to Excel file and where to write the data**

The screenshot shows a Microsoft Excel spreadsheet titled "SampleData.xlsx - Excel". The data consists of two columns: "Name" and "Roll No.". The "Name" column contains "Kedar", "Vikas", "Yashchandra", "Manan", and "Pavan". The "Roll No." column contains "621", "607", "616", "613", and "620". Cell F2 is highlighted with a red box and contains the text "Write data from this cell". The Excel ribbon is visible at the top, and the taskbar at the bottom shows various application icons.

**11. Assign the Range & variable mention in the below image**

The screenshot shows the UiPath Studio interface with a project named "ExcelPractical - UiPath Studio". In the Activity Builder, a "WriteRangePractical" activity is selected. Under the "Do" section, there is a "Write Range" activity. The "Worksheet" dropdown is set to "Sheet1" and the "Range" dropdown is set to "F2". The "DataTable" variable is highlighted with a red box. The properties pane on the right shows the activity's display name as "WriteRangePractical". The taskbar at the bottom shows the Windows desktop environment.

**12. Output:**

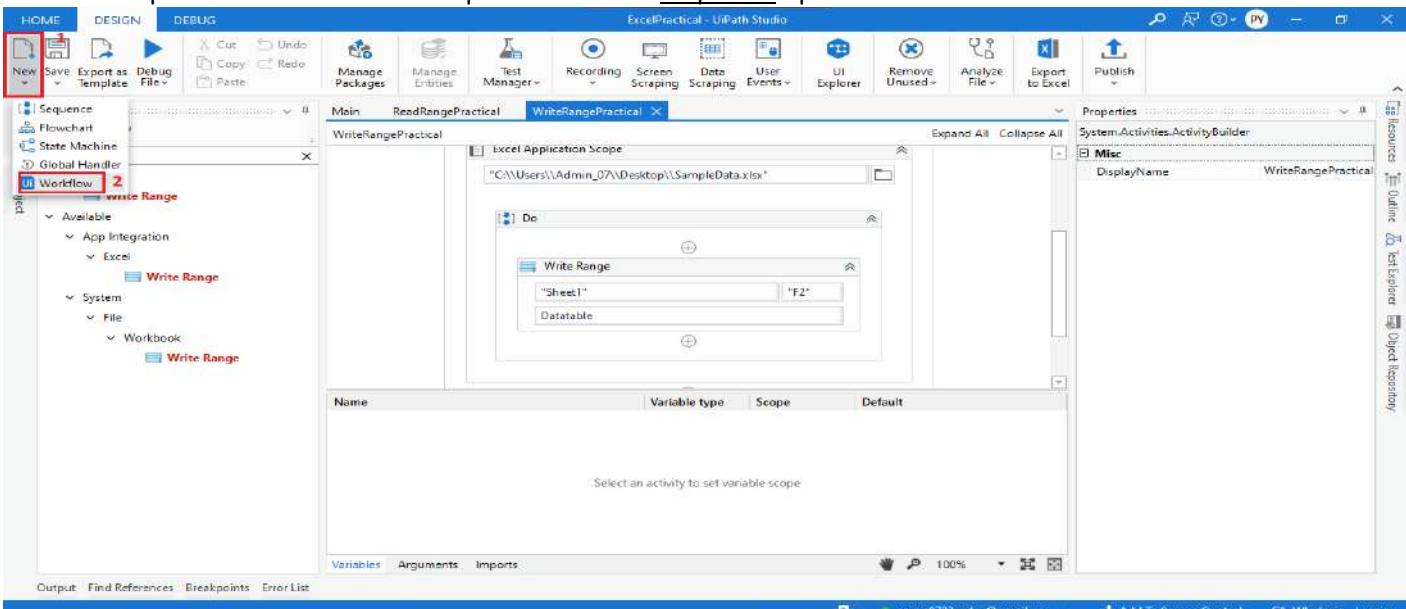
The screenshot shows a Microsoft Excel spreadsheet titled "SampleData.xlsx - Excel". The data is organized in a table with columns labeled "Name" and "Roll No.". The rows contain the following data:

	Name	Roll No.
1	Kedar	621
2	Vikas	607
3	Yashchandra	616
4	Manan	613
5	Pavan	620

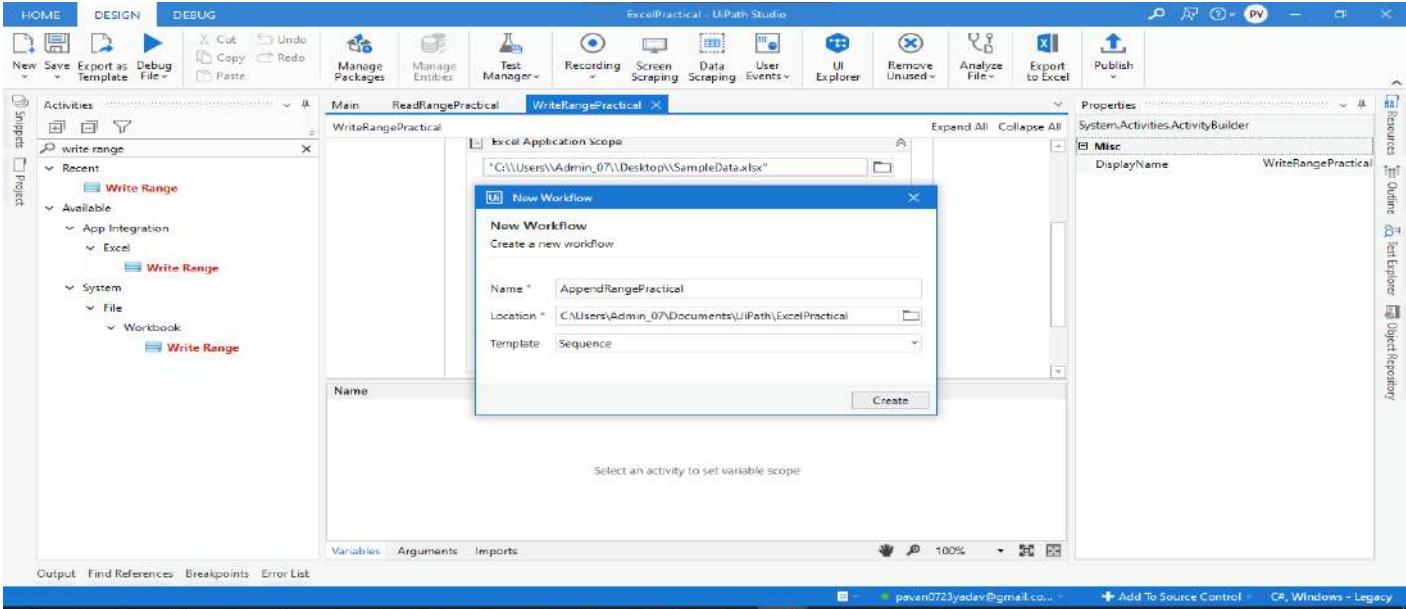
The cell containing "Pavan" in the second row is highlighted with a red border. The status bar at the bottom right indicates the date as 03-08-2022 and the time as 10:48.

**Append Range**

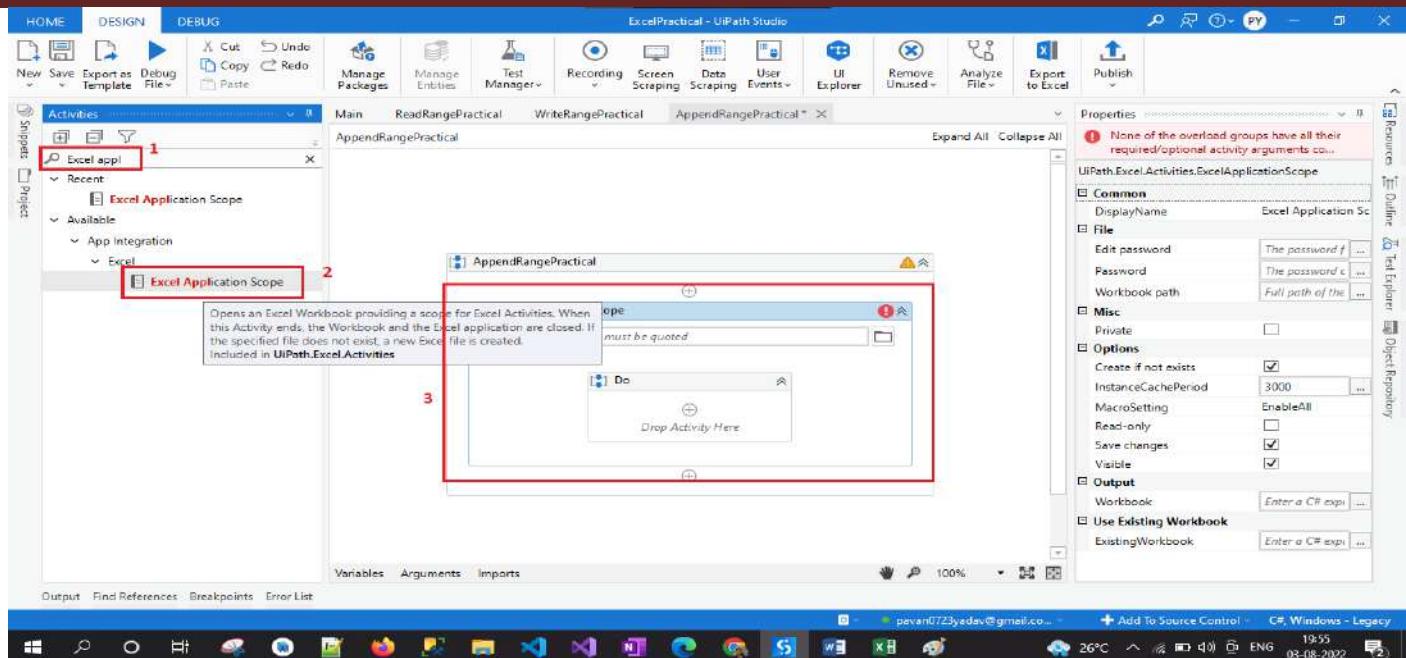
1. Go to new option and create a new sequence to select Sequence option



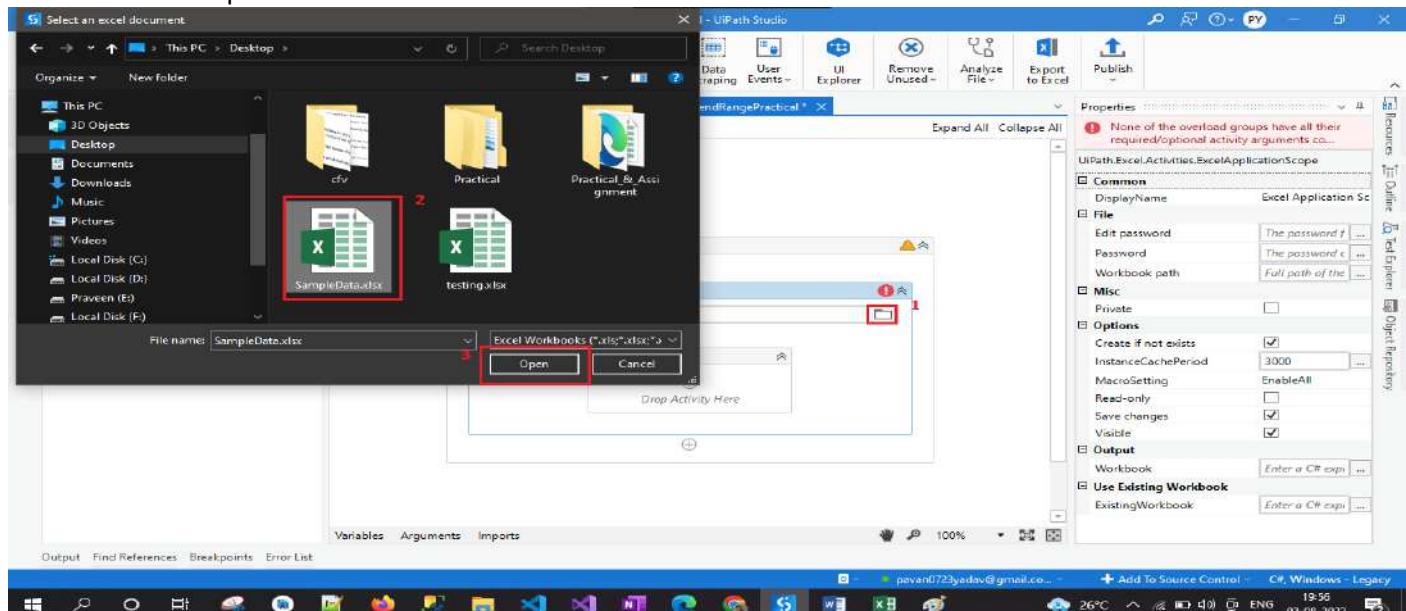
2. Write following detail of the process.



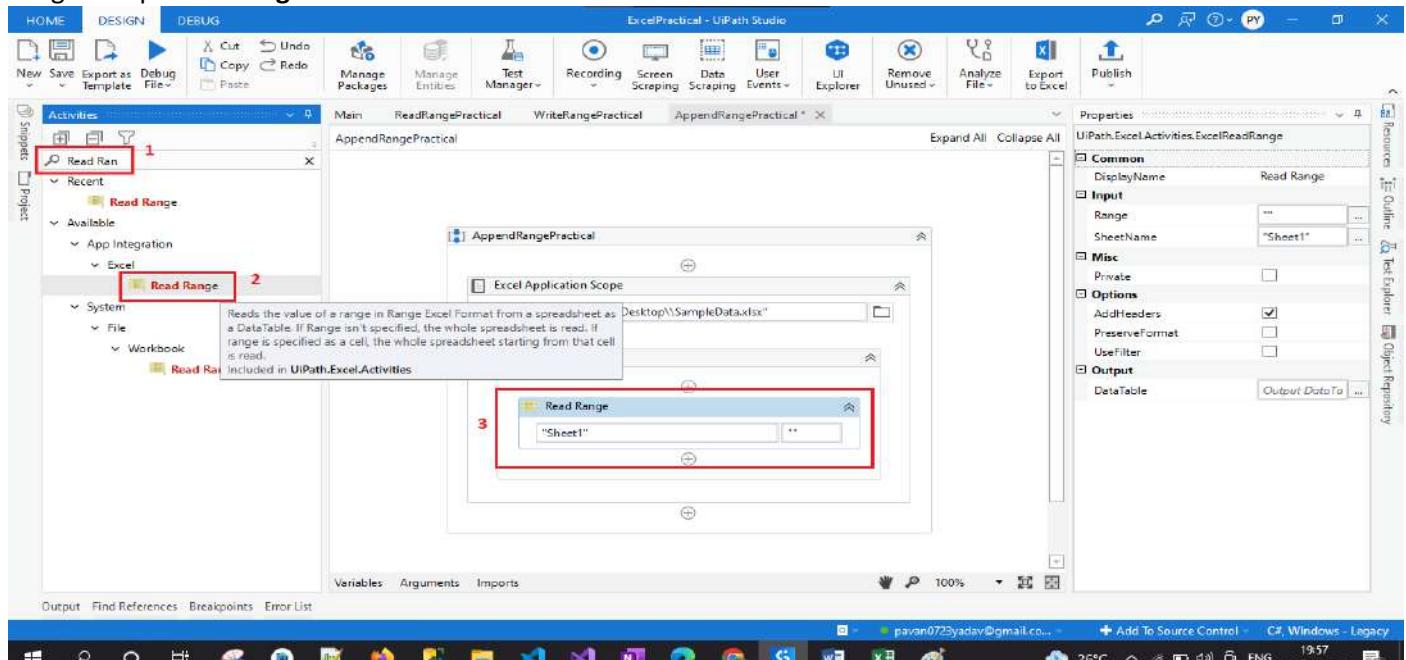
3. Drag & drop Excel Application Scope



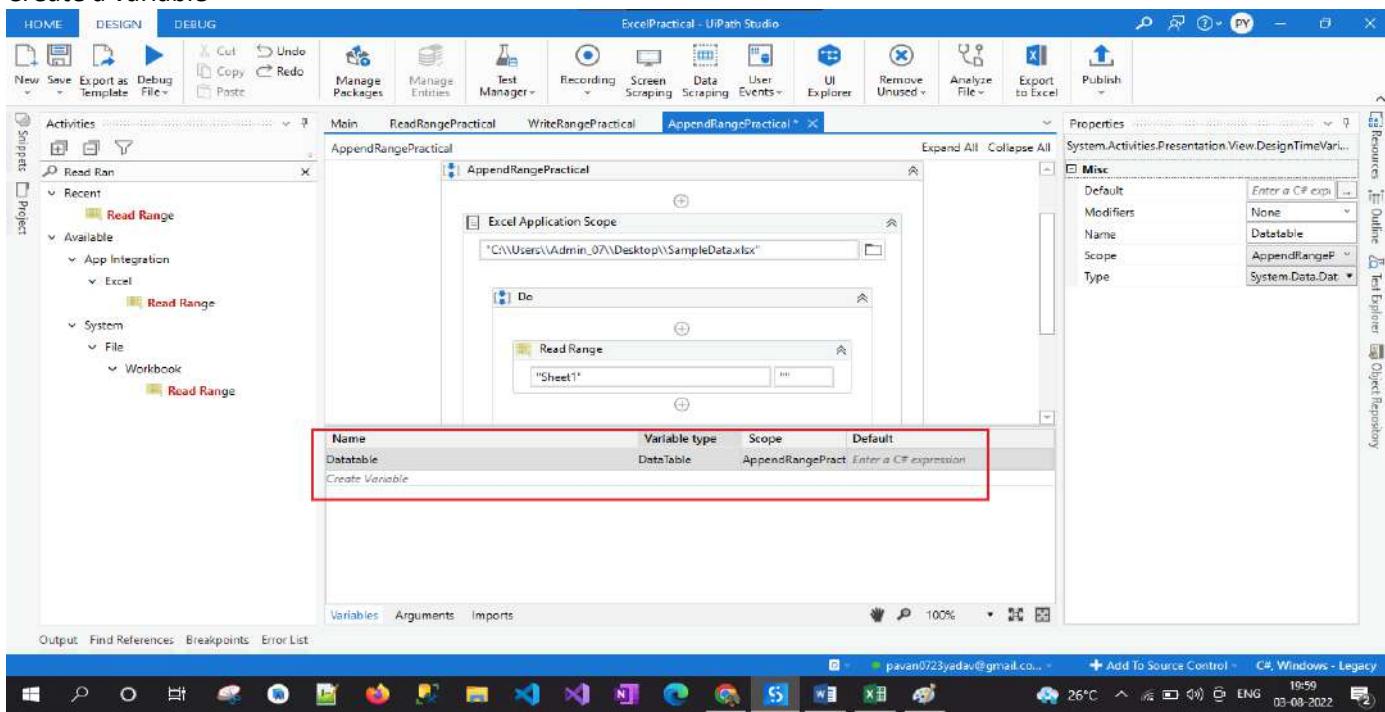
#### 4. Give the excel file path



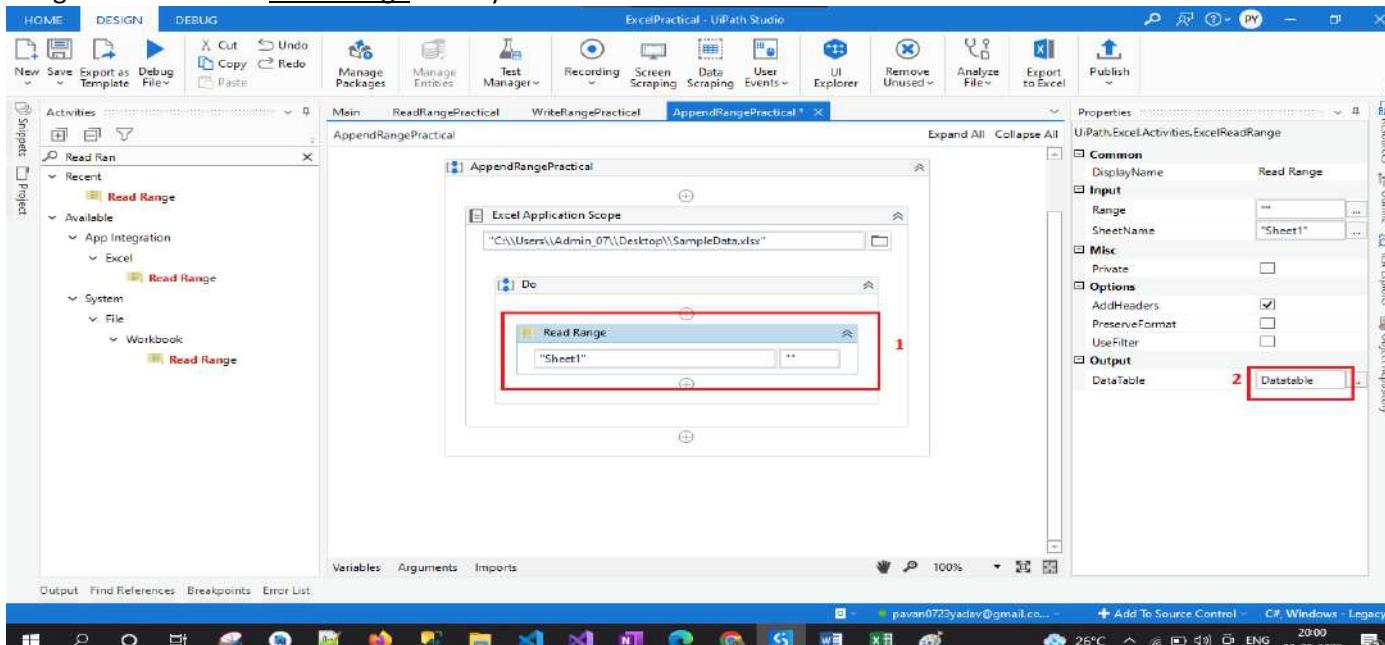
#### 5. Drag & drop Read Range



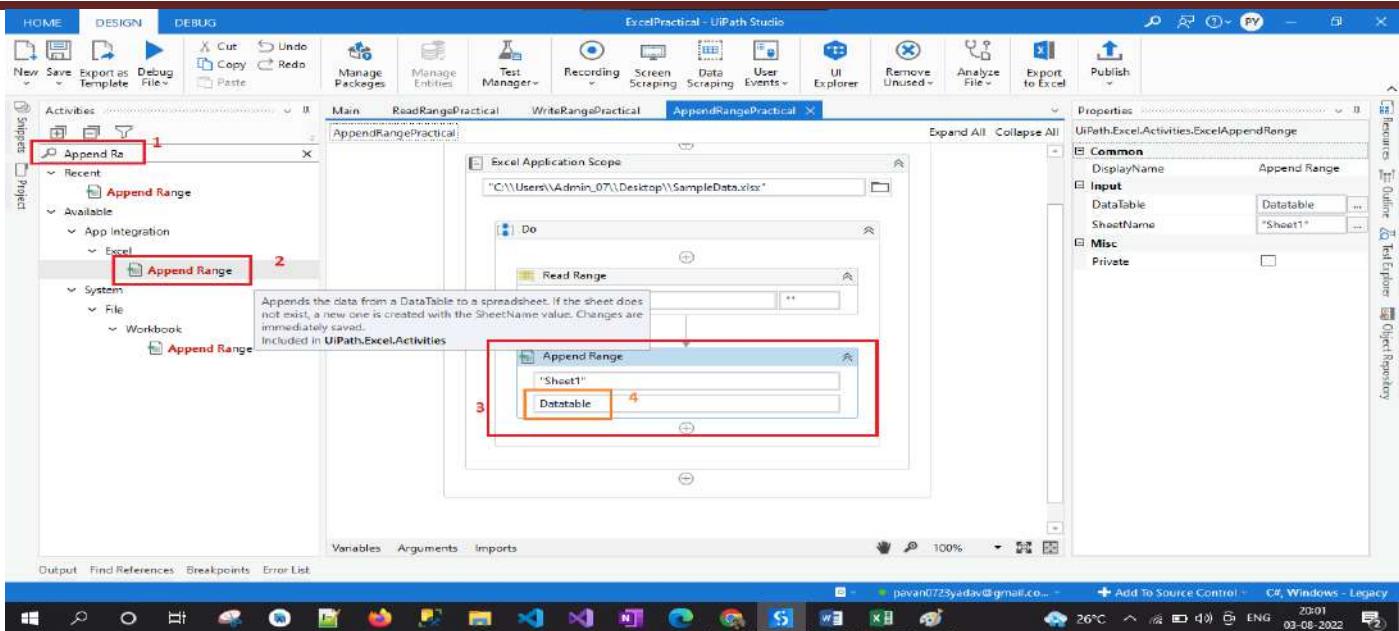
## 6. Create a variable



## 7. Assign variable to the Read Range activity



## 8. Drag & drop Append Range

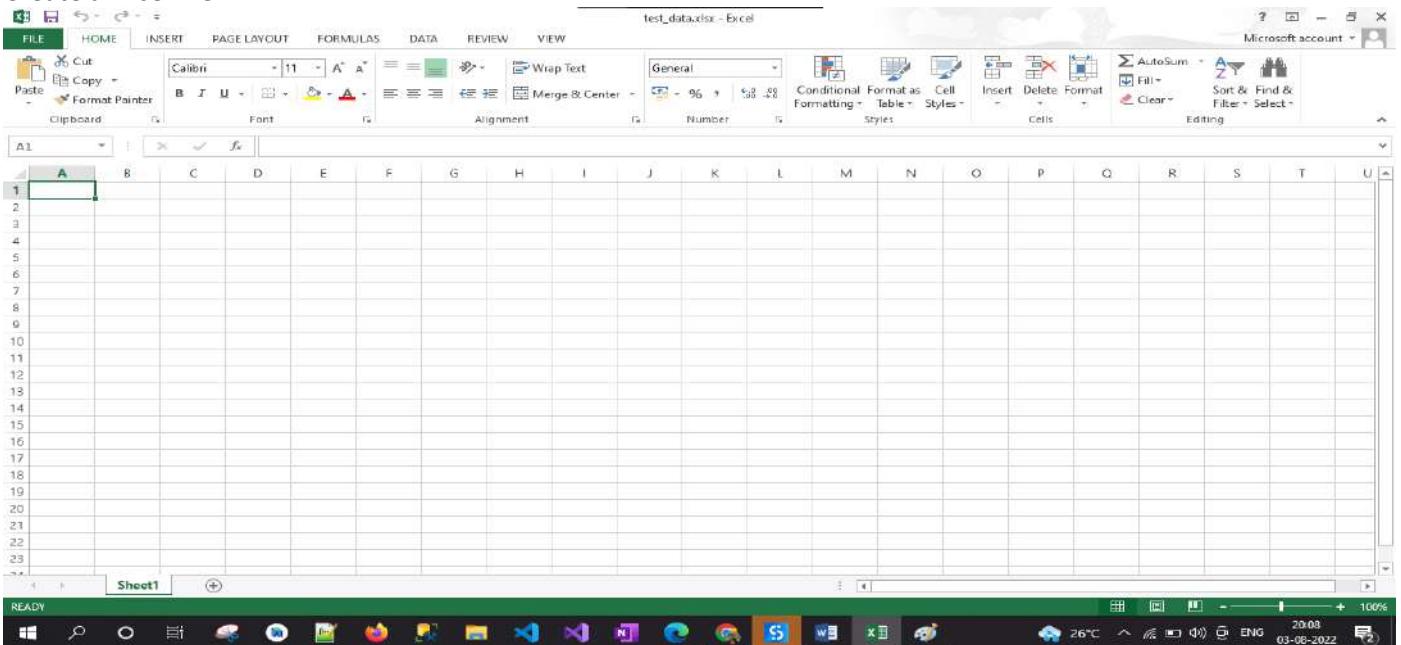


### 9. Output:

SampleData.xlsx - Excel	
1 Name	Roll No
2 Kedar	621
3 Vikas	607
4 Yashchandra	616
5 Manan	613
6 Pavan	620
7	
8	
9	
10	Pavan Yadav
11 Kedar	621
12 Vikas	607
13 Yashchandra	616
14 Manan	613
15 Pavan	620
16	
17	
18	
19	
20	Pavan Yadav
21	
22	

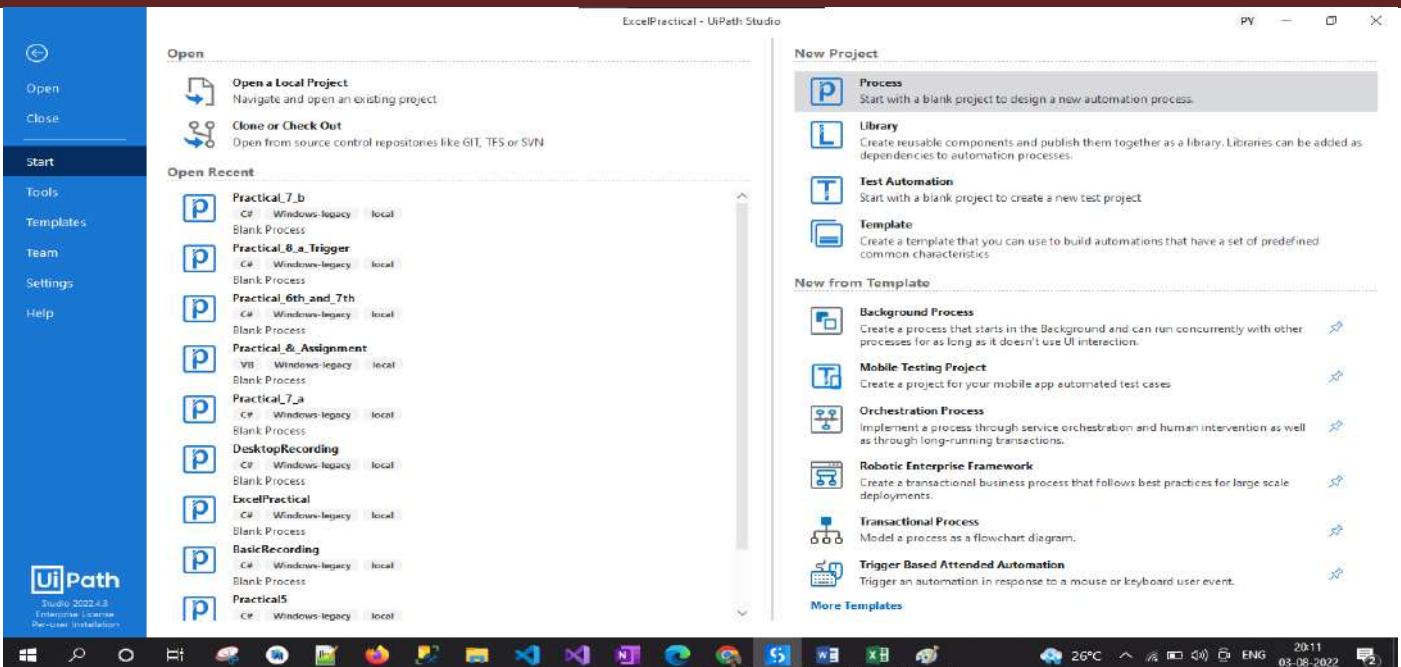
## B] Automate the process to extract data from an excel file into a database and vice versa.

### 1. Create a Excel file

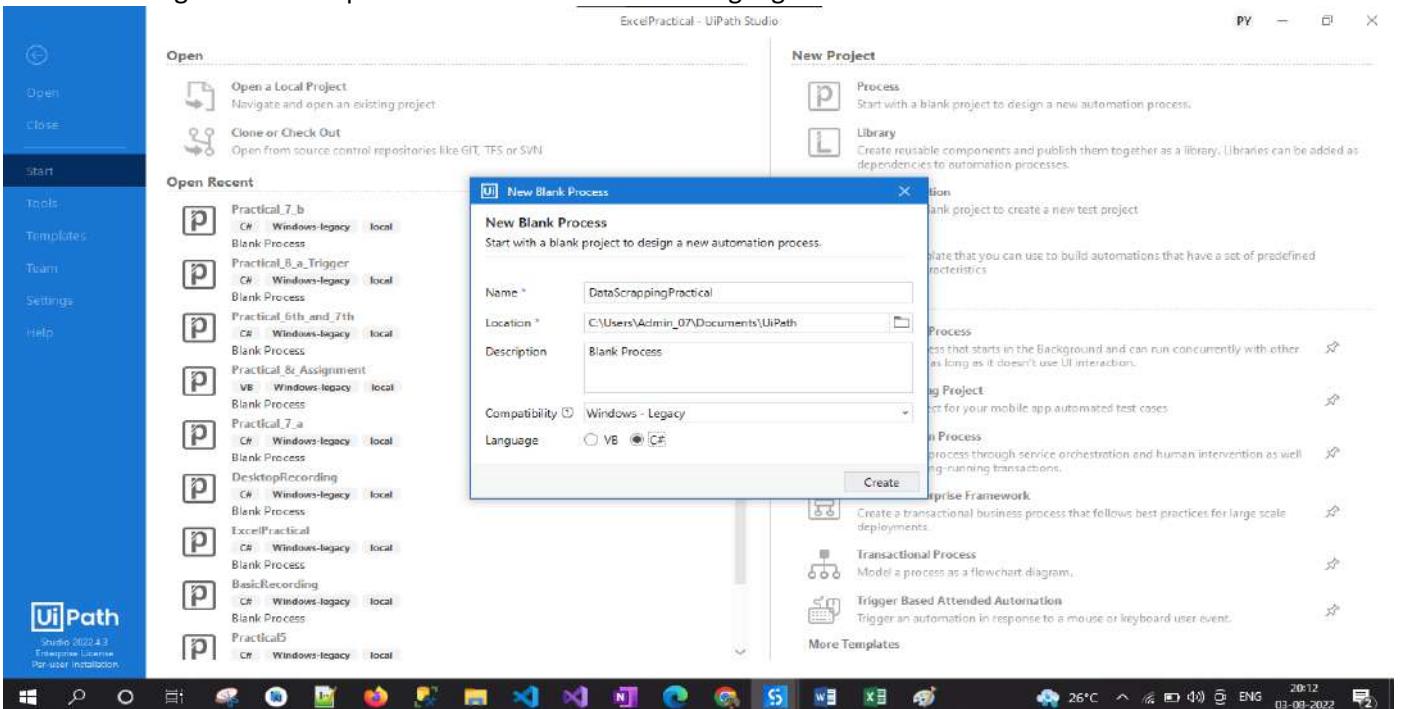


### 2. Go to any shopping website

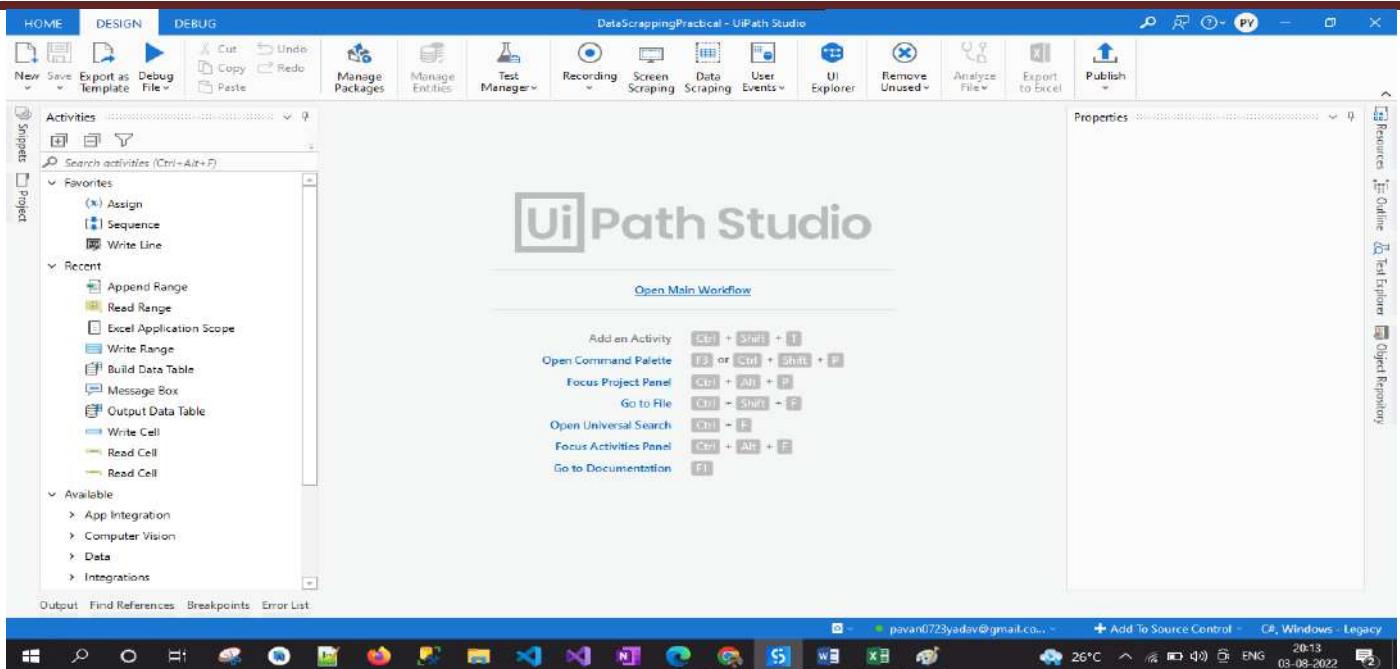
### 3. Click on the Process to New Project



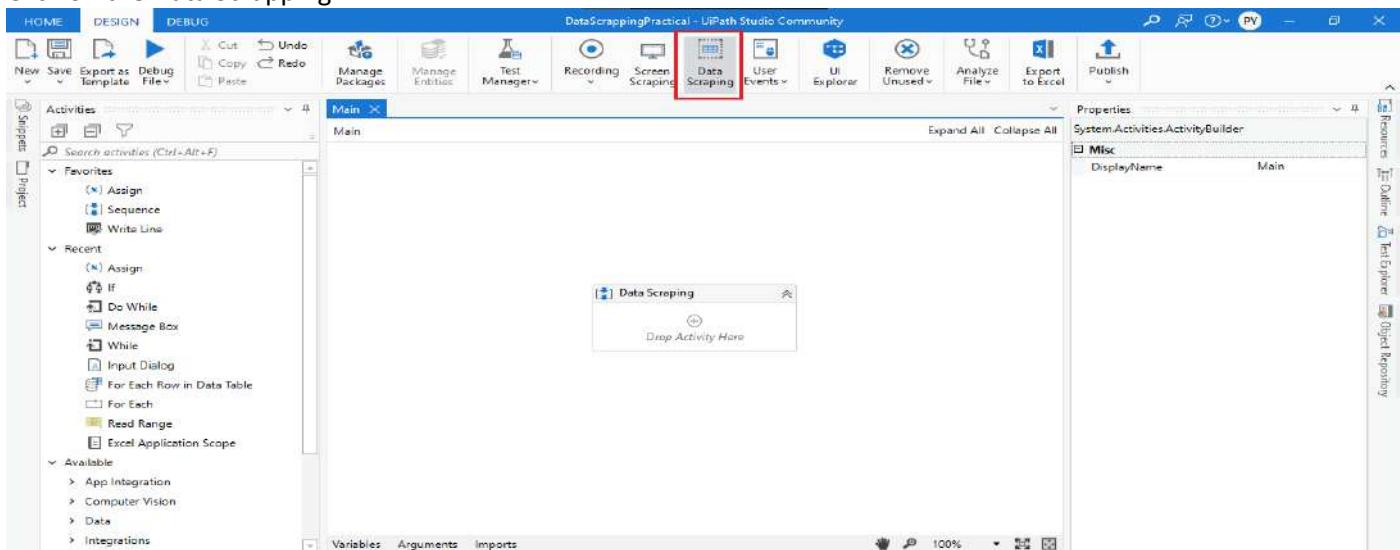
#### 4. Write following detail of the process. Note: Select the C# Language



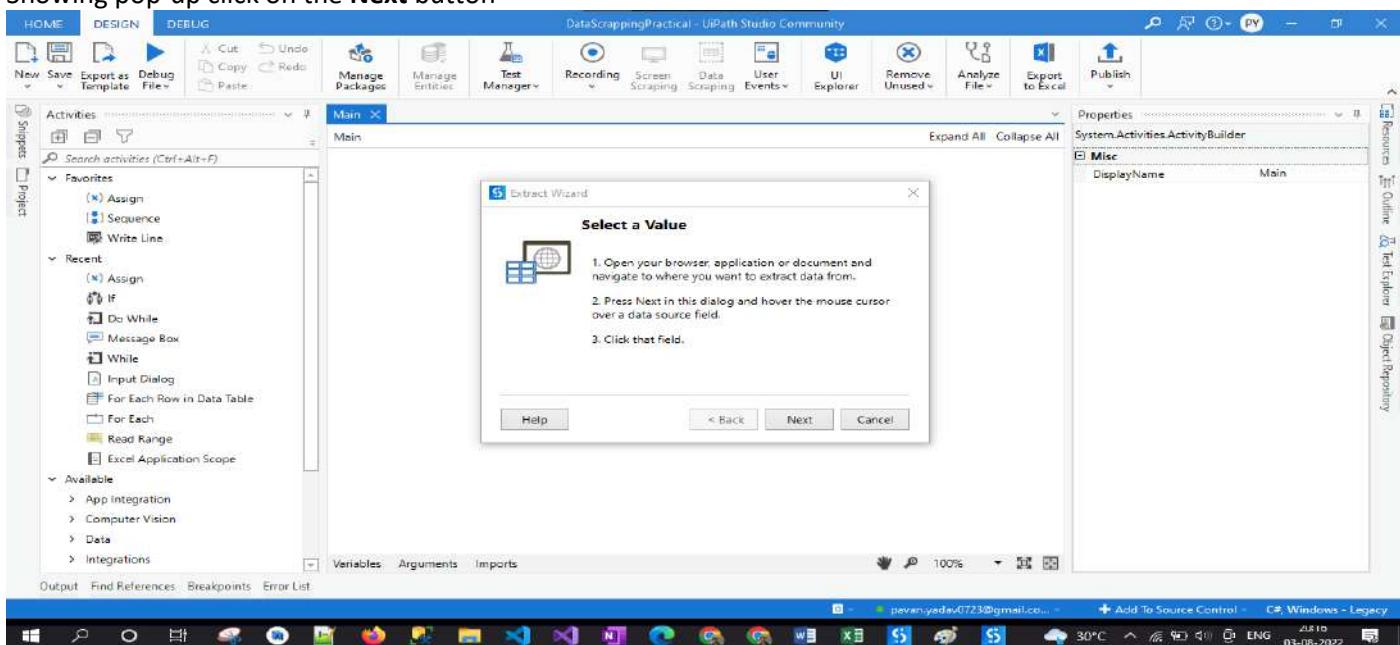
#### 5. Click on the Open Main Workflow



## 6. Click on the Data Scrapping



## 7. Showing pop-up click on the Next button



Select the 1<sup>st</sup> name of the watch same like below image

8. Click on the Next button

Select the 2<sup>nd</sup> name of the watch same like below image

**9. Configure column as per requirement**

The screenshot shows a Windows desktop with a taskbar at the bottom. A browser window is open to the Amazon.in website, displaying search results for 'smart watch for men'. An 'Extract Wizard' dialog box is overlaid on the page, specifically the 'Configure Columns' step. The dialog lists 'Text Column Name' as 'Column1' and 'URL Column Name' as 'Column2', both with checked checkboxes. In the background, product cards for various smartwatches like the 'Fire-Boltt Rage Full Touch 1.28" Display & 60 Sports Modes with IP68 Rating Smartwatch, SpO2 Tracking, Over 100 Cloud Based Watch Faces, Grey, Free Size' and 'Noise ColorFit Pulse Spo2 Smart Watch with 10 days battery life, 60+ Watch Faces, 1.4" Full Touch HD Display Smartwatch, 24\*7 Heart Rate Monitor Smart Band, Sleep Monitoring Smart...' are visible.

**10. Click on the Extract Correlated Data button**

This screenshot shows the 'Extract Wizard' dialog box on the 'Preview Data' step. The 'Extract Correlated Data' button is highlighted with a red box. The preview area displays a list of product names and descriptions, such as 'Fire-Boltt Rage Full Touch 1.28" Display & 60 Sports Modes with IP68 Rating Smartwatch, SpO2 Tracking, Over 100 Cloud Based Watch Faces, Grey, Free Size' and 'Noise ColorFit Pulse Spo2 Smart Watch with 10 days battery life, 60+ Watch Faces, 1.4" Full Touch HD Display Smartwatch, 24\*7 Heart Rate Monitor Smart Band, Sleep Monitoring Smart...'. The background shows the same Amazon search results for smartwatches.

**11. Select the 1<sup>st</sup> price of the watch same like below image**

12. Click on the Next button

Select the 2<sup>nd</sup> prize of the watch same like below image

**Search Results:**

- Fire-Boltt Rage Full Touch 1.28" Display & 60 Sports Modes with IP68 Rating Smartwatch, SpO2 Tracking, Over 100 Cloud Based Watch Faces, Grey, Free Size**  
₹1,999 ₹2,999 (78% off)  
prime Get it by tomorrow, September 4  
FREE Delivery by Amazon
- Fire-Boltt Dynamite Bluetooth Calling Smartwatch with Industry's Largest 1.81" Display, 120+ Sports Mode, IP68 Rating, Fast Charging, 100+ Watch Faces**  
₹3,499 ₹9,999 (65% off)  
Save ₹500 with coupon  
prime Get it by tomorrow, September 4  
FREE Delivery by Amazon
- Noise ColorFit Pulse Spo2 Smart Watch with 10 days battery life, 60+ Watch Faces, 1.4" Full Touch HD Display Smartwatch, 24\*7 Heart Rate Monitor Smart Band, Sleep Monitoring Smart...**  
₹5,600 ₹10,999 (50% off)  
prime Get it by tomorrow, September 4  
FREE Delivery by Amazon

### 13. Configure column as per requirement

**Configure Columns**

This identified fields are highlighted.

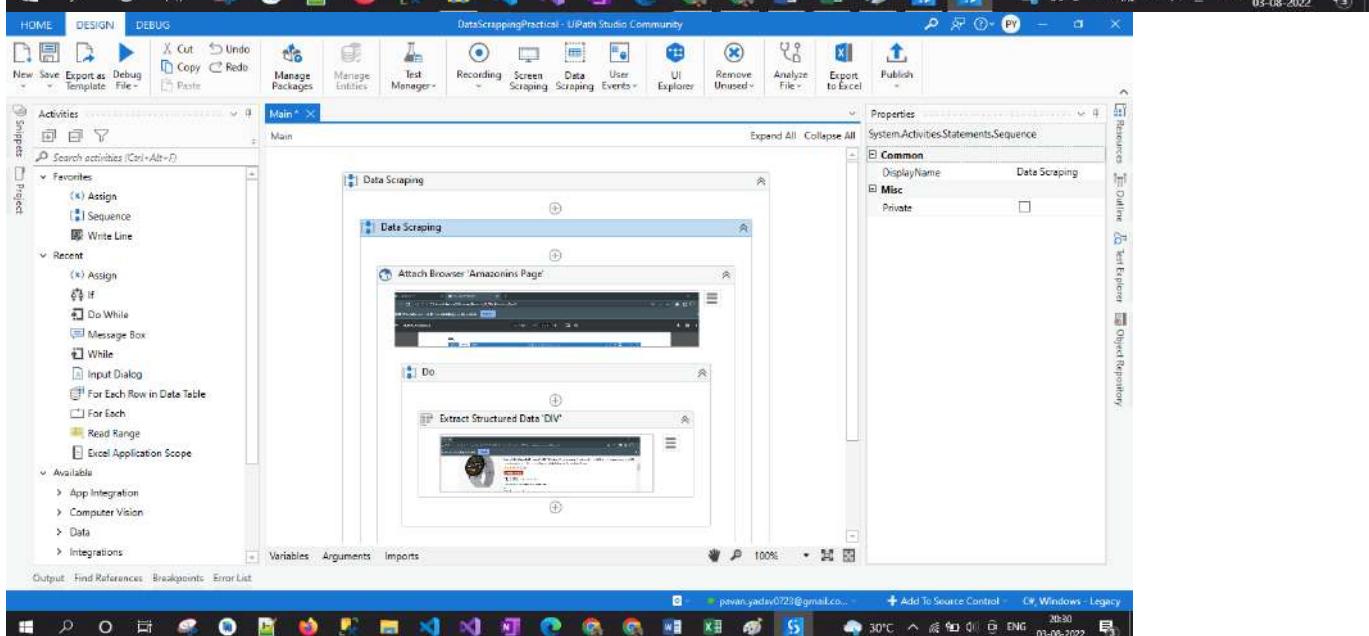
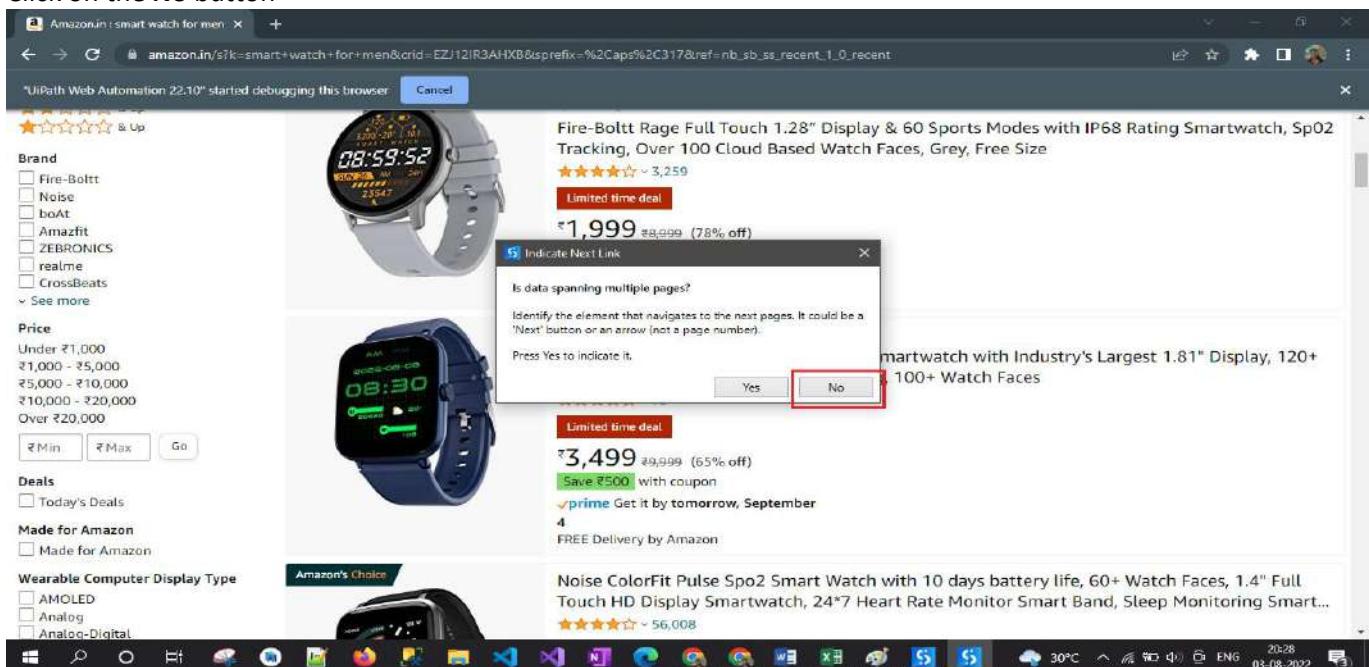
Extract Text  
Text Column Name: Column2

Extract URL  
URL Column Name: Column3

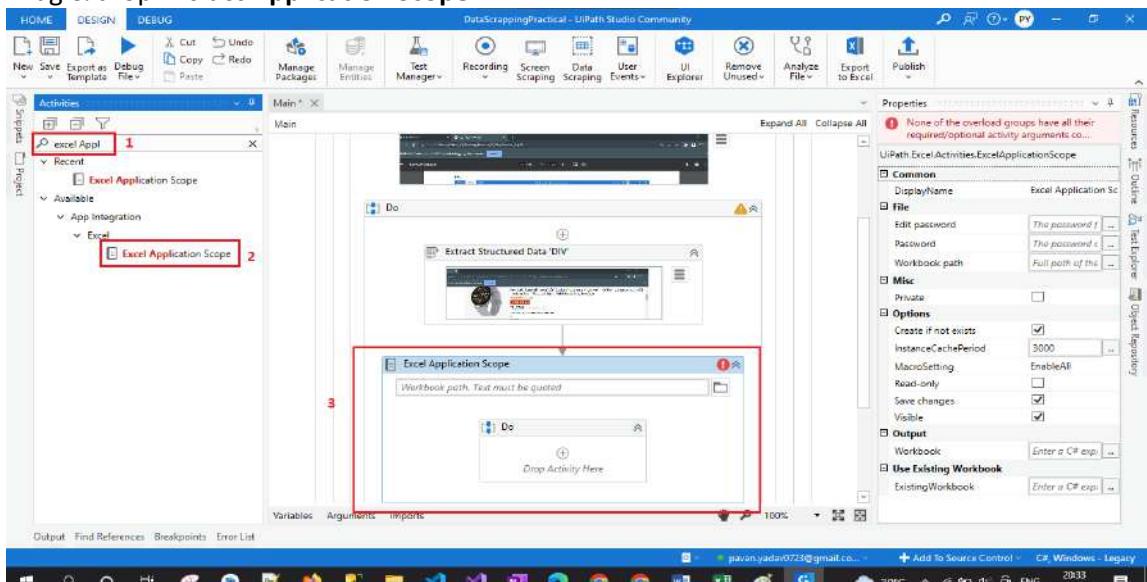
### 14. Click on the Finish button

Column2	Column3
SpO2 Tracking, Over 100 Cloud Based Watch Faces, Grey, Free Size	₹1,999
60+ Sports Mode, IP68 Rating, Fast Charging, 100+ Watch Faces	₹3,499
Body with Blood Oxygen Monitoring, Continuous Heart Rate, Full Touch & Multiple Watch Faces	₹9,999
H R with SpO2, Heart Rate Monitoring & IP67 Rating	₹2,999
Pin Code Locking & Split Screen Access, Built-in Mic & Speaker for HD Calls, Silver Green, Free Size	₹3,499
100+ Watch Faces, SpO2 Monitoring, Call Notification, Quick Replies to Text & Calls (Rose Pink)	₹1,999

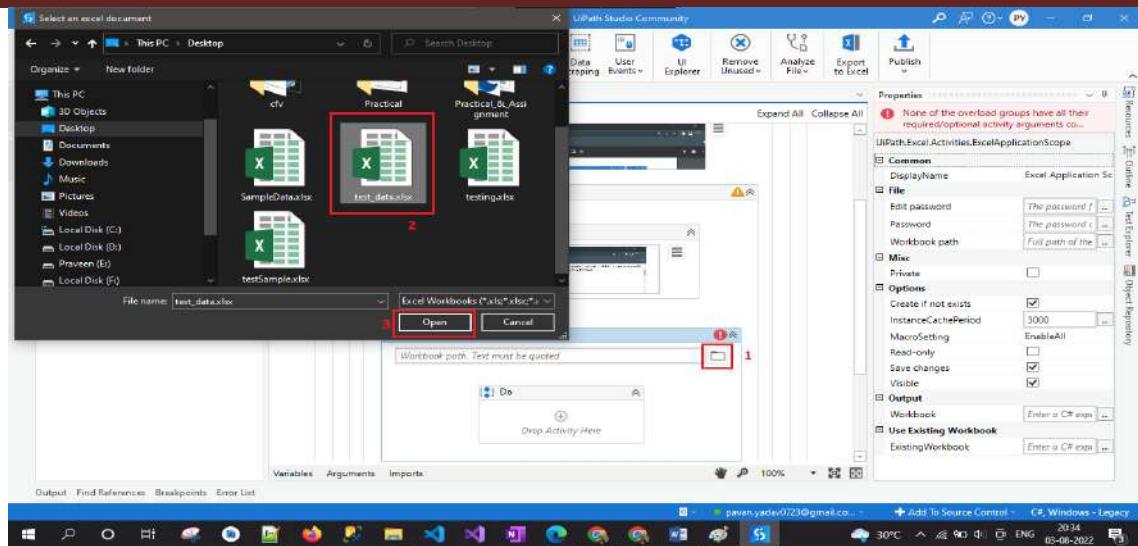
## 15. Click on the No button



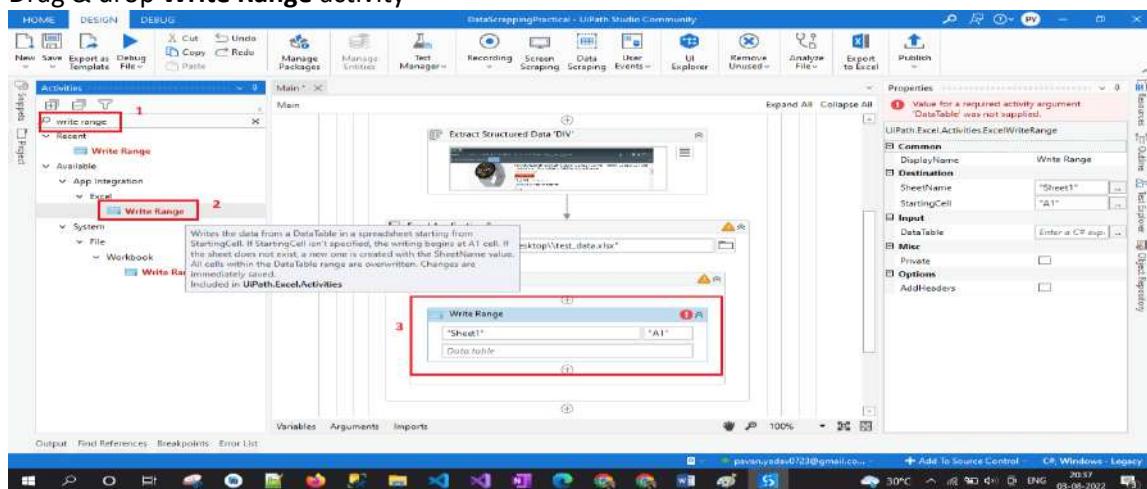
## 16. Drag &amp; drop Extract Application Scope



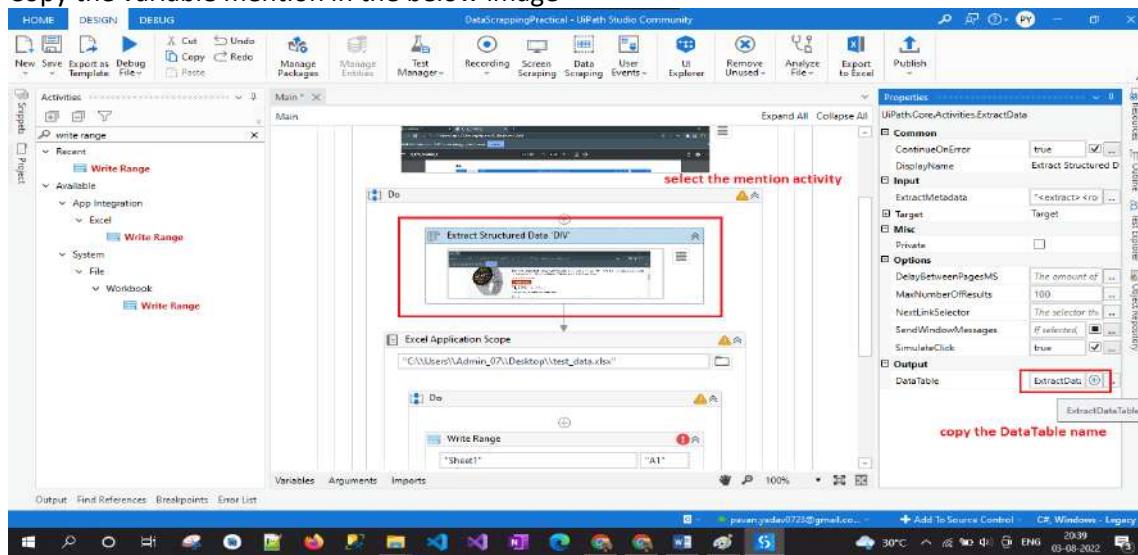
## 17. Give the path of the Excel file



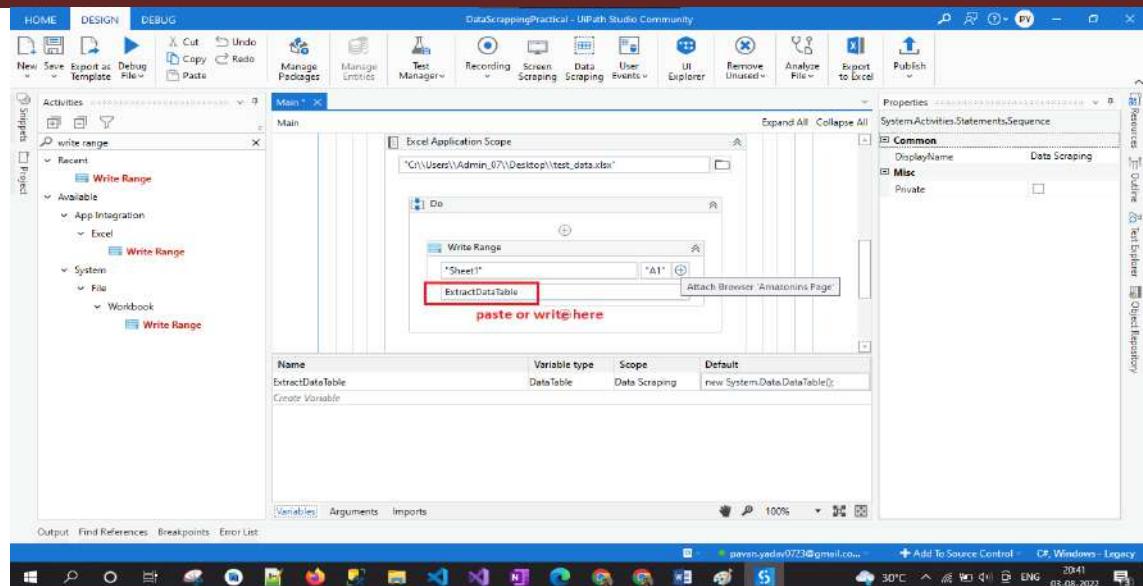
**18. Drag & drop Write Range activity**



**19. Copy the variable mention in the below image**



**20. Assign the variable**



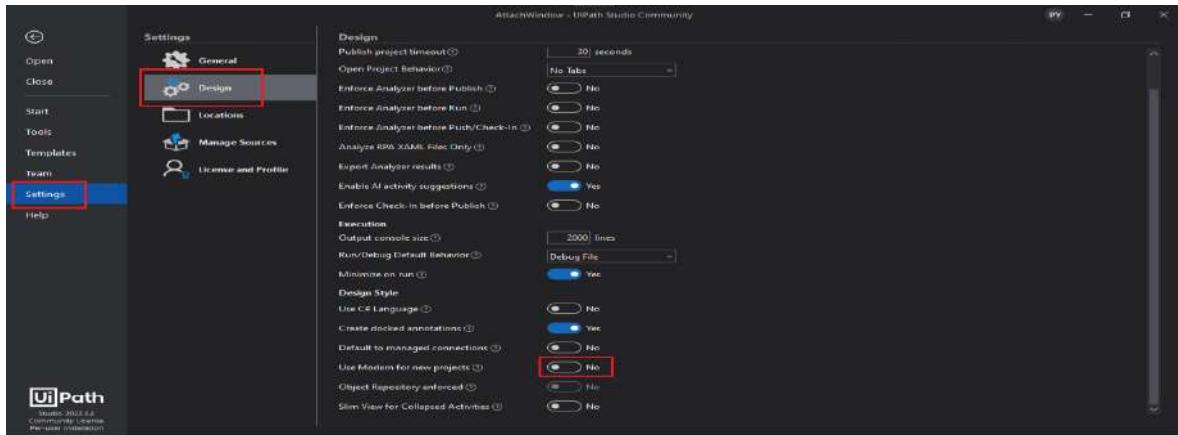
## 21. Output

Model	Details	Price
Fire-Boltt Rage Full Touch	1.28" Display & 60 Sports Modes with IP68 Rating Smartwatch, SpO2 Tracking, Over 100 Cloud Based Watch Faces, Grey, Free Size	₹1,999
Fire-Boltt Dynamite Bluetooth Calling Smartwatch	with Industry's Largest 1.81" Display, 120+ Sports Mode, IP68 Rating, Fast Charging, 100+ Watch Faces	₹3,499
Fire-Boltt India's No 1 Smartwatch Brand Ring	Bluetooth Calling with SpO2 & 1.7" Metal Body with Blood Oxygen Monitoring, Continuous Heart Rate, Full Touch & Multiple Watch Faces	₹3,999
Fire-Boltt Phoenix Bluetooth Calling Smartwatch	1.3", 120+ Sports Modes, 240*240 PX High Res with SpO2, Heart Rate Monitoring & IP67 Rating	₹2,999
Fire-Boltt Ring Pro Bluetooth Calling	1.75" 320*385px High Res, IP68 & SpO2 Monitoring, Pin Code Locking & Split Screen Access, Built in Mic & Speaker for HD Calls, Silver Green, Free Size	₹3,499
Noise ColorFit Pulse Grand Smart Watch	1.69" HD Display, 60 Sports Modes, 150 Watch Faces, SpO2 Monitoring, Call Notification, Quick Replies to Text & Calls (Rose Pink)	₹1,999

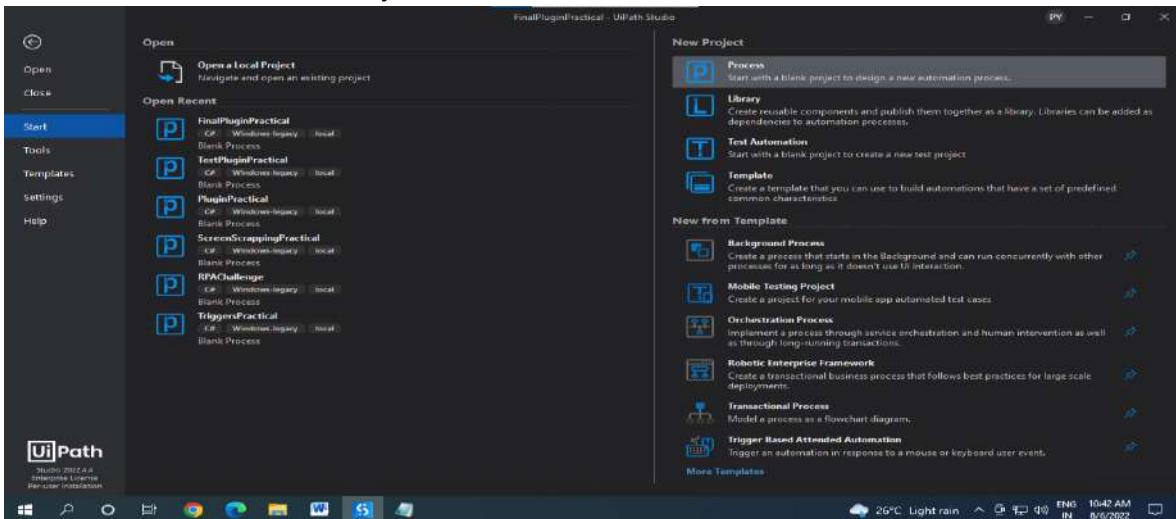
## Practical 7:

### A] Implement the attach window activity.

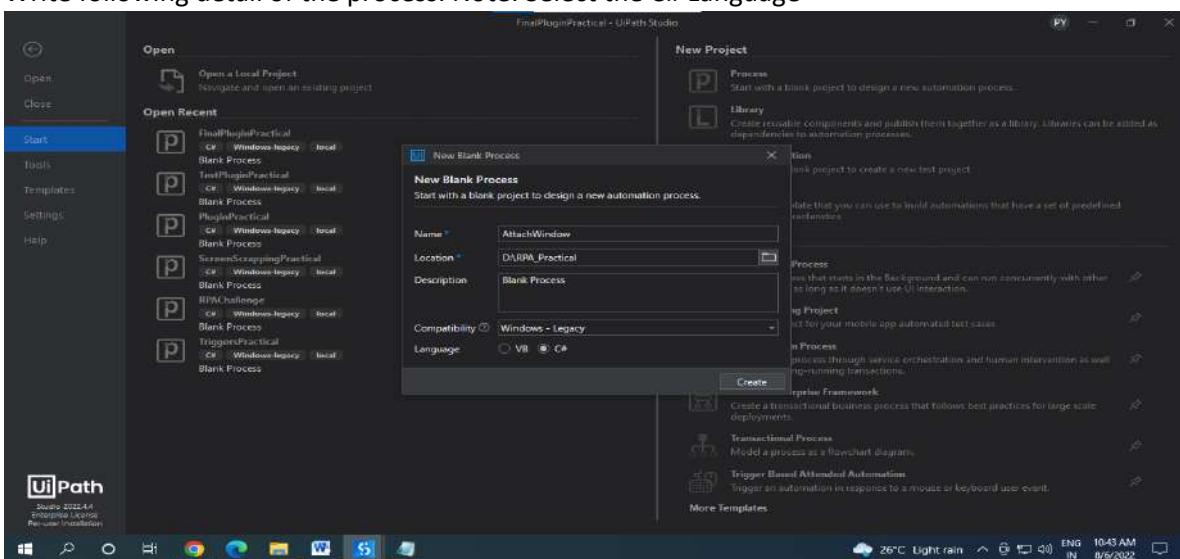
**Note:** Disable the Use modern for new project. Go to Setting -> Design -> Use modern for new project -> No.



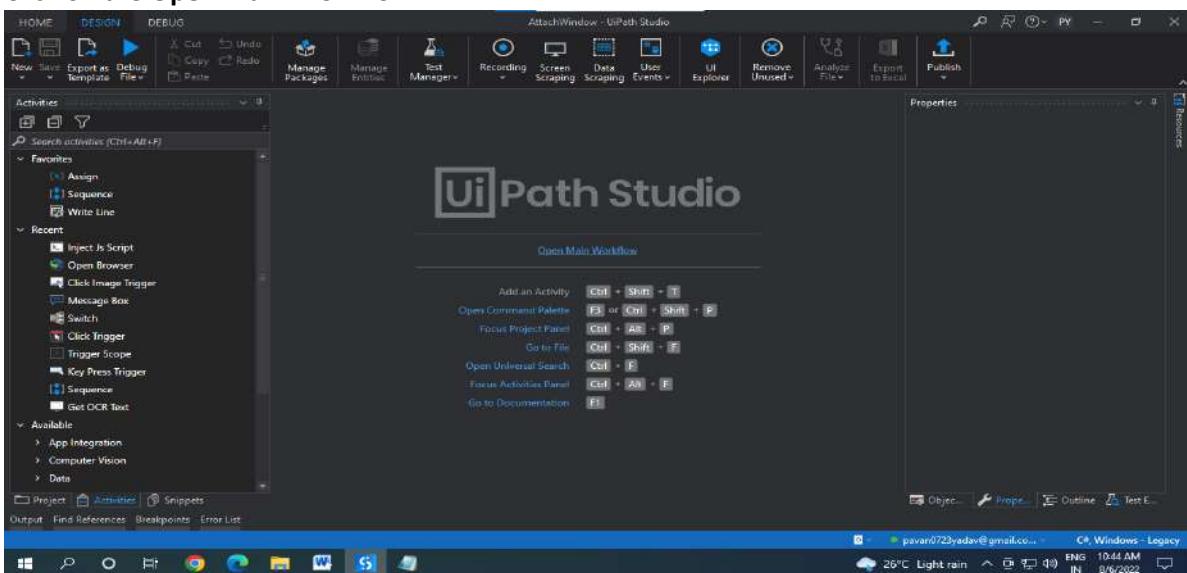
- Click on the **Process** to New Project



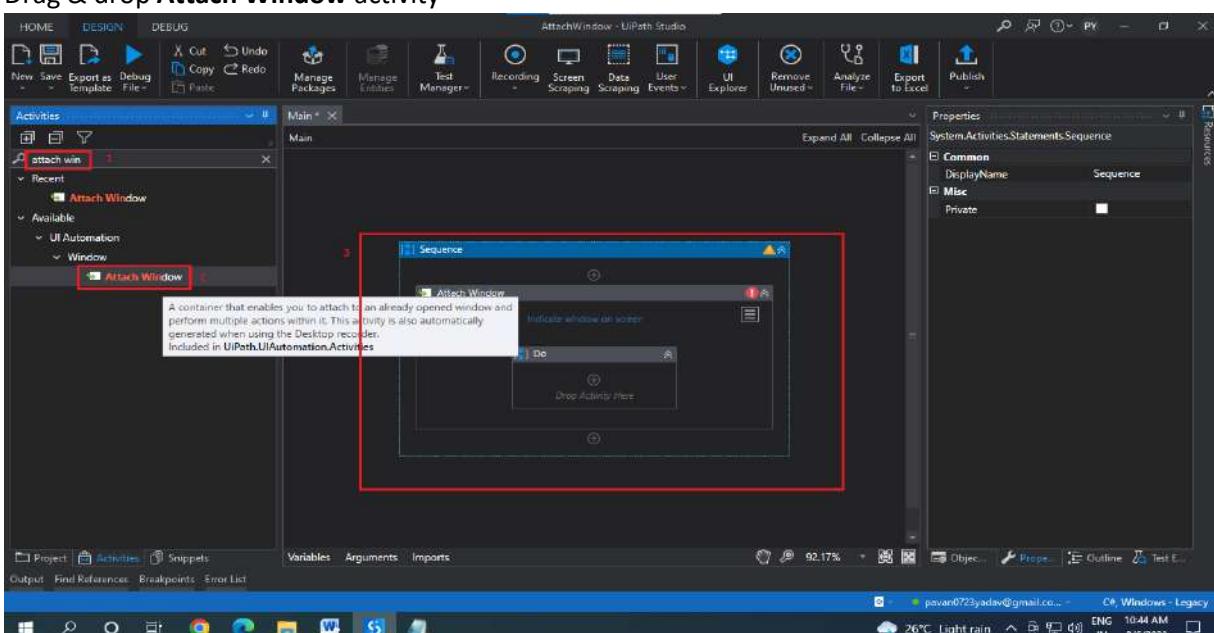
- Write following detail of the process. Note: Select the C# Language



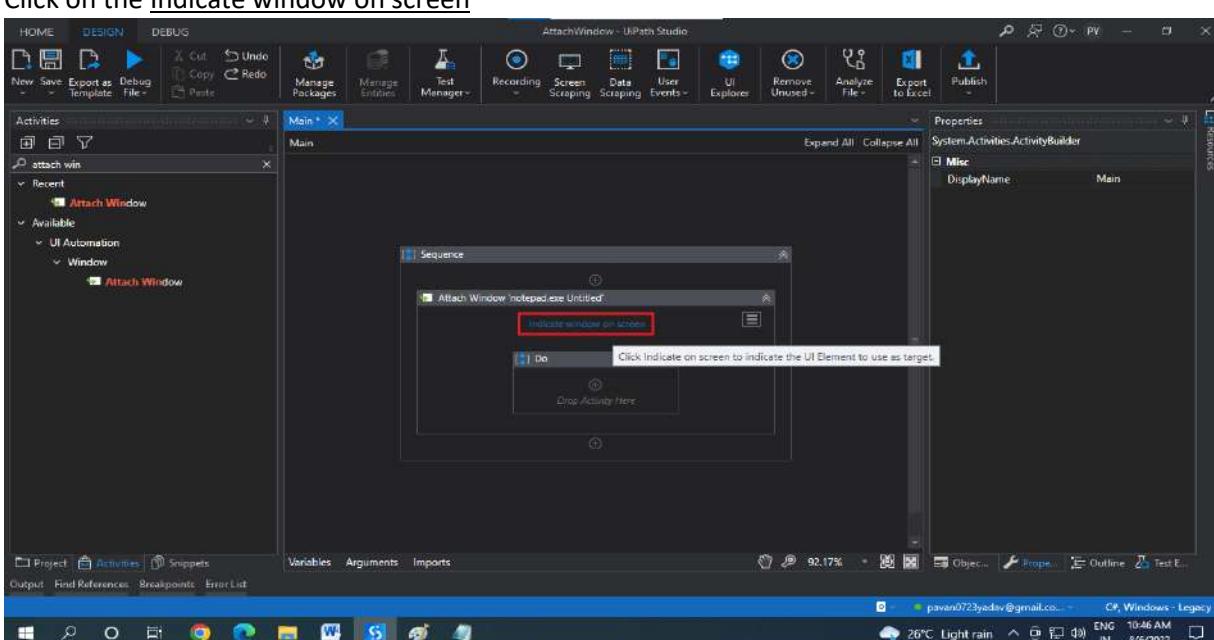
**3. Click on the Open Main Workflow**

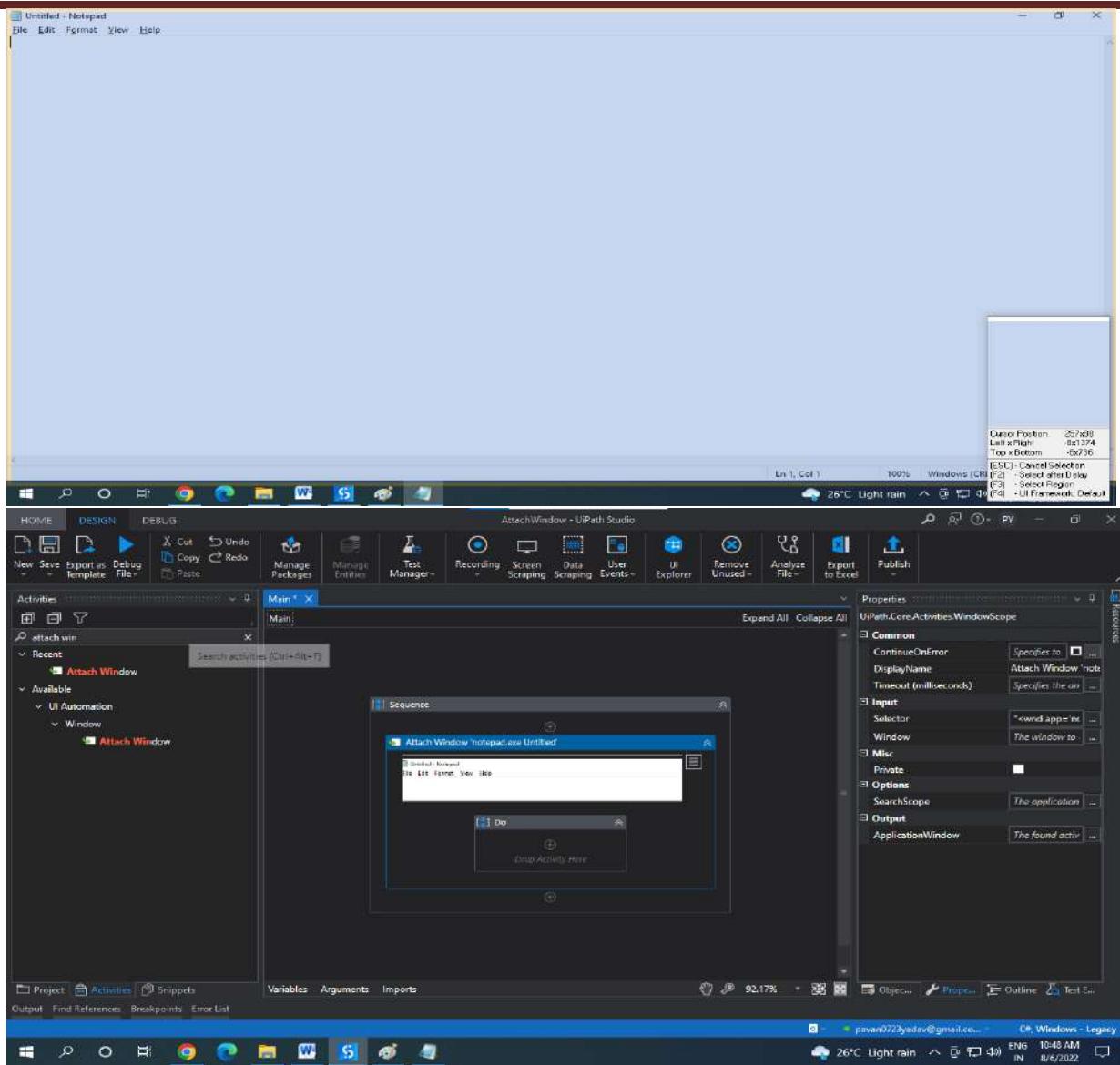


**4. Drag & drop Attach Window activity**

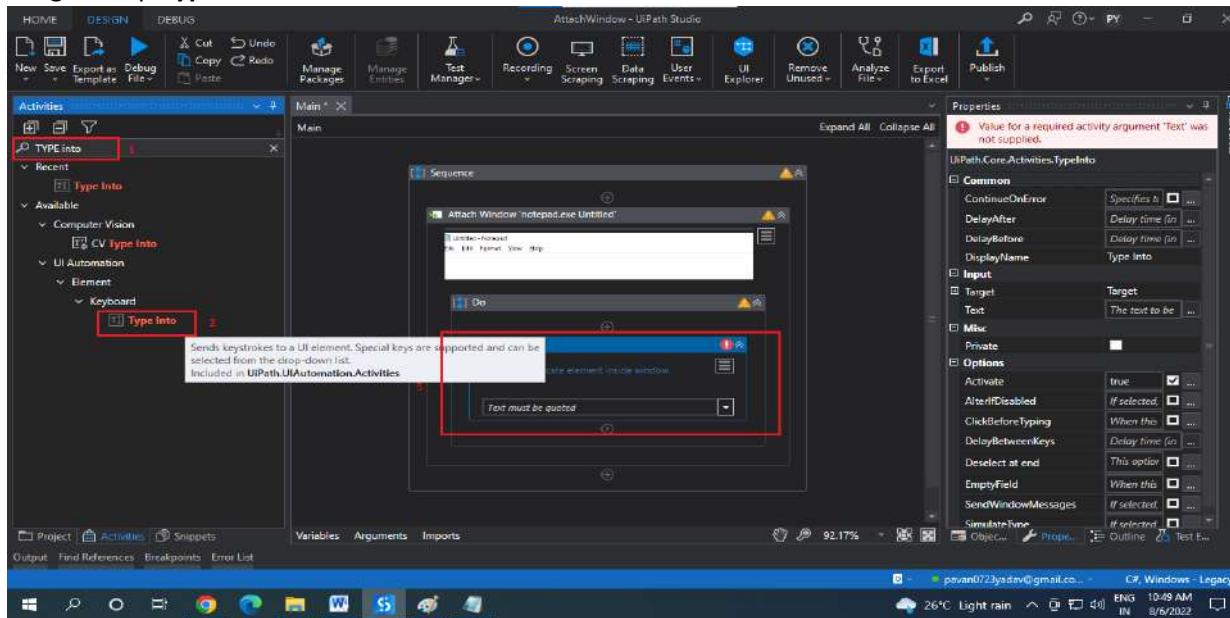


**5. Click on the Indicate window on screen**

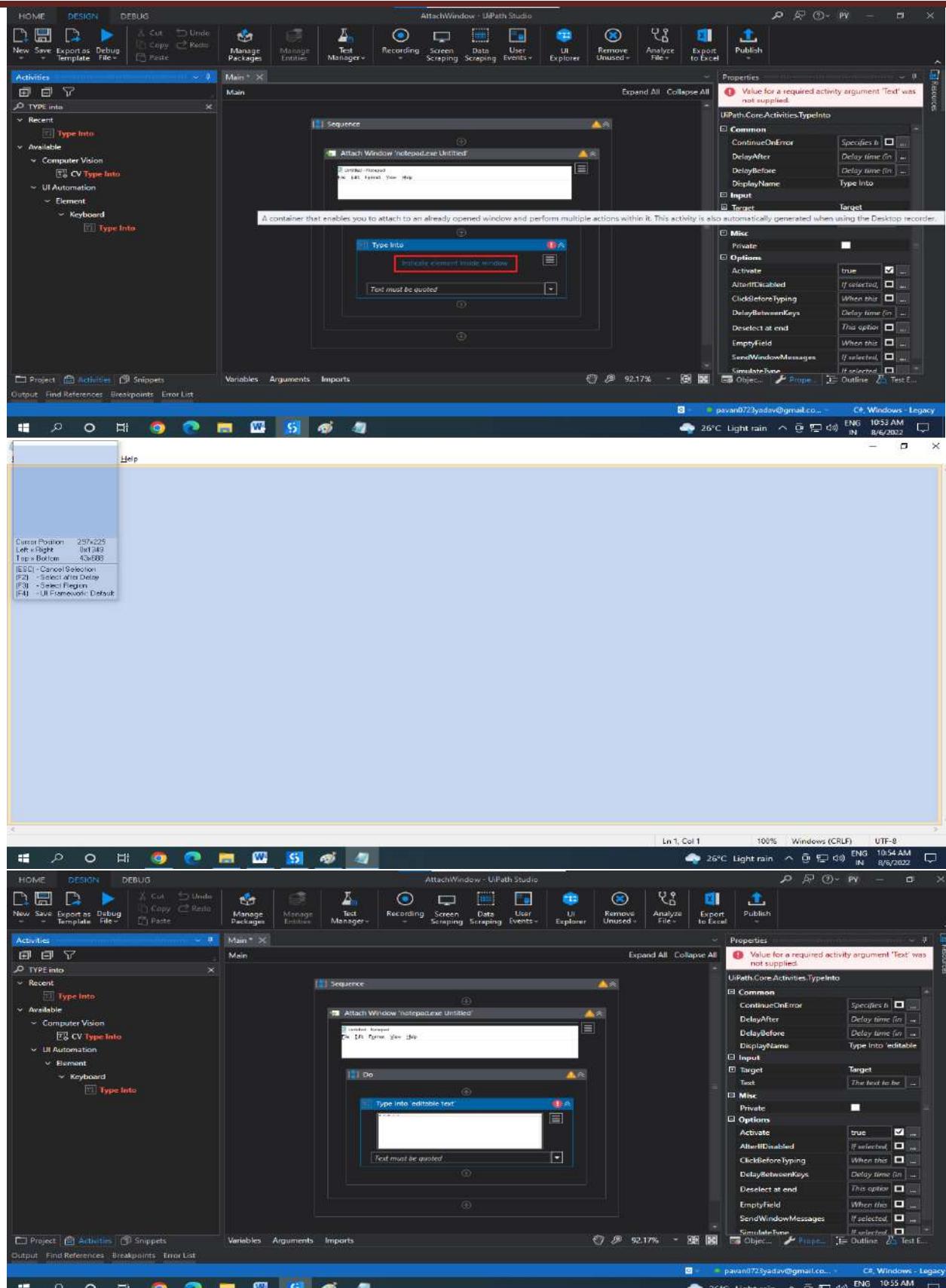




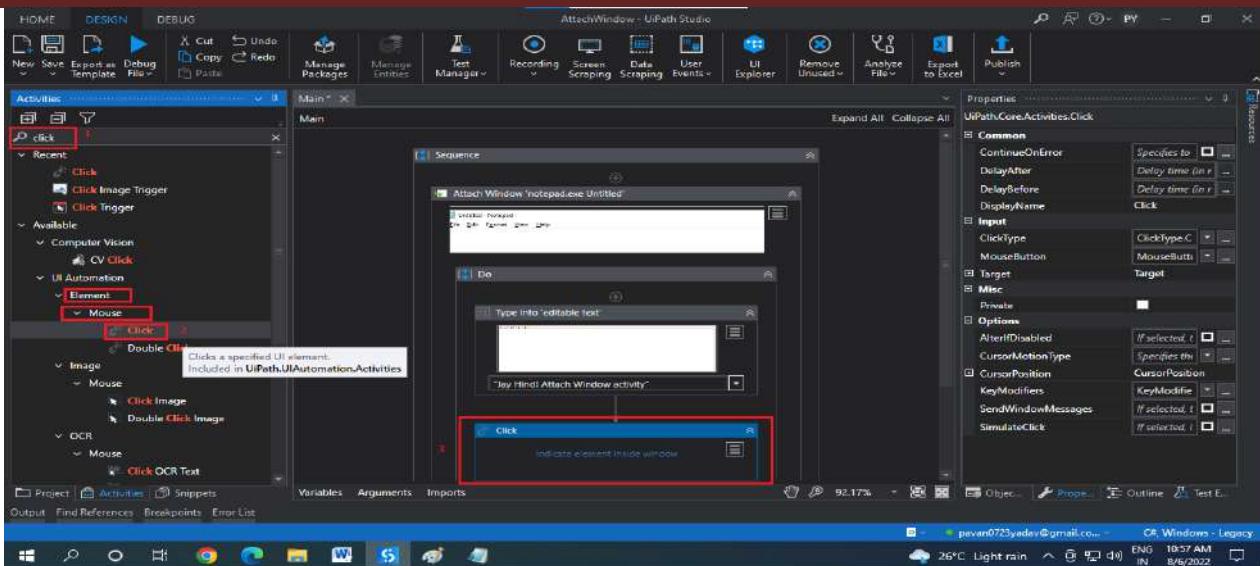
## 6. Drag & drop Type Into



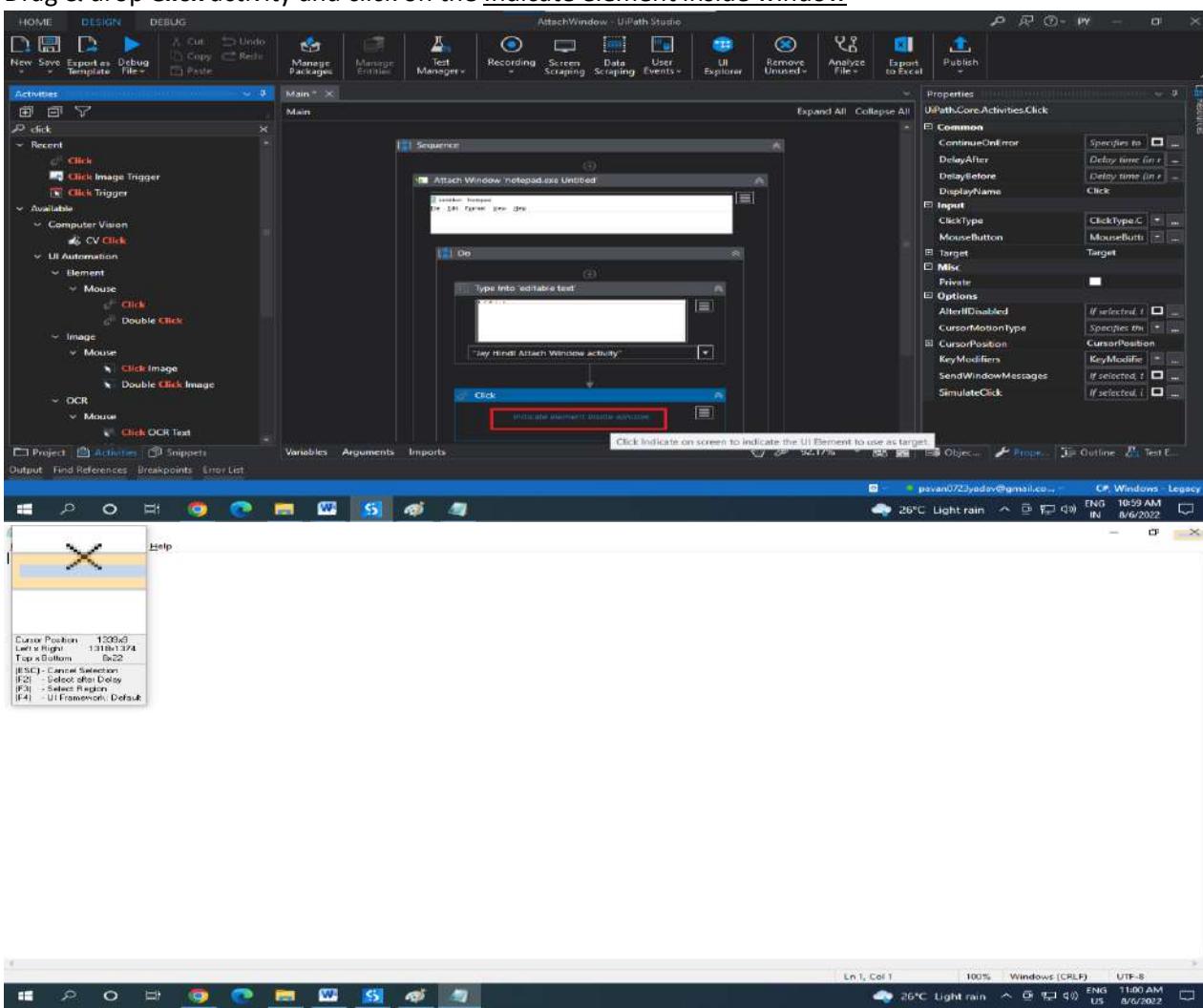
## 7. Click on the Indicate element inside window

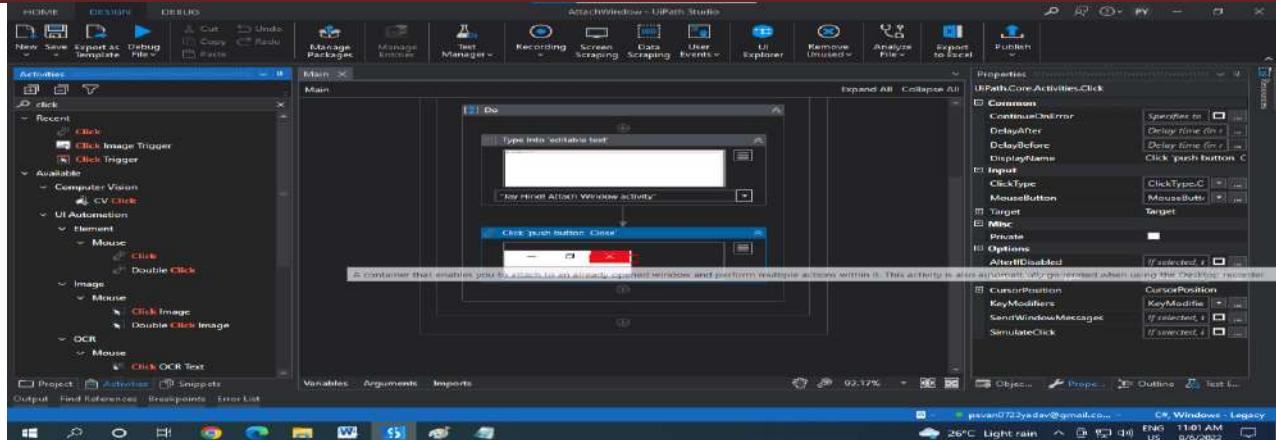


8. Type the word you want to write i.e. ""Jay Hind! Attach Window activity[k(enter)]""

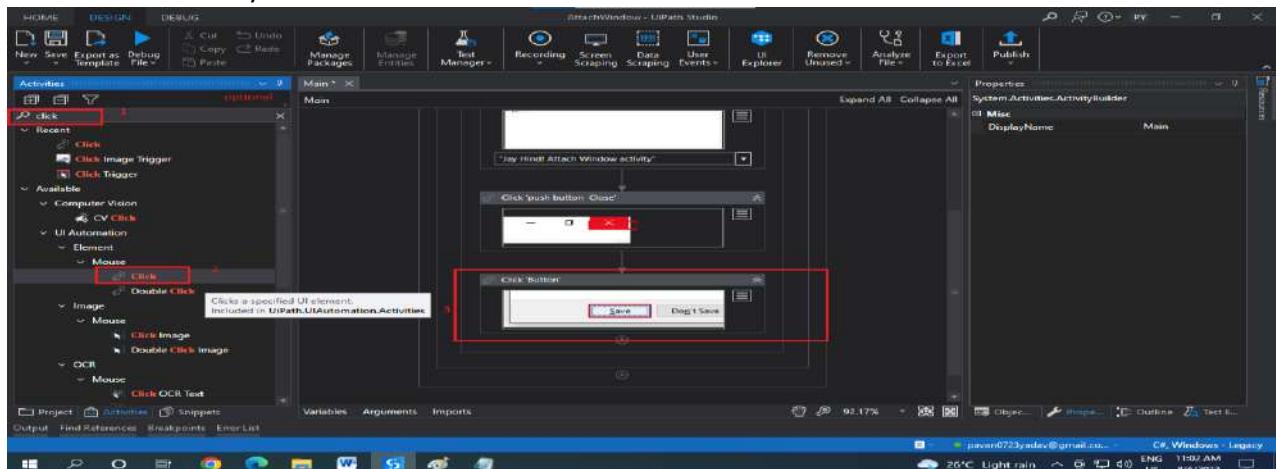


9. Drag & drop **Click** activity and click on the Indicate element inside window

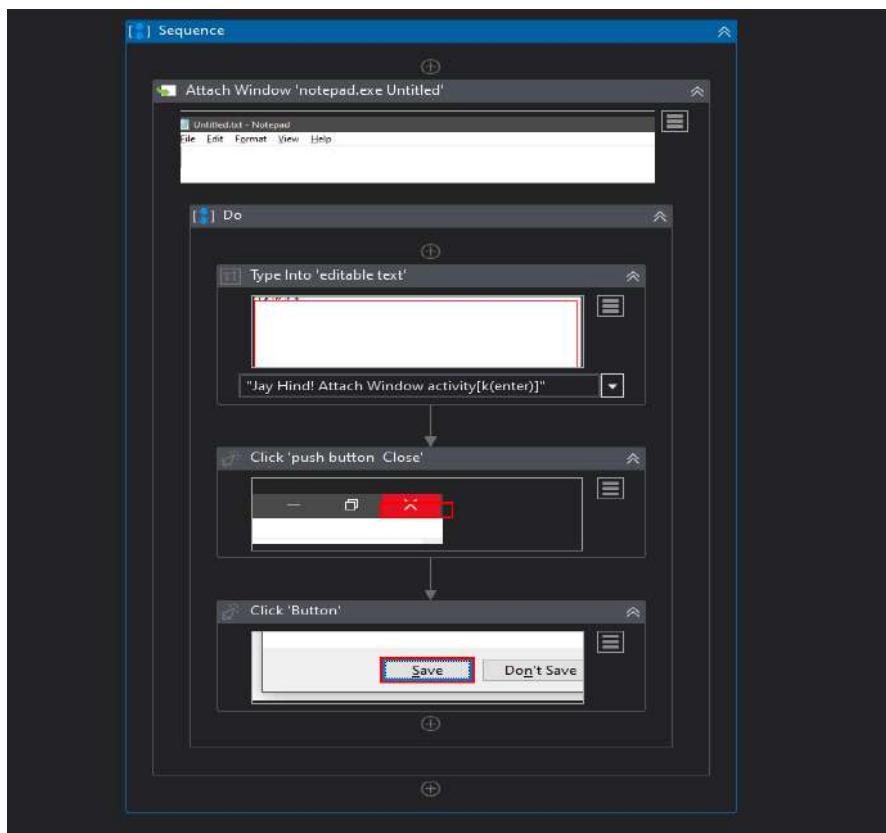




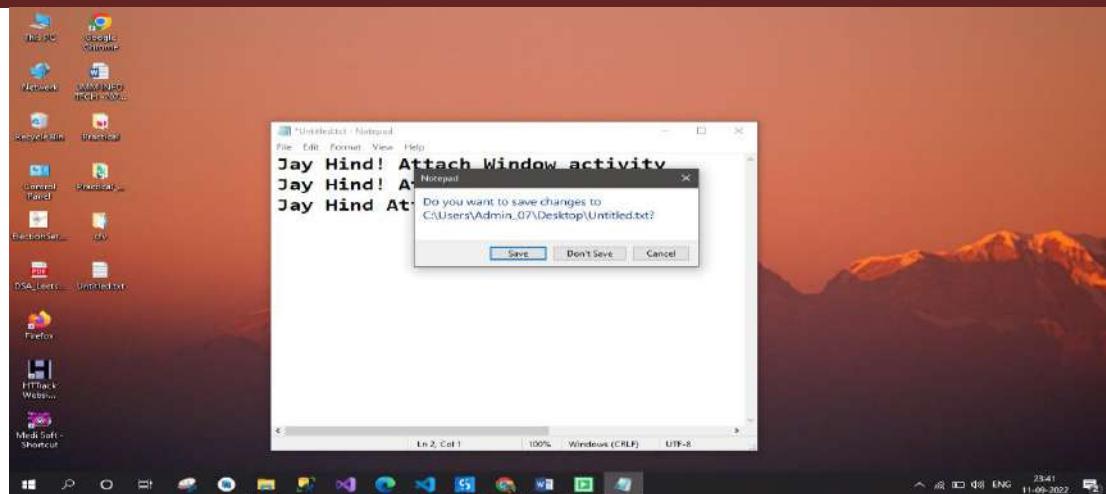
Another Click activity added



## 10. Overview



## 11. Output

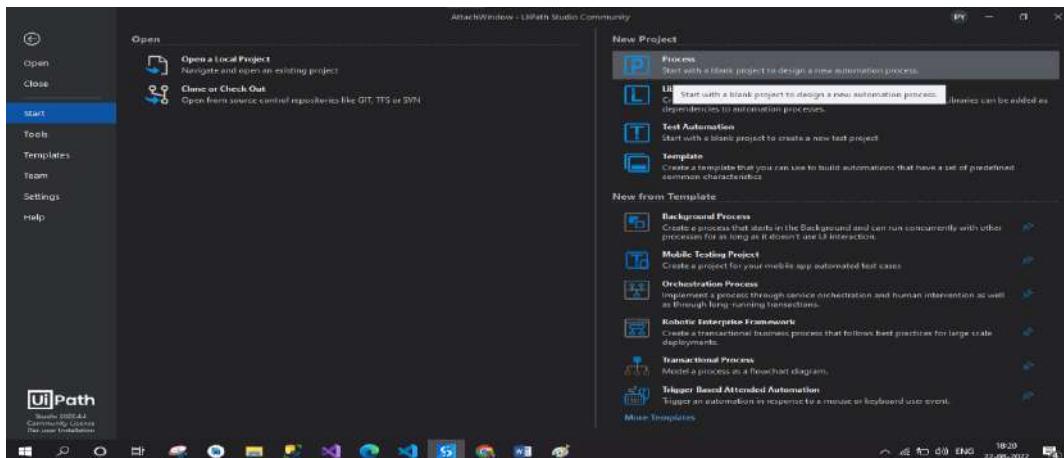


## B] Find different controls using UI Path.

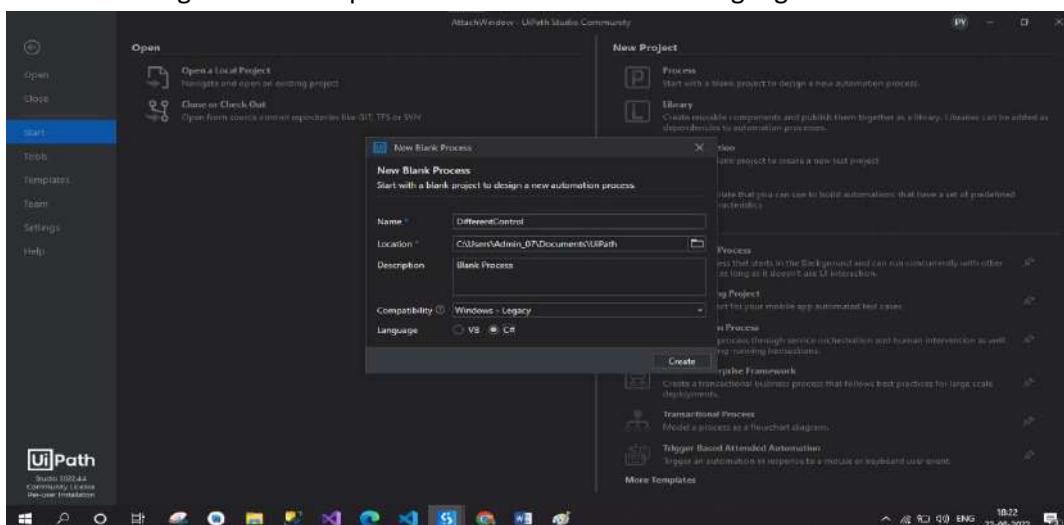
The different controls are as follow

1. Anchor base Element Exists
2. Element scope
3. Find children
4. Find element
5. Find relative element
6. Get ancestor
7. Indicate on screen

### 1. Click on the Process to New Project



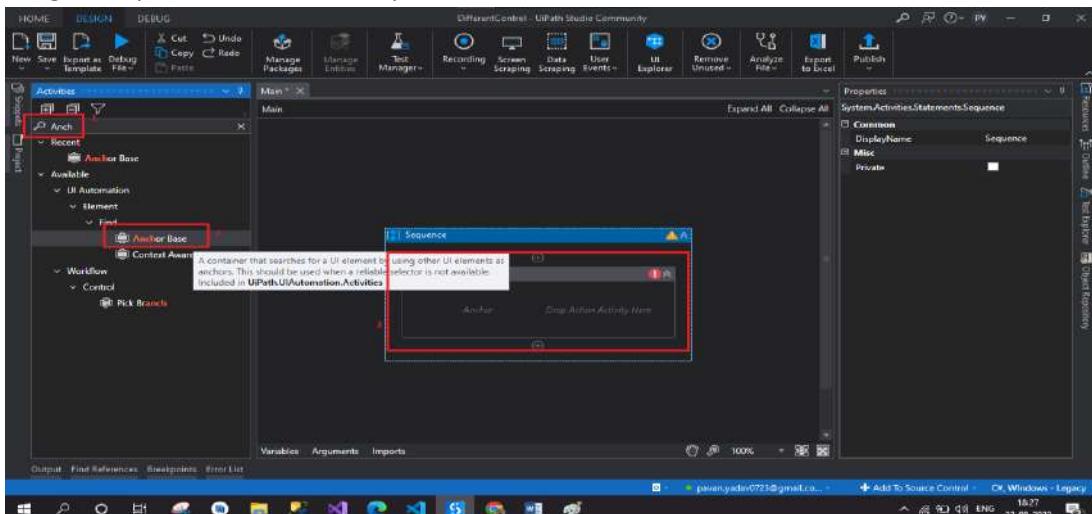
### 2. Write following detail of the process. Note: Select the C# Language



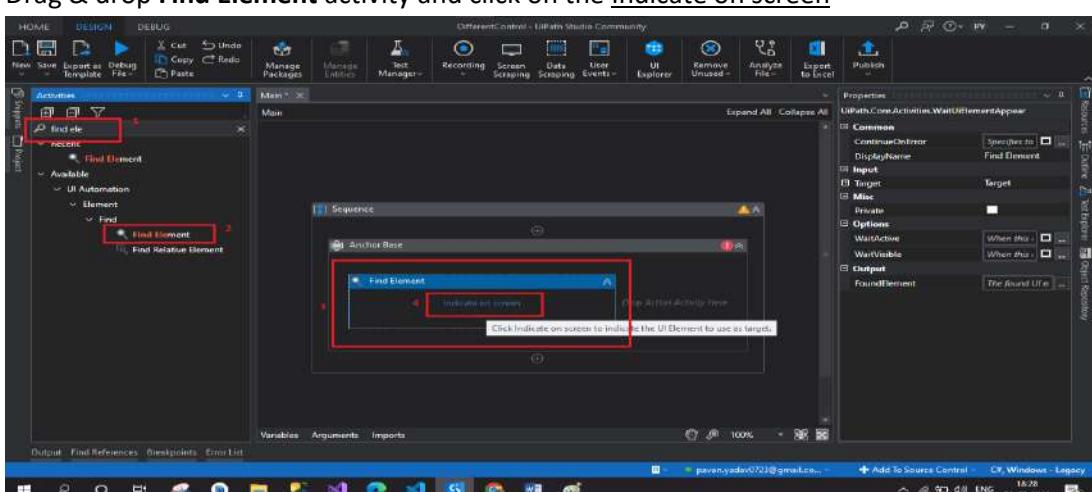
### 3. Click on the Open Main Workflow



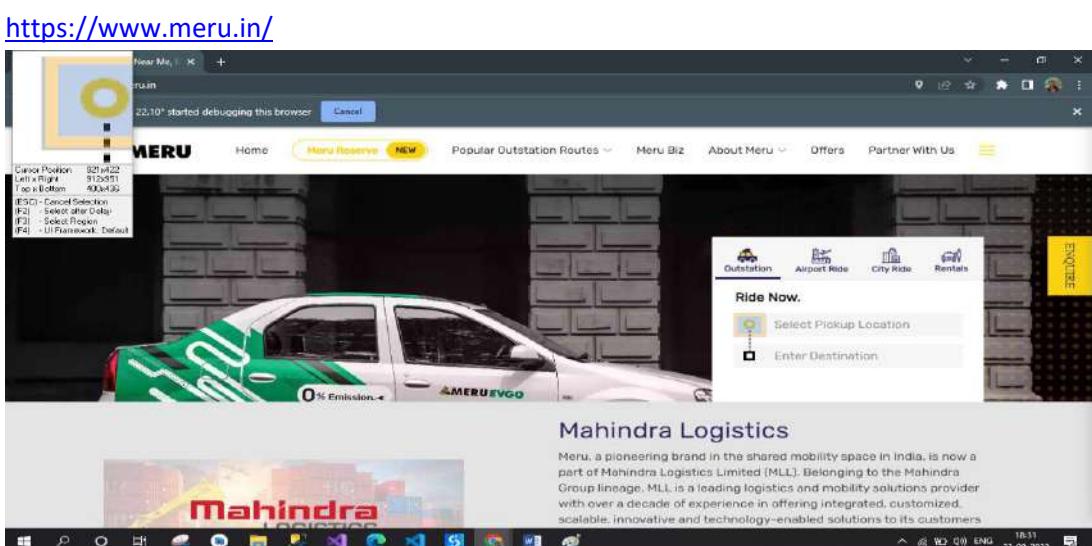
**4. Drag & drop Anchor Base activity**



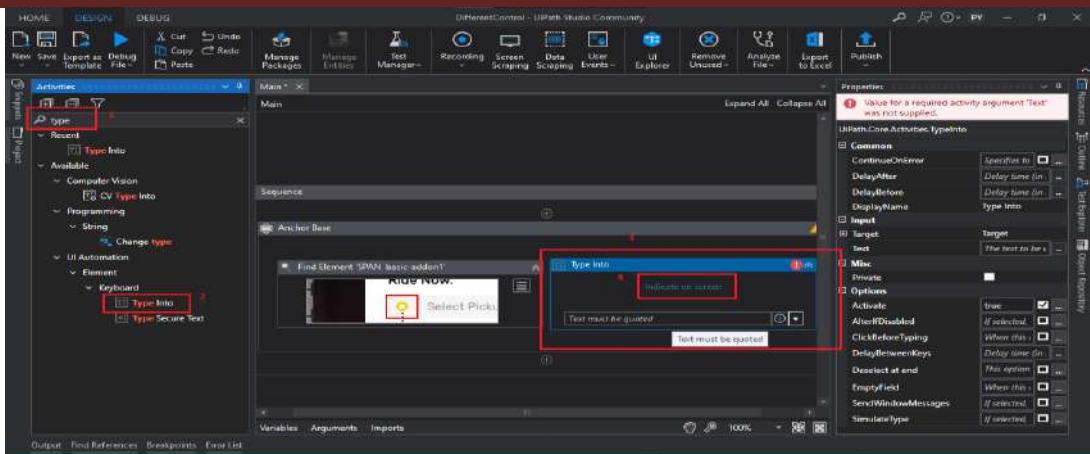
**5. Drag & drop Find Element activity and click on the Indicate on screen**



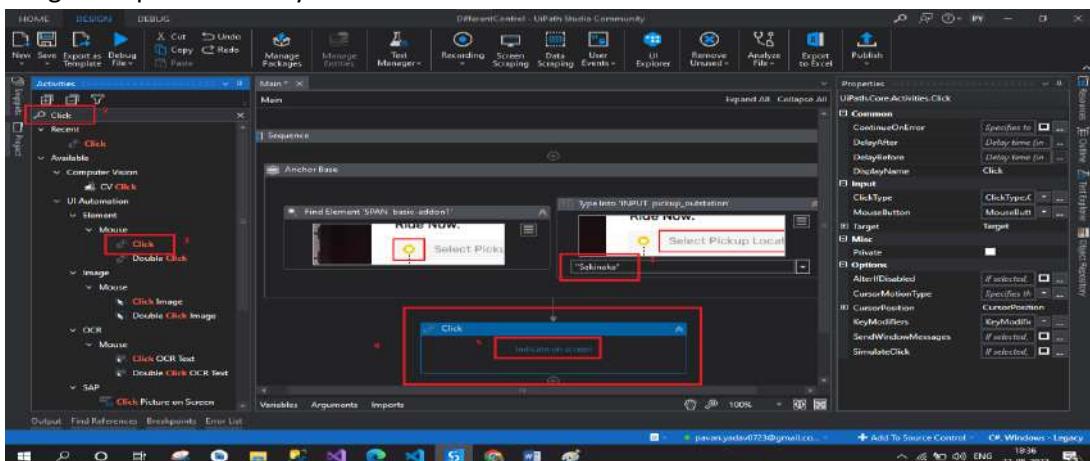
**6. Go to the below URL and add the element.**



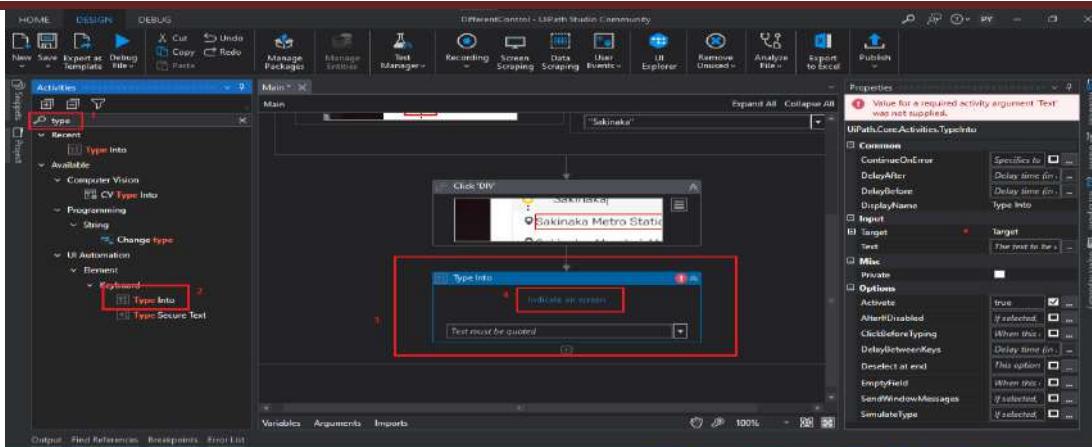
**7. Drag & drop Type into Activity and click on the Indicate on screen**



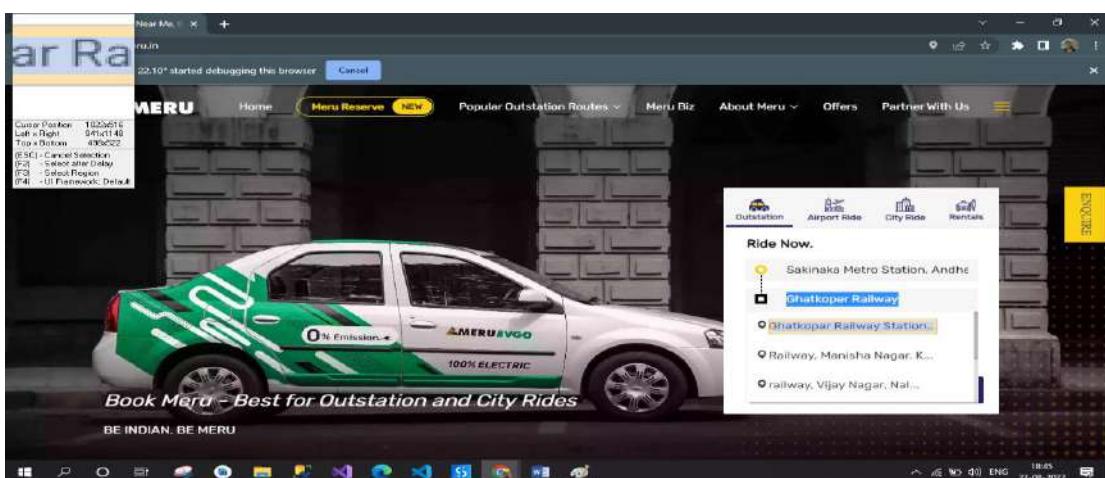
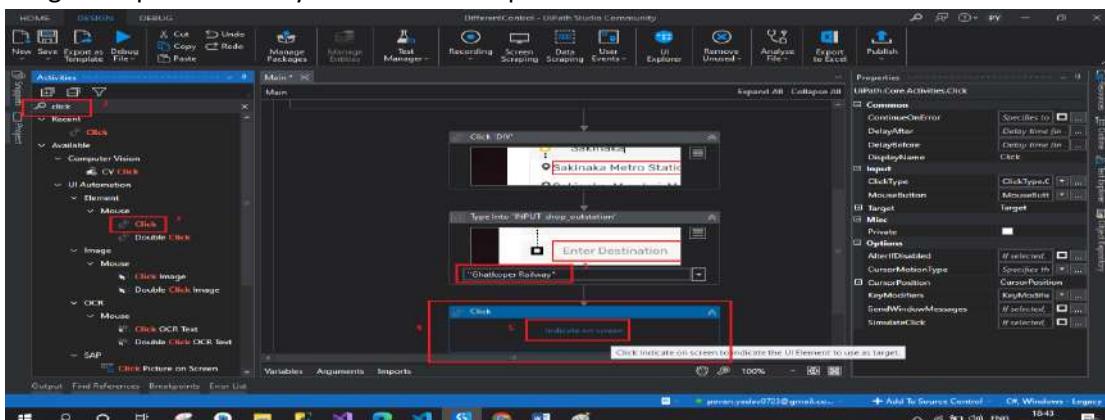
## 8. Drag & drop Click activity. Click on the location.



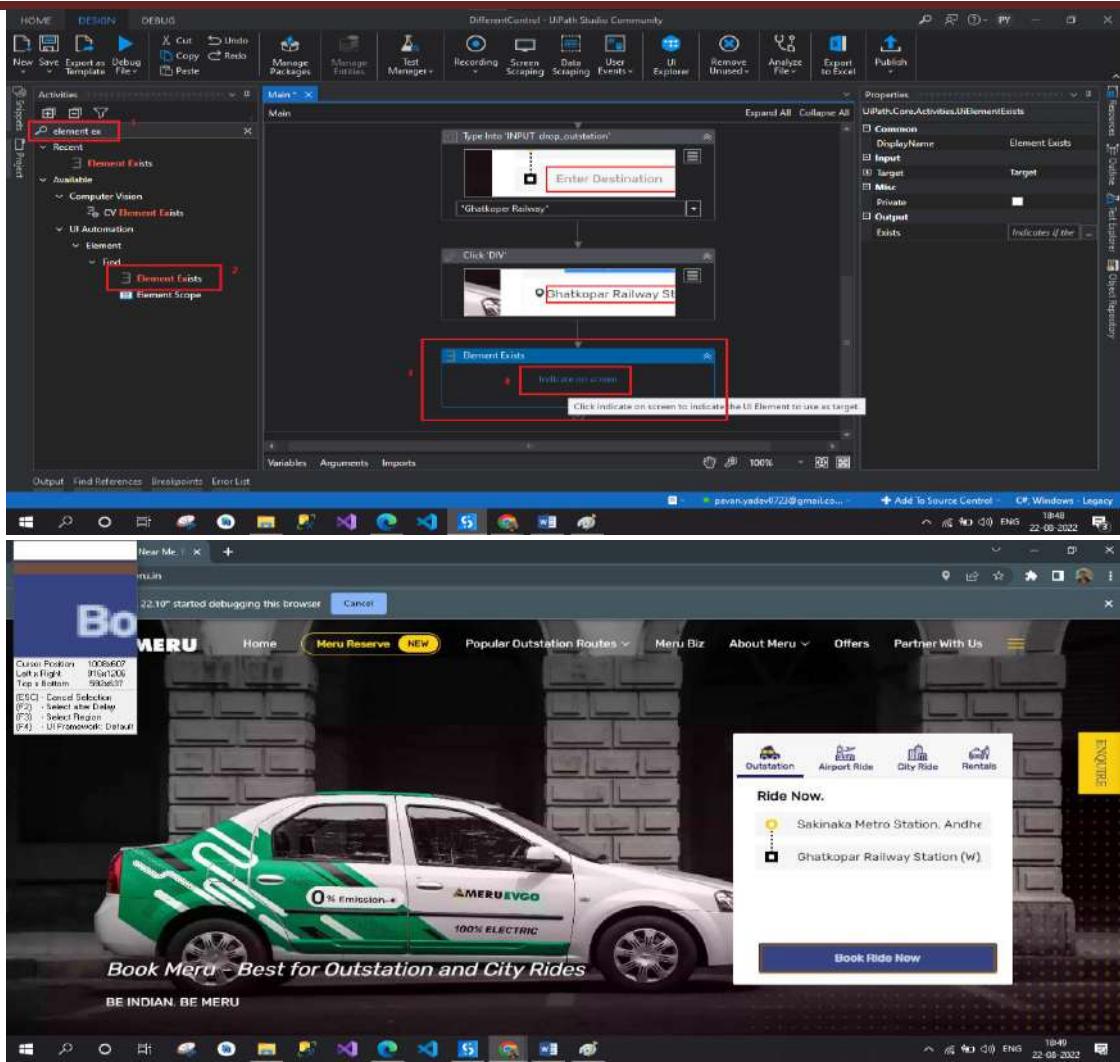
## 9. Drag & drop Type Into activity



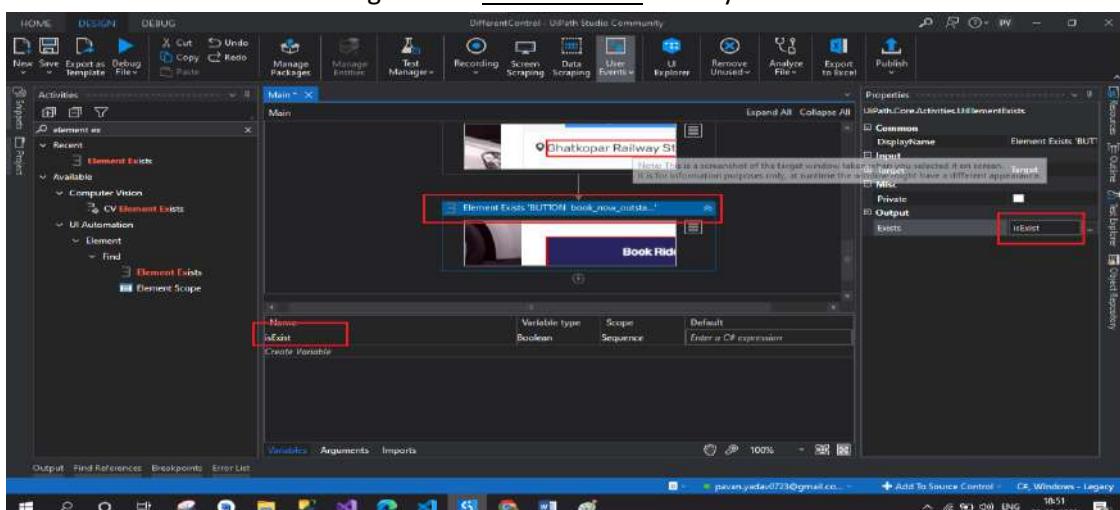
10. Drag & drop Click activity. Click on the drop location.



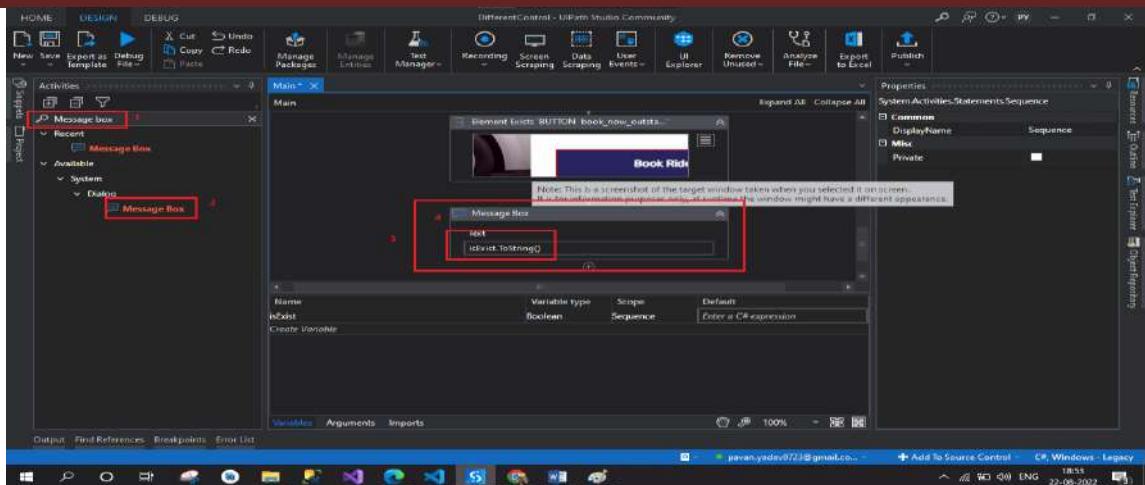
11. Drag & drop the Element Exist activity



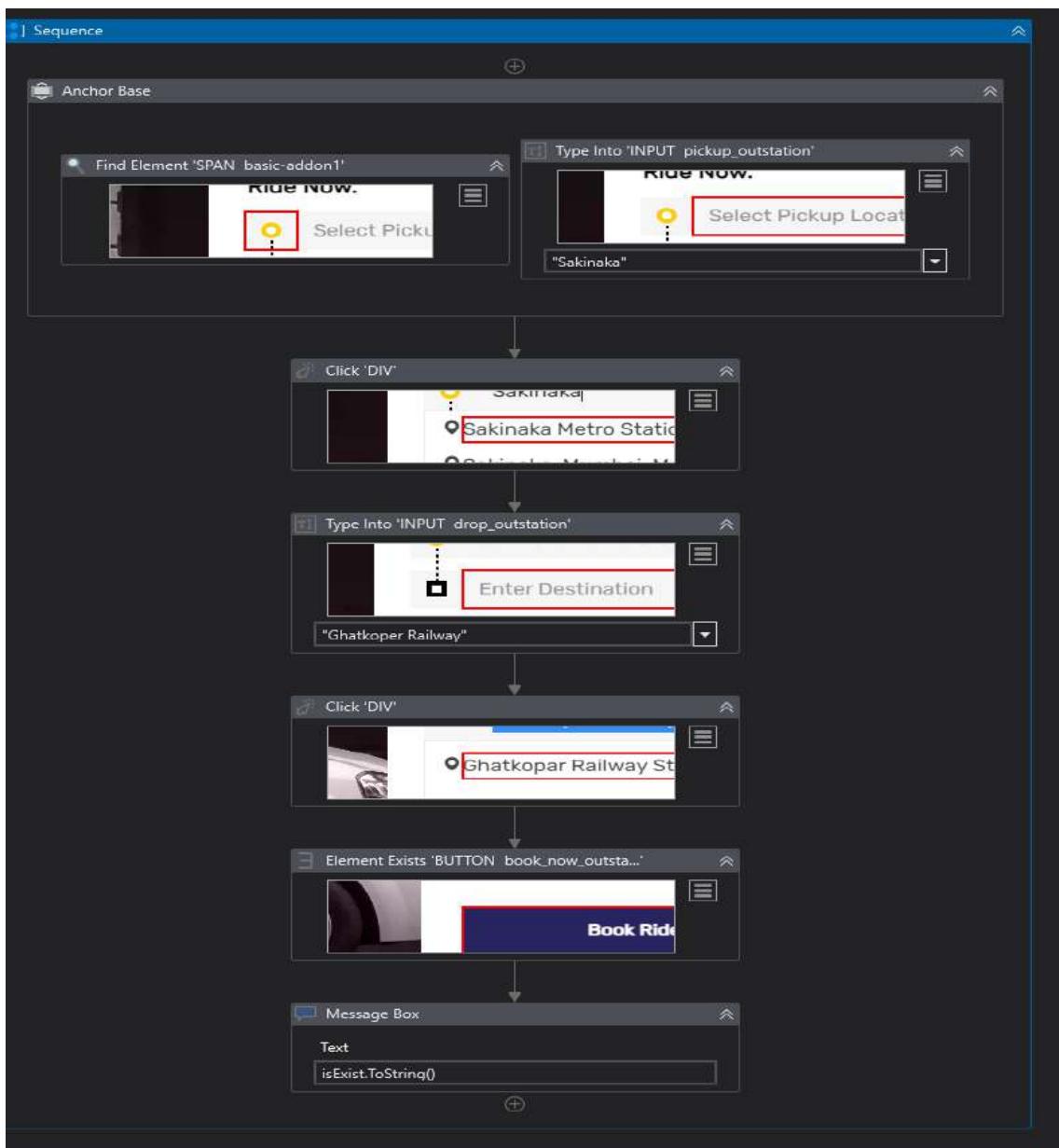
**12. Create a new variable and assign to the Element Exist activity**



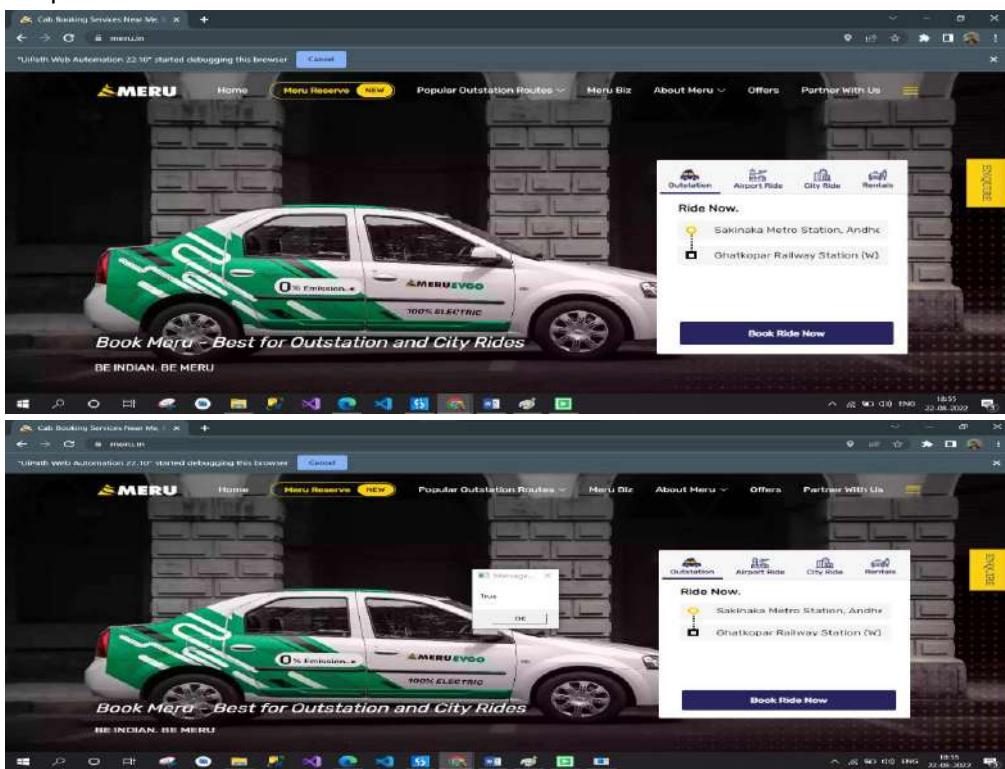
**13. Drag & drop Message Box activity**



## 14. Overview

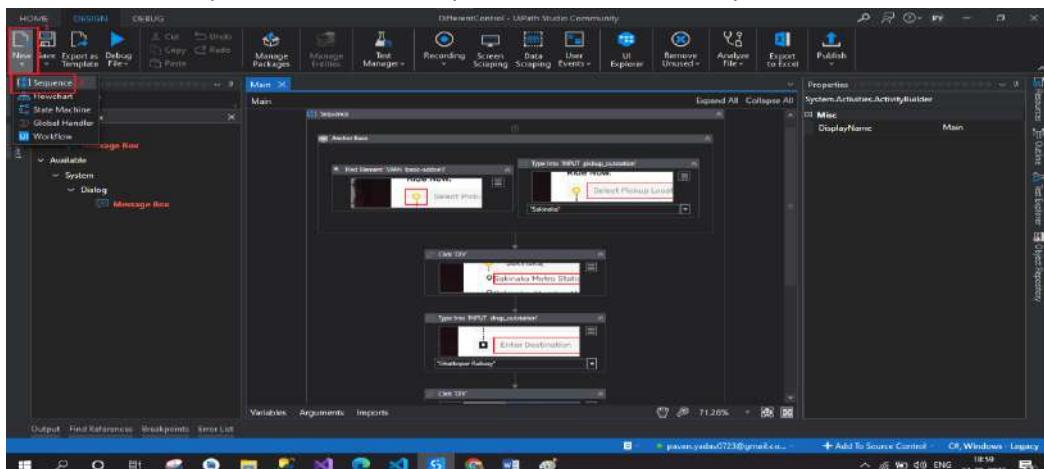


## 15. Output

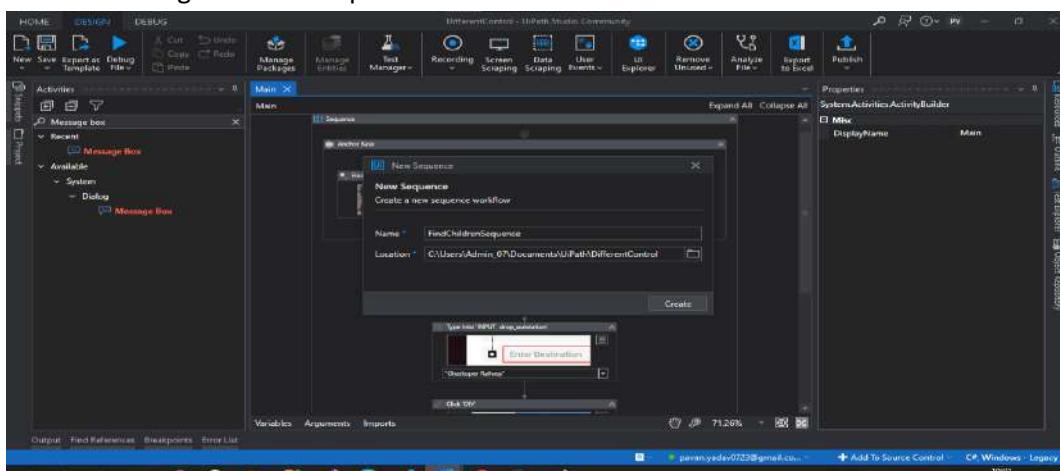


## Find Children activity

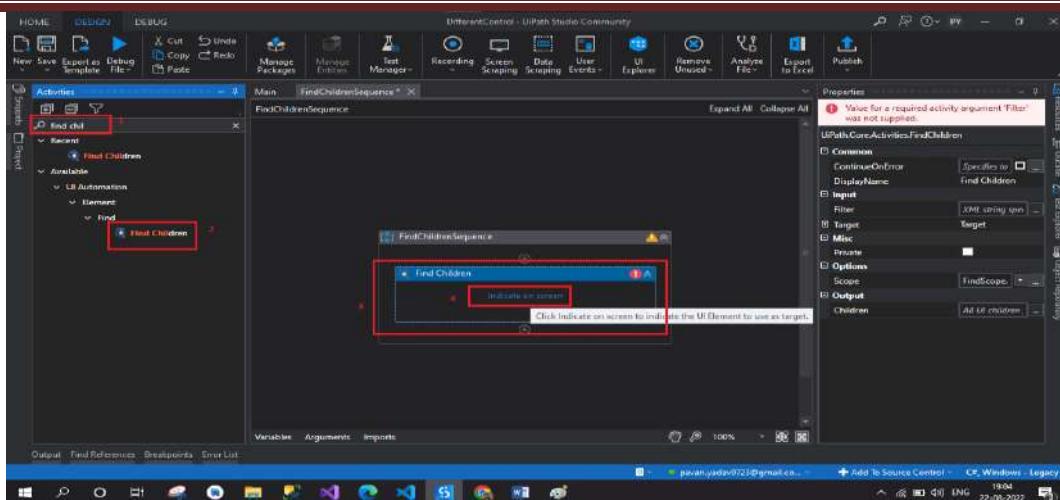
- Create a New sequence. Go to New option and select the Sequence



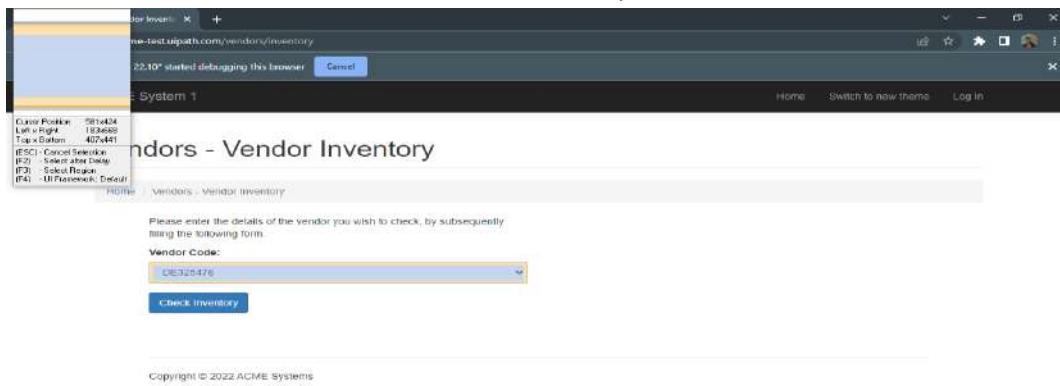
- Write following detail of the process.



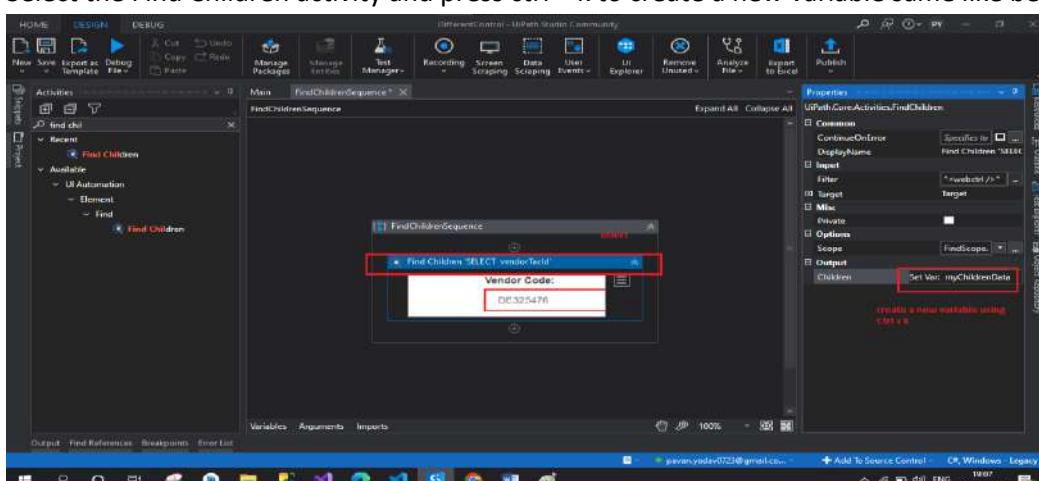
- Drag & drop Find Children activity



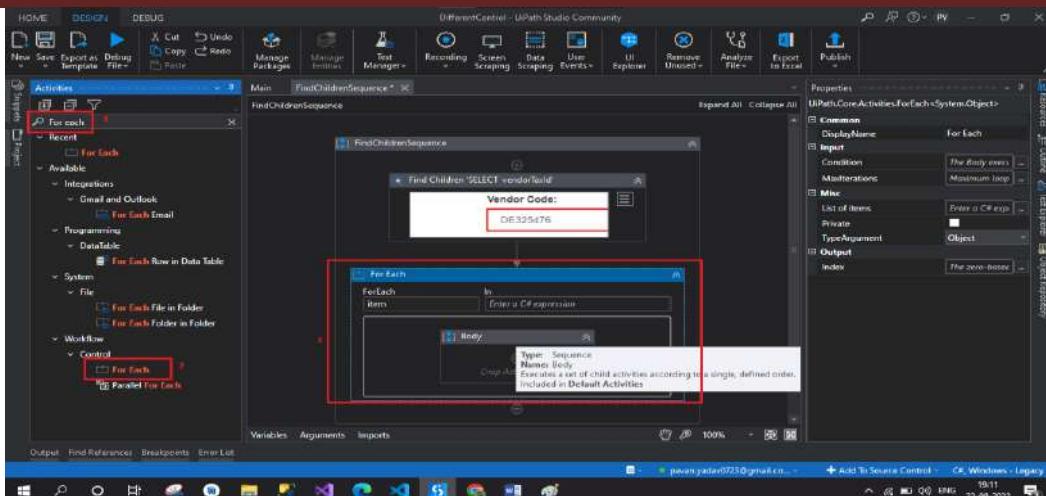
4. Go to the below URL. <https://acme-test.uipath.com/vendors/inventory>
5. Attach the Vendor Code to the Find Children activity.



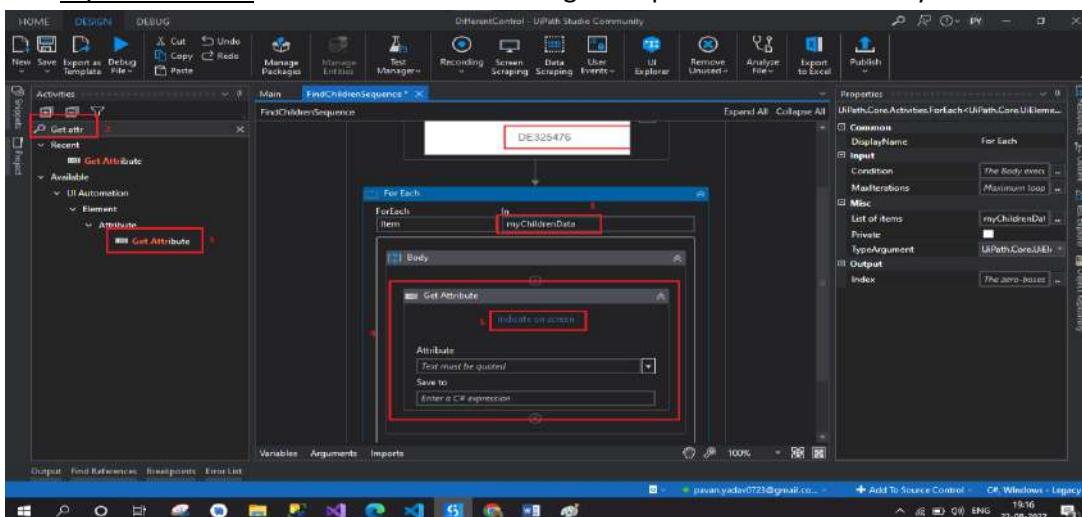
6. Select the Find Children activity and press **ctrl + k** to create a new variable same like below image



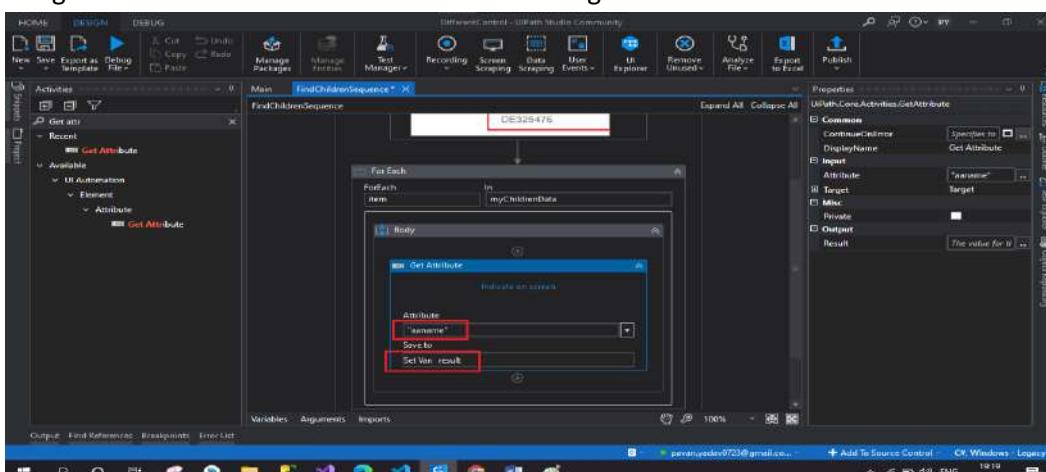
7. Drag & drop **For Each Loop** activity



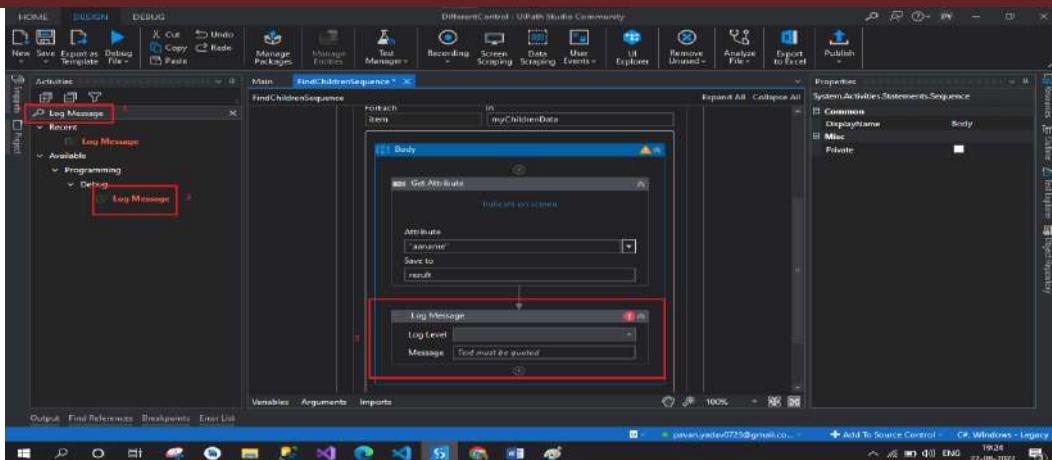
8. Add myChildrenData variable to the In and Drag & drop Get Attribute activity



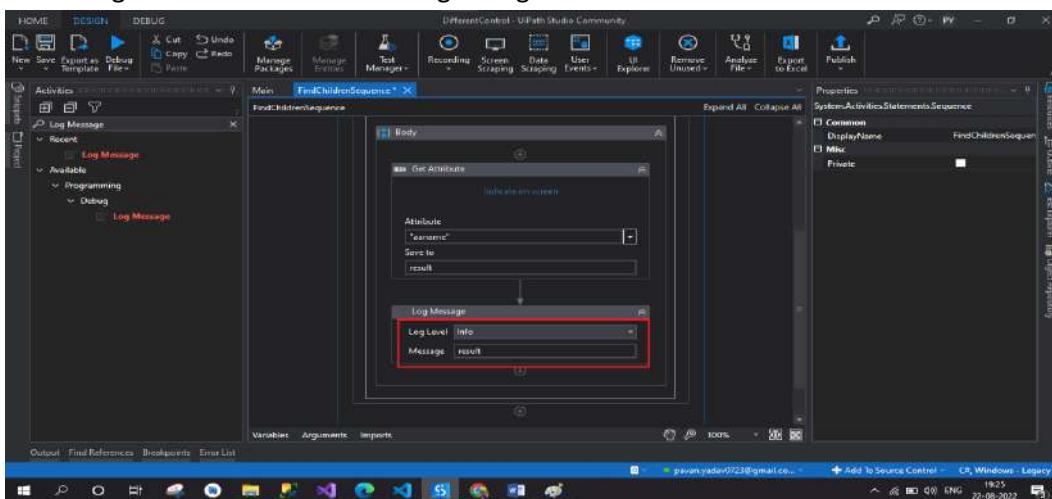
9. Assign a Attribute and create a new variable using **ctrl + k**



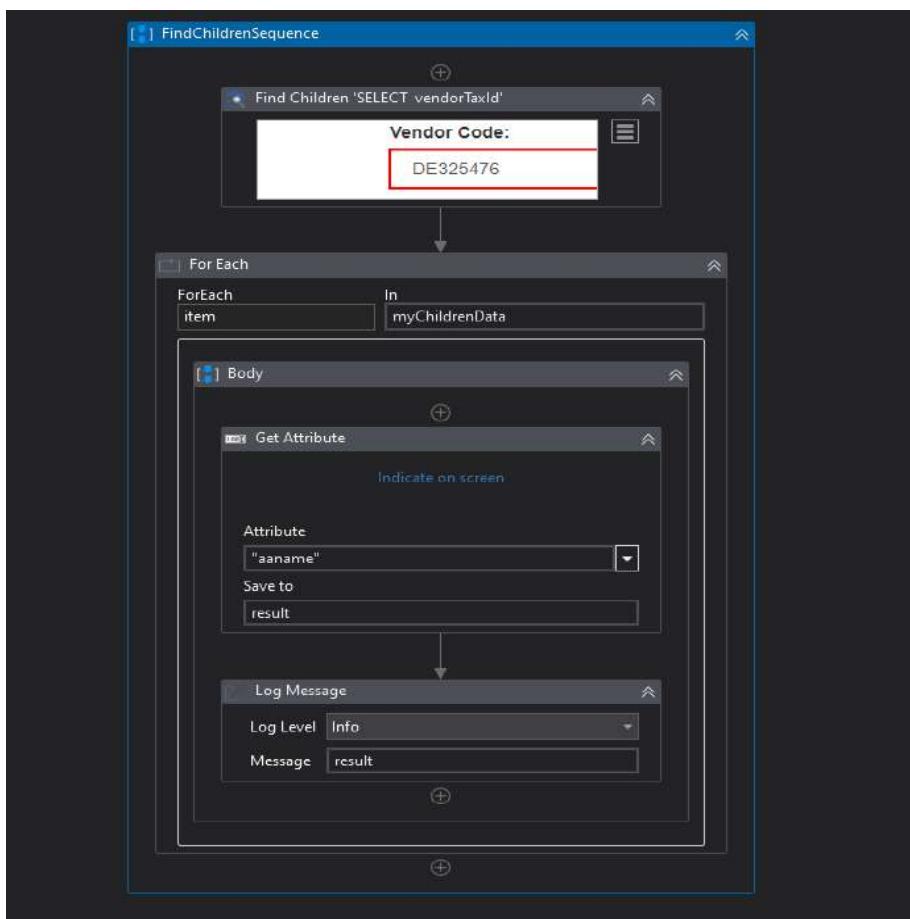
10. Drag & drop Log Message activity.



11. Select Log level as info and in Message assign result variable



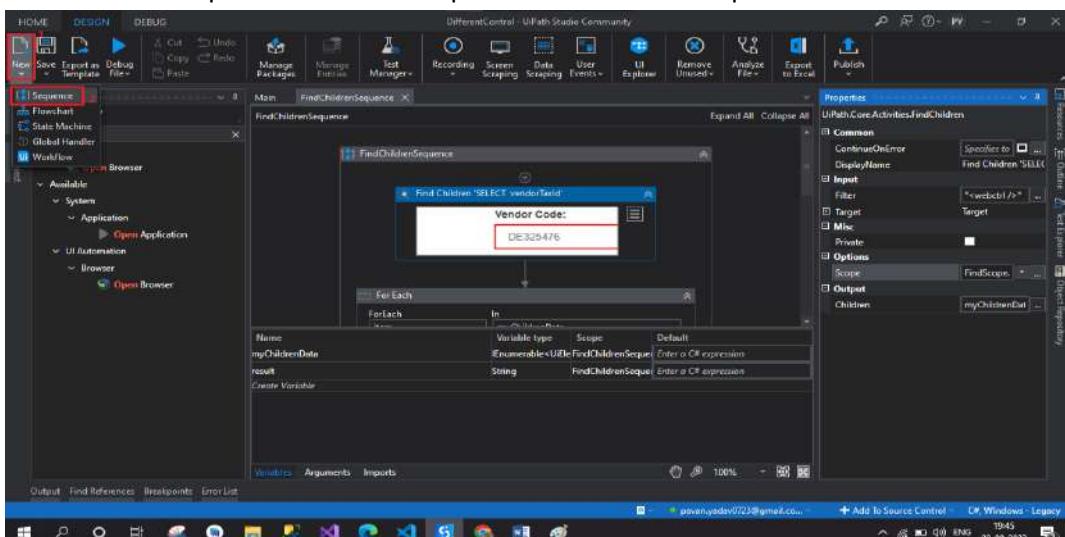
## 12. Overview



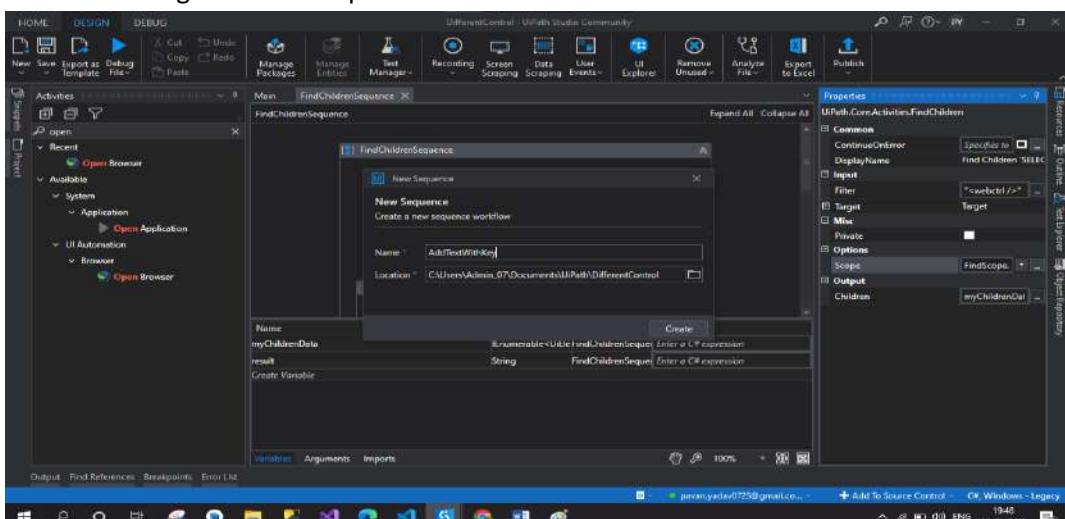
## 13. Output

**Add text**

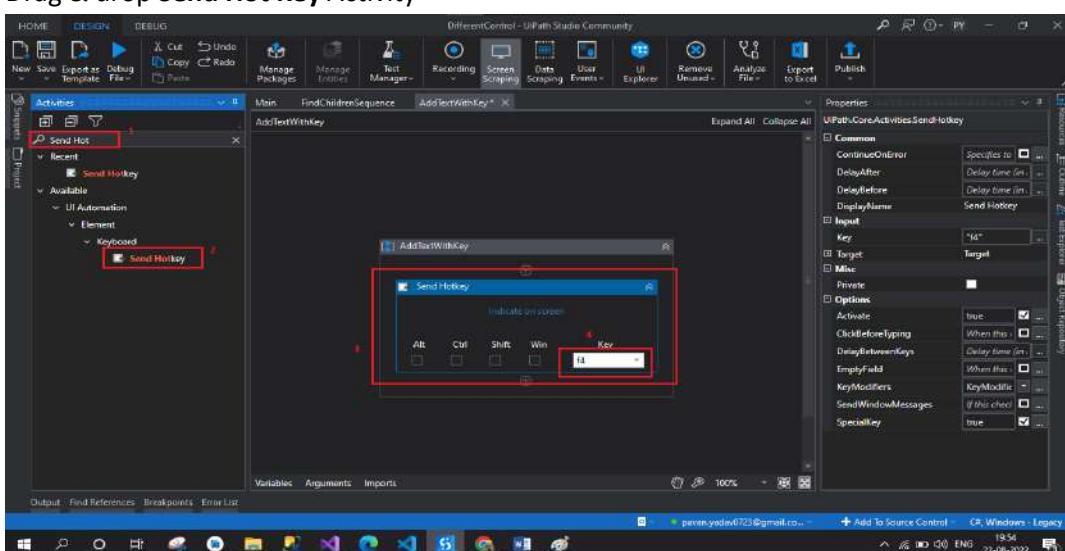
- Create a New sequence. Go to New option and select the Sequence



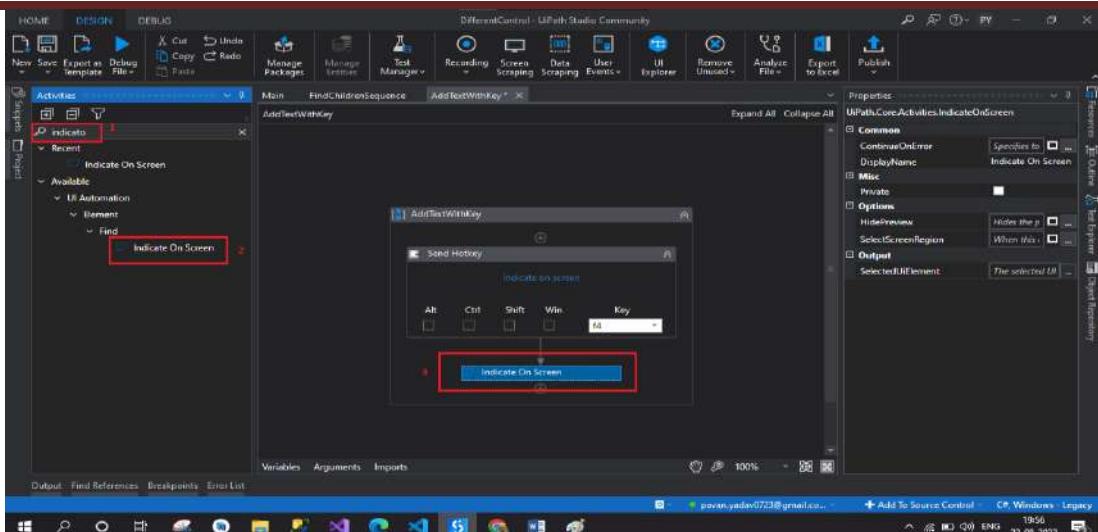
- Write following detail of the process.



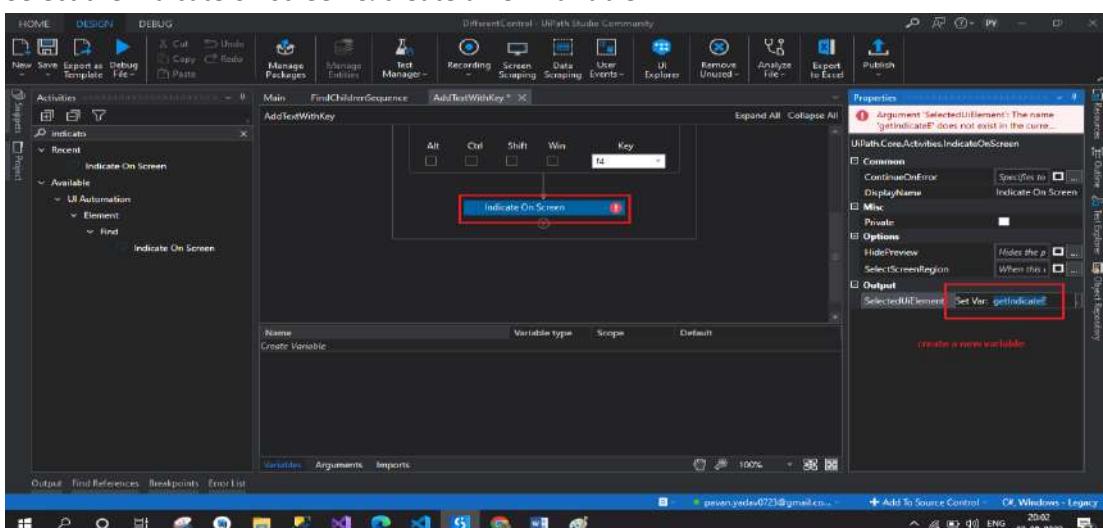
- Drag & drop Send Hot Key Activity



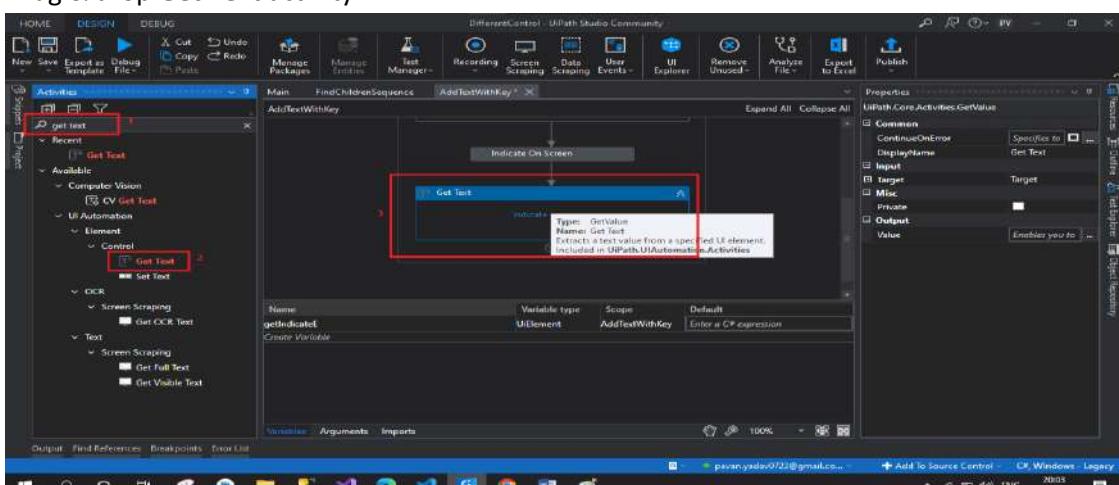
- Drag & drop Indicate on Screen Activity



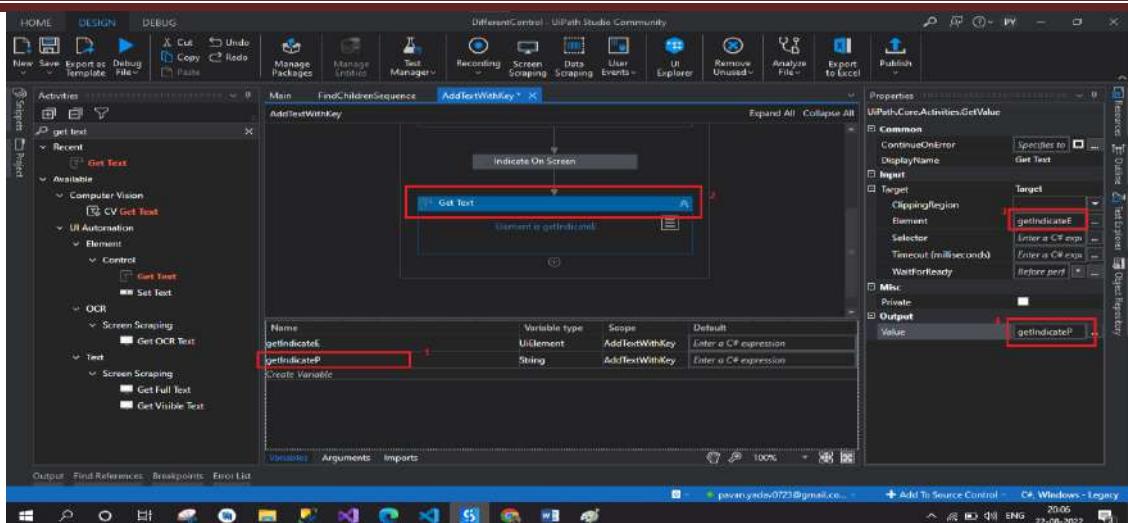
### 5. Select the indicate on screen & create a new variable



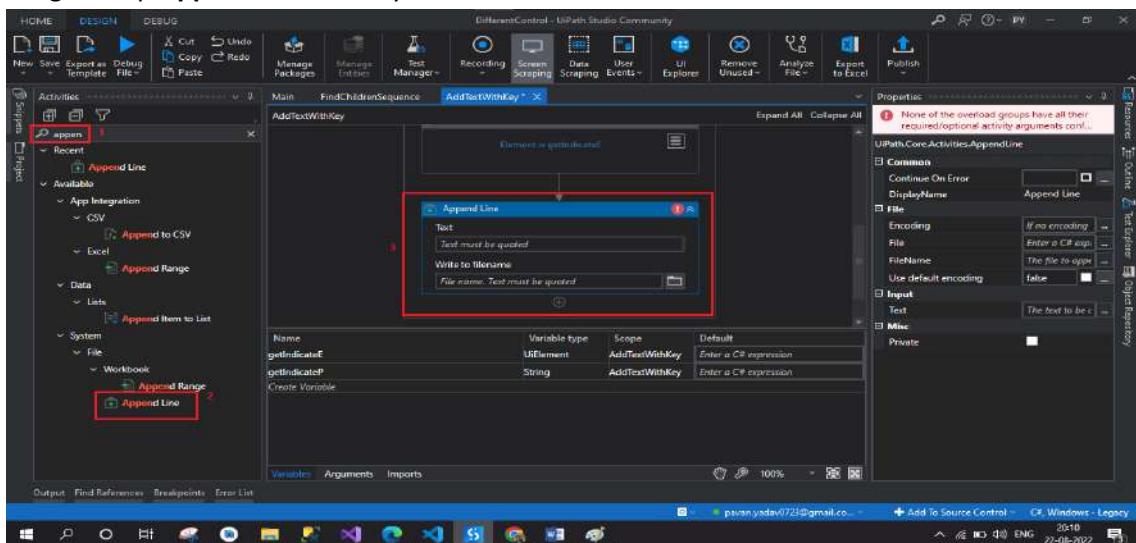
### 6. Drag & drop Get Text activity



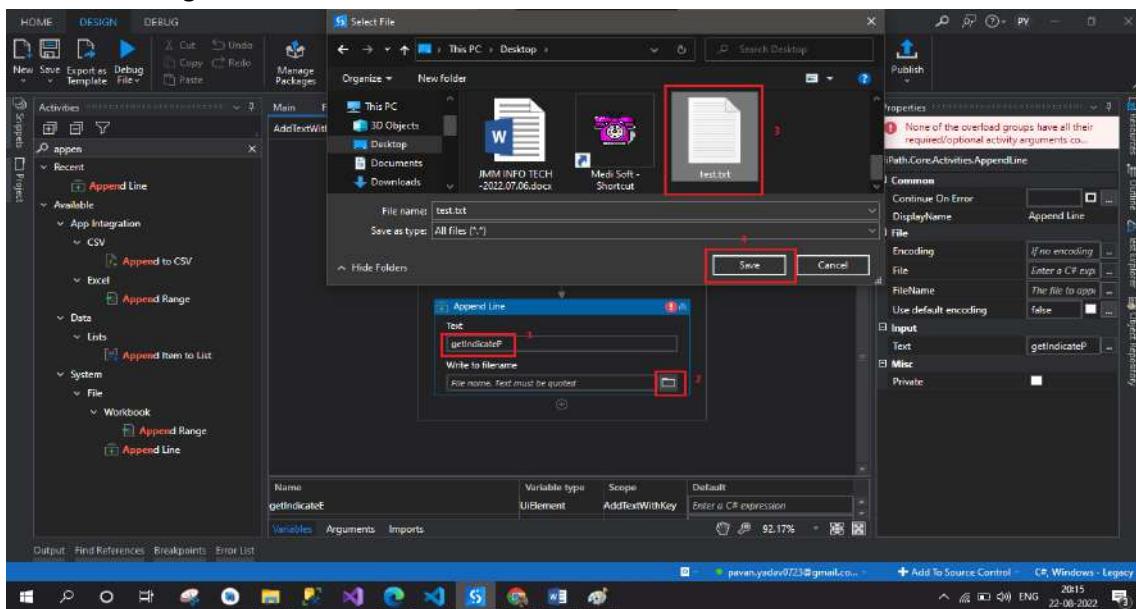
### 7. Properties of Get Text activity give getIndicateE within element box and within value create variable getIndicatedP



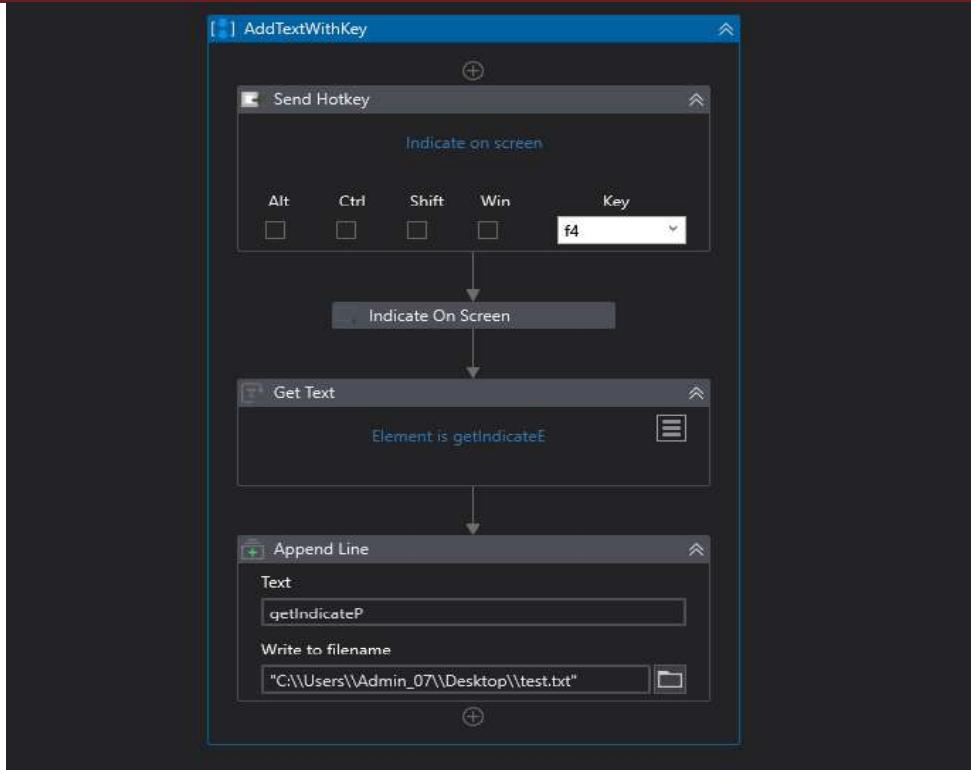
## 8. Drag & drop Append Line activity



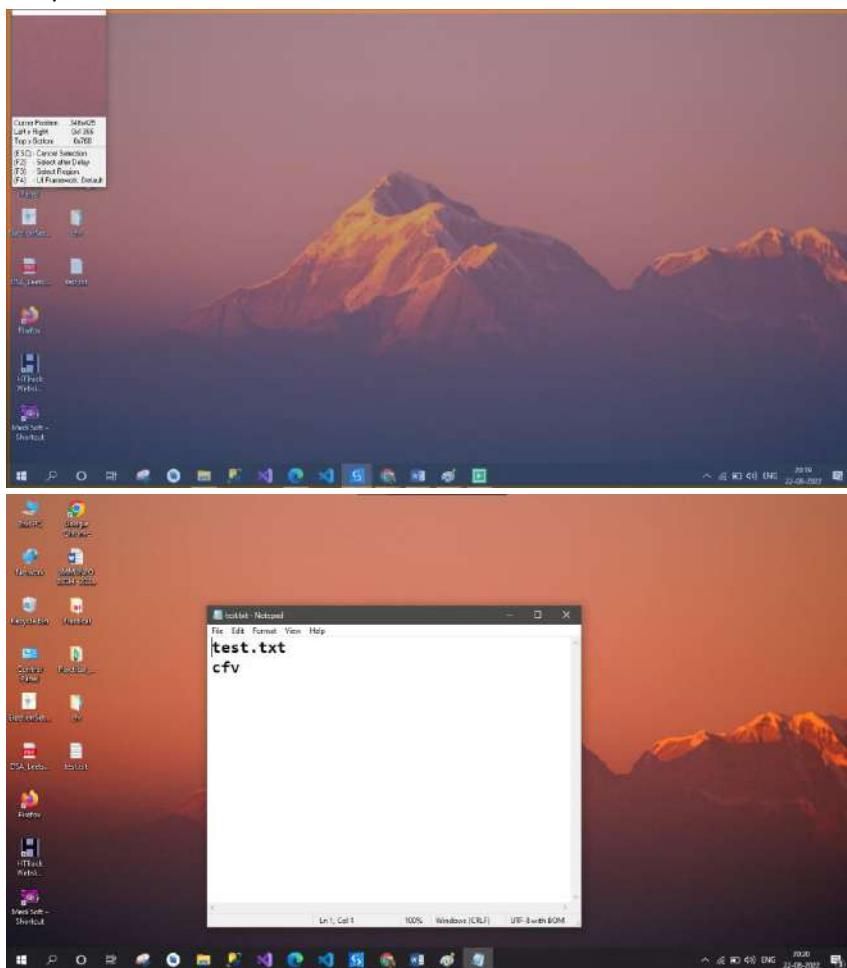
## 9. Within text add getIndicateP and browse to the newly created text file. Within properties at the text box give variable name getIndicateP



## 10. Overview

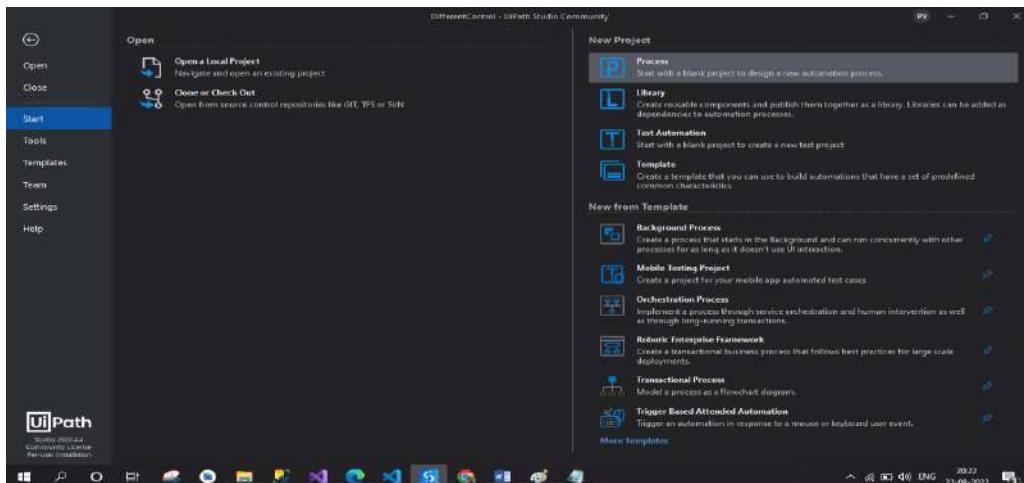


### 11. Output

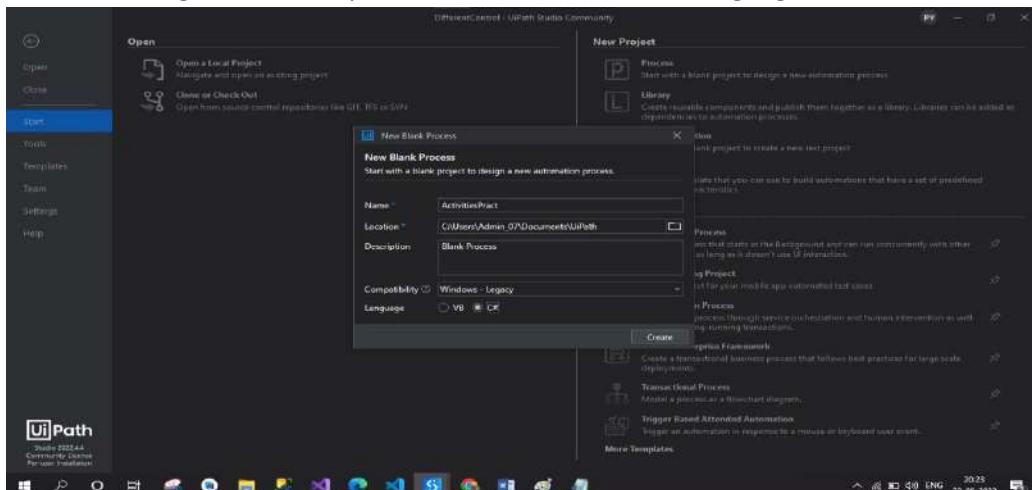


## C] Demonstrate the following activities in UI Path:

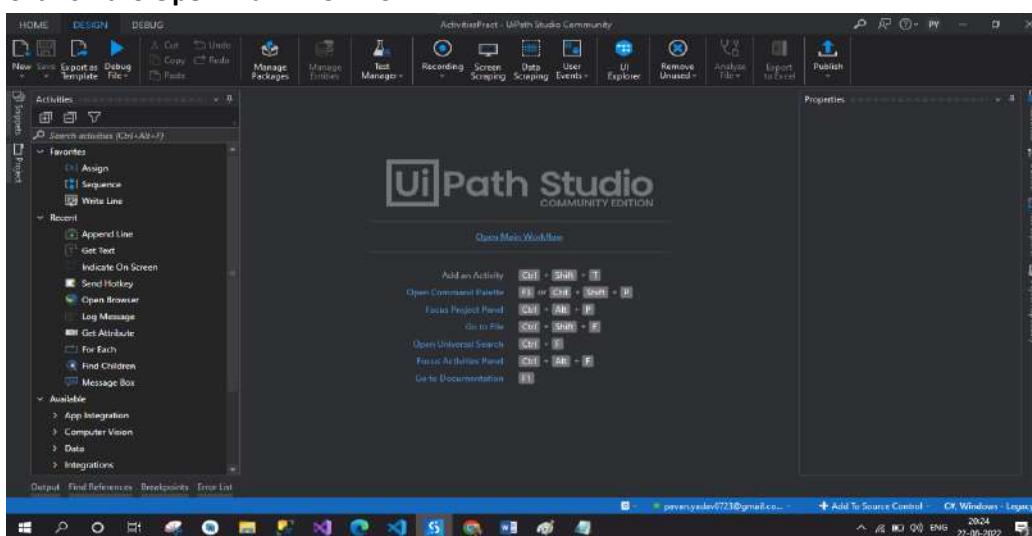
1. Mouse (click, double click and hover)
2. Type into
3. Type Secure text
1. Click on the Process to New Project



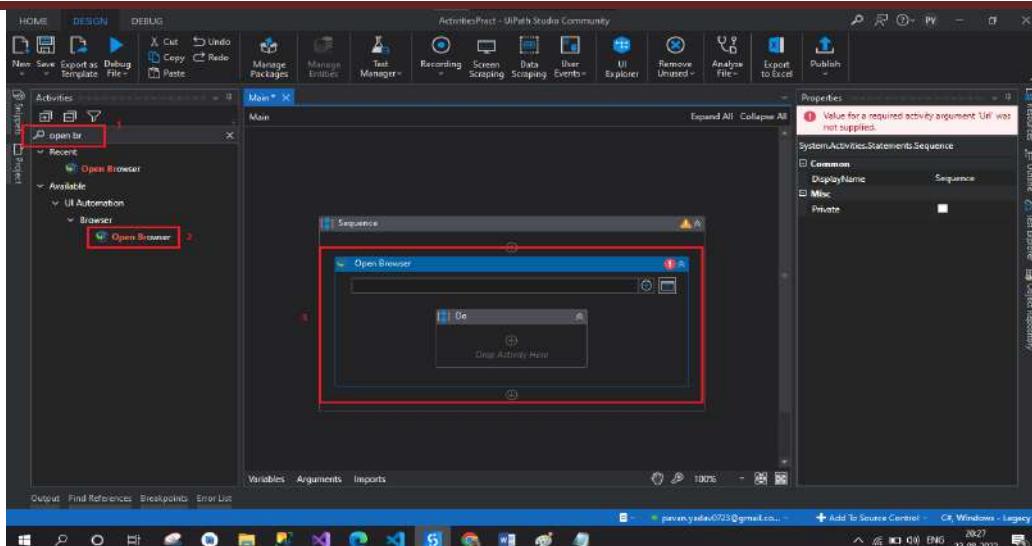
2. Write following detail of the process. Note: Select the C# Language



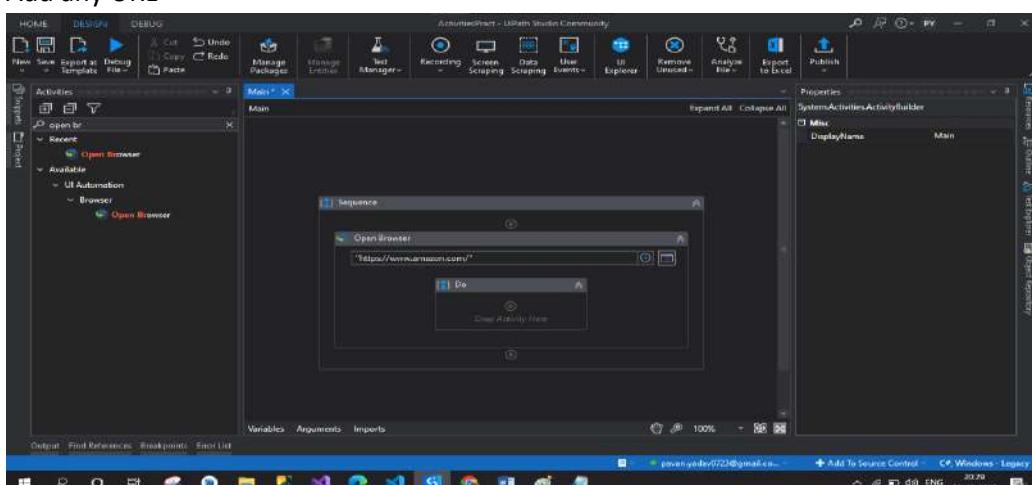
3. Click on the Open Main Workflow



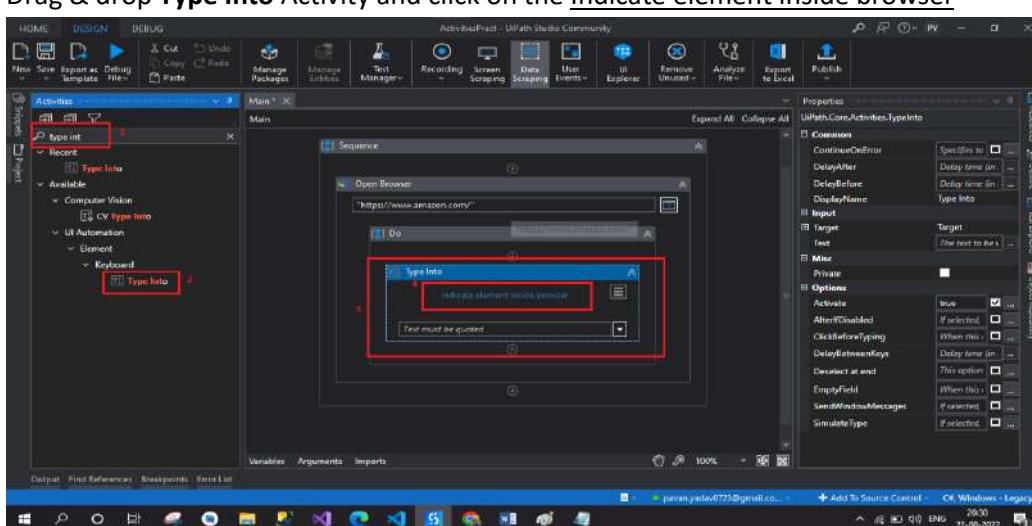
4. Drag & Drop Open Browser activity

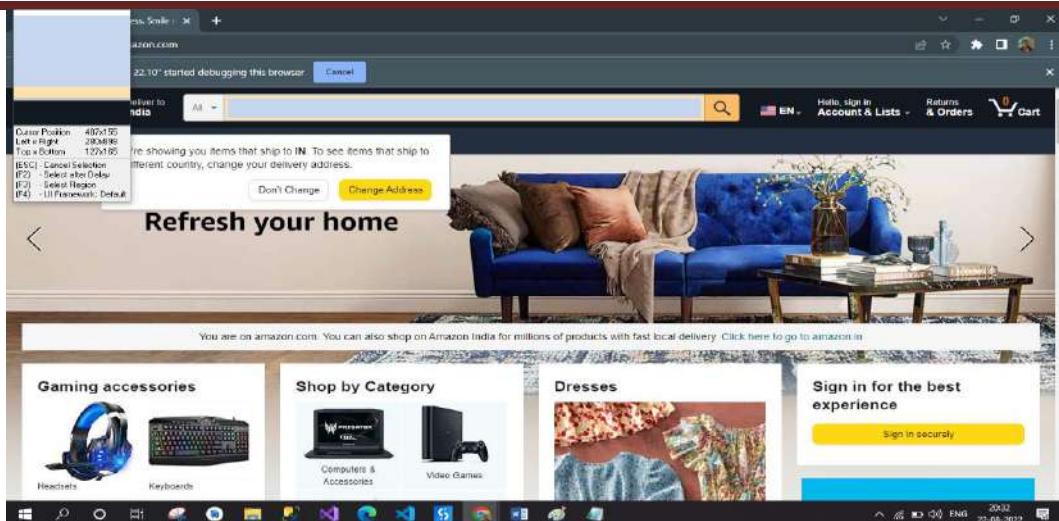


5. Add any URL

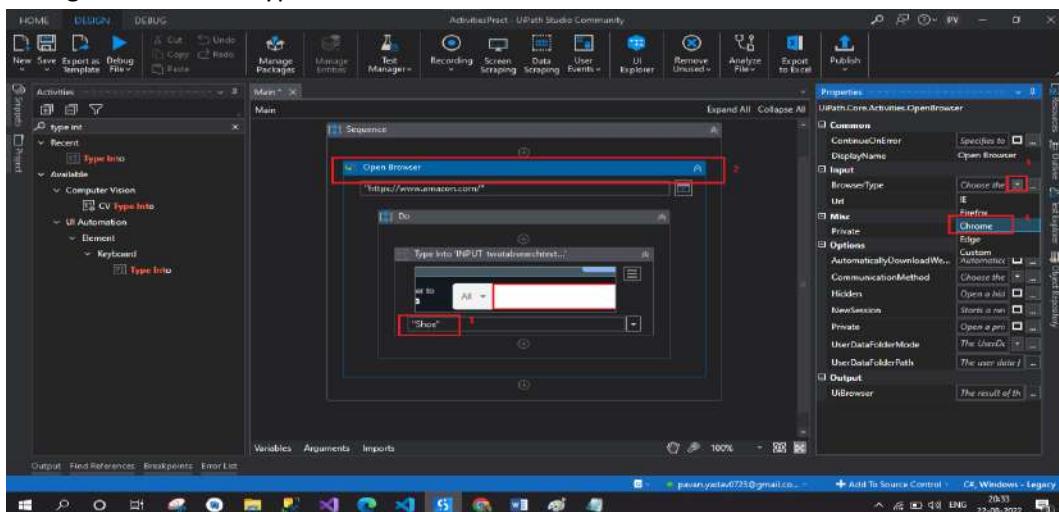


6. Drag & drop **Type Into** Activity and click on the Indicate element inside browser

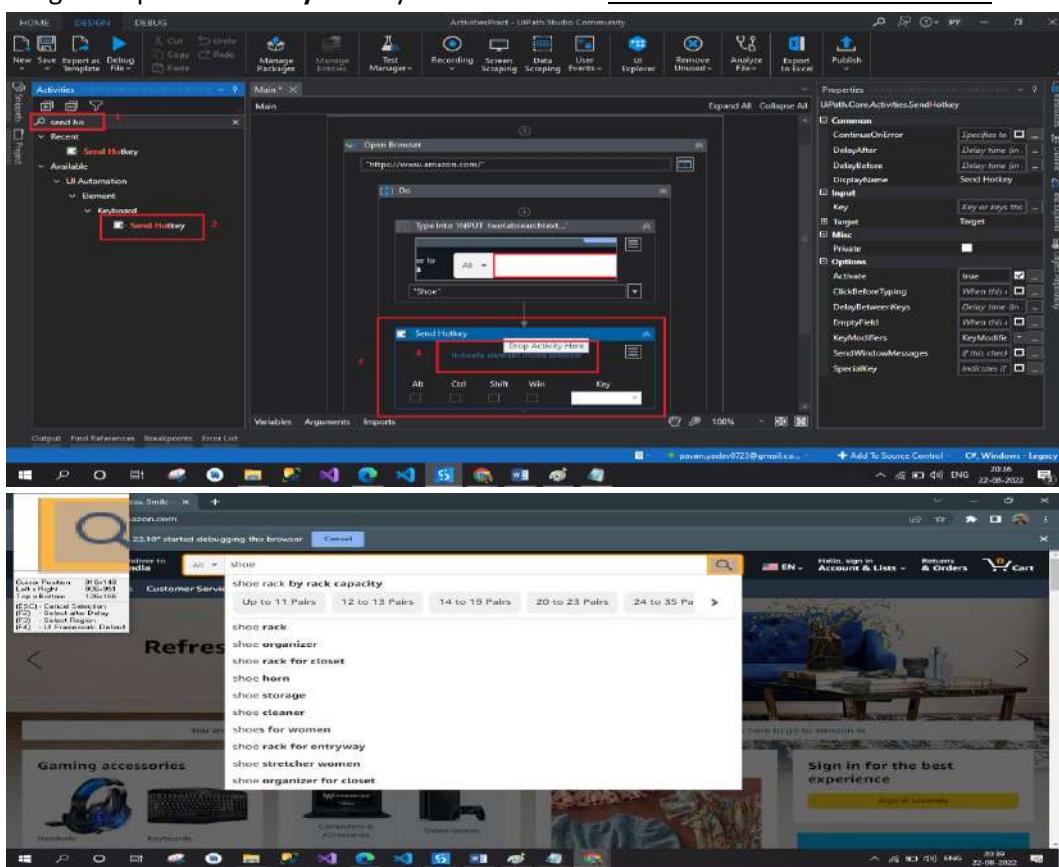




## 7. Change the Browser type i.e. Chrome

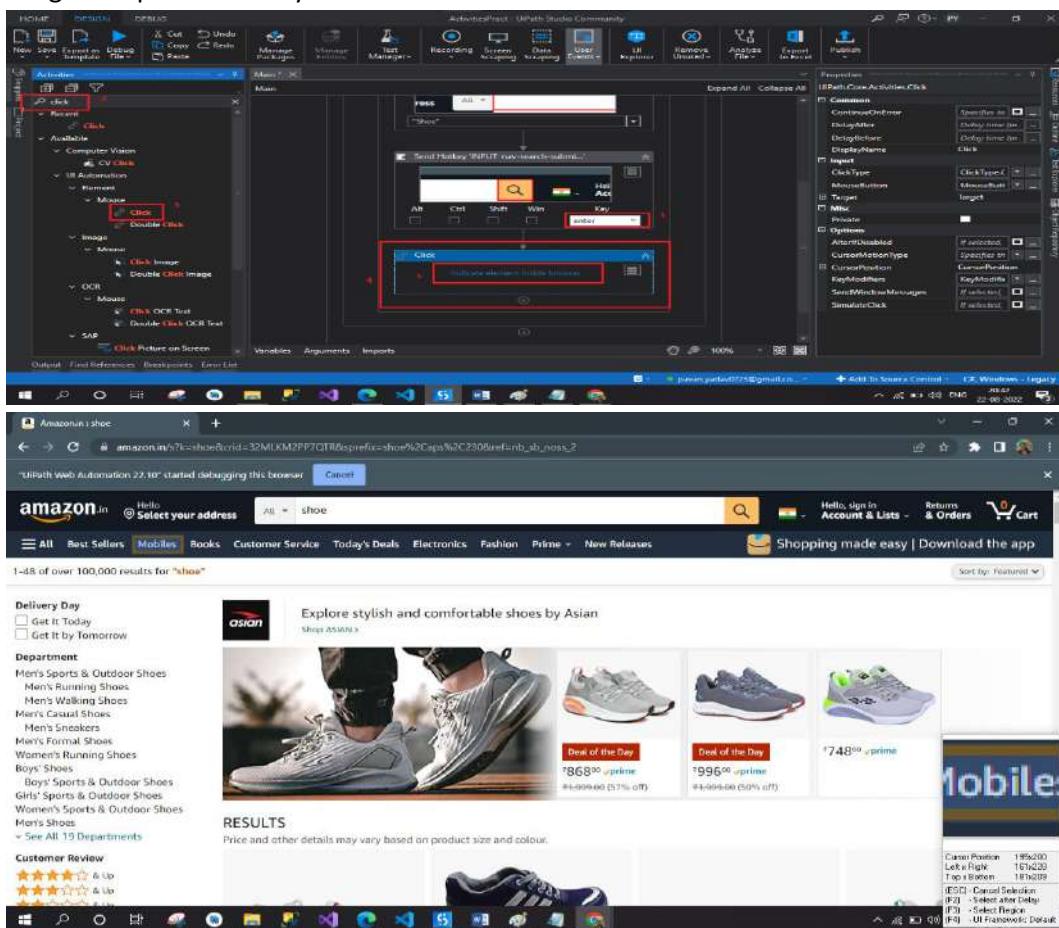


## 8. Drag & drop Send HotKey activity and click on the Indicate element inside browser

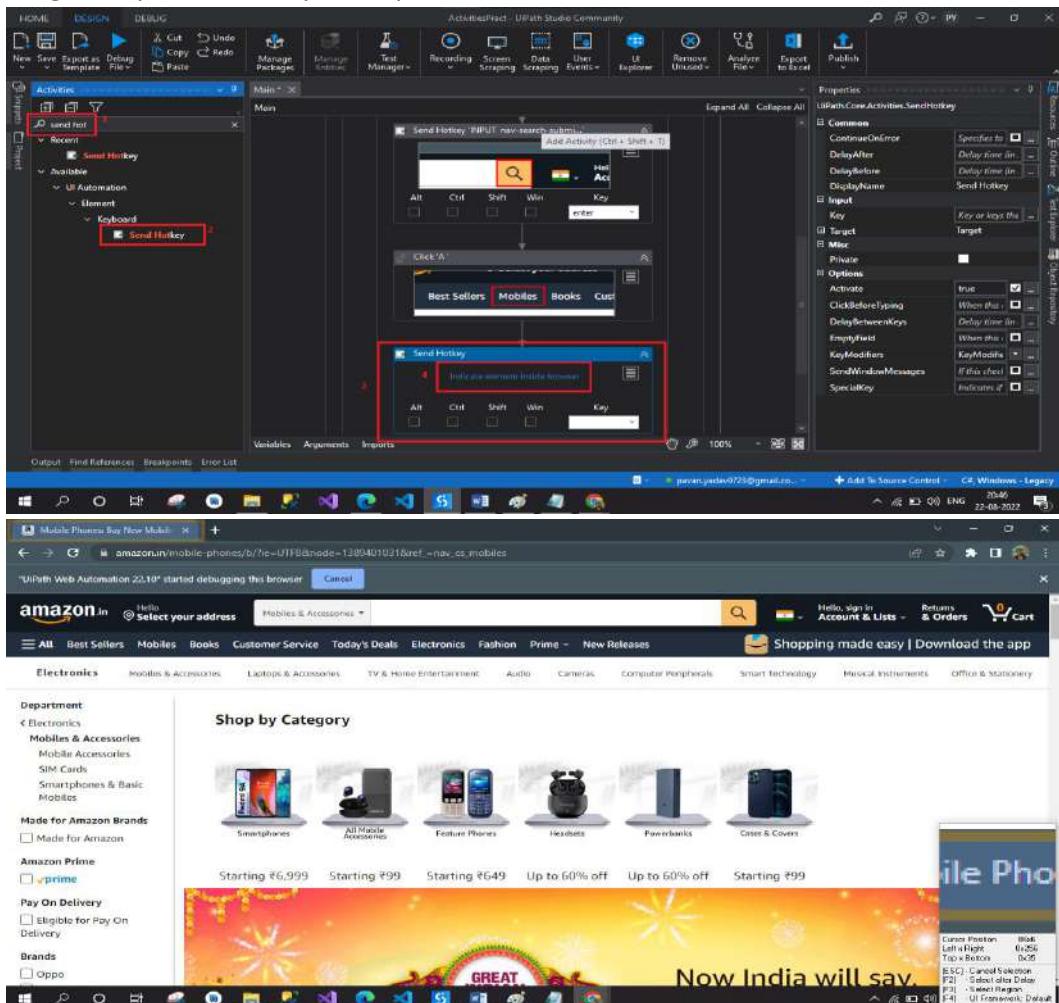


Note: change Open browser url <https://www.amazon.in/>

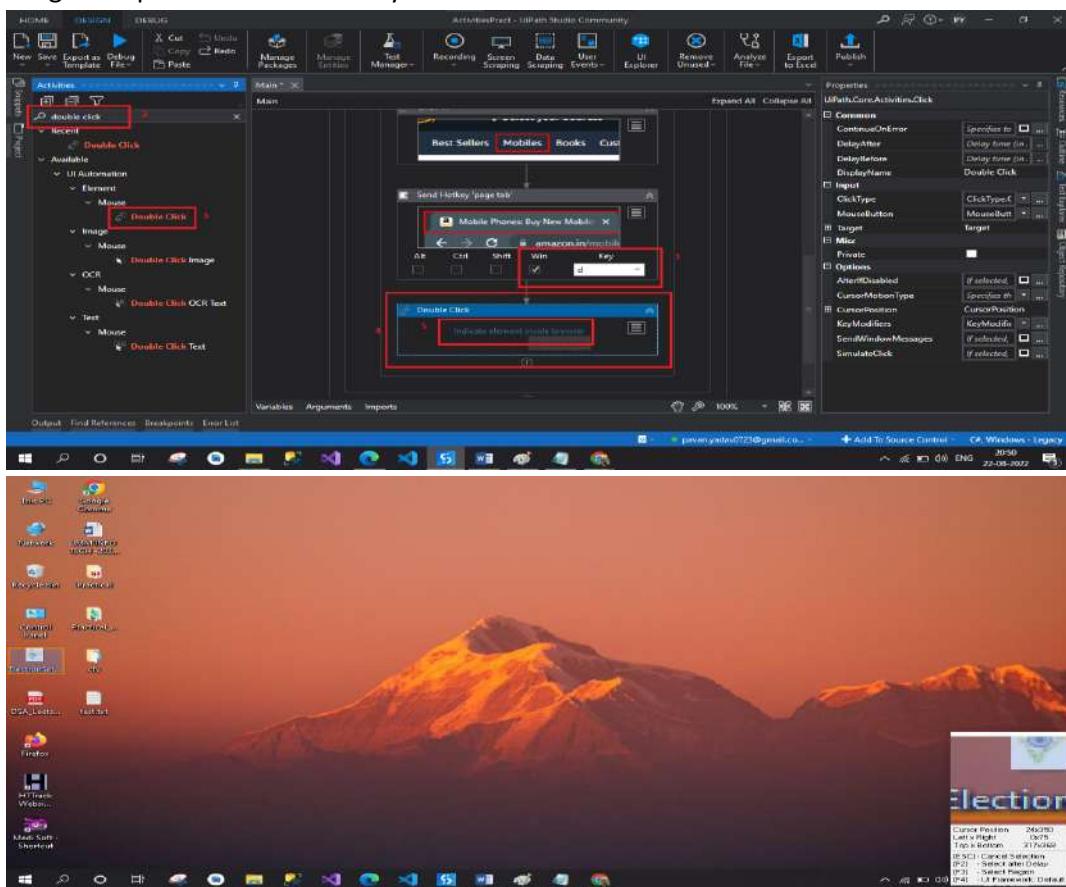
## 9. Drag &amp; drop Click activity



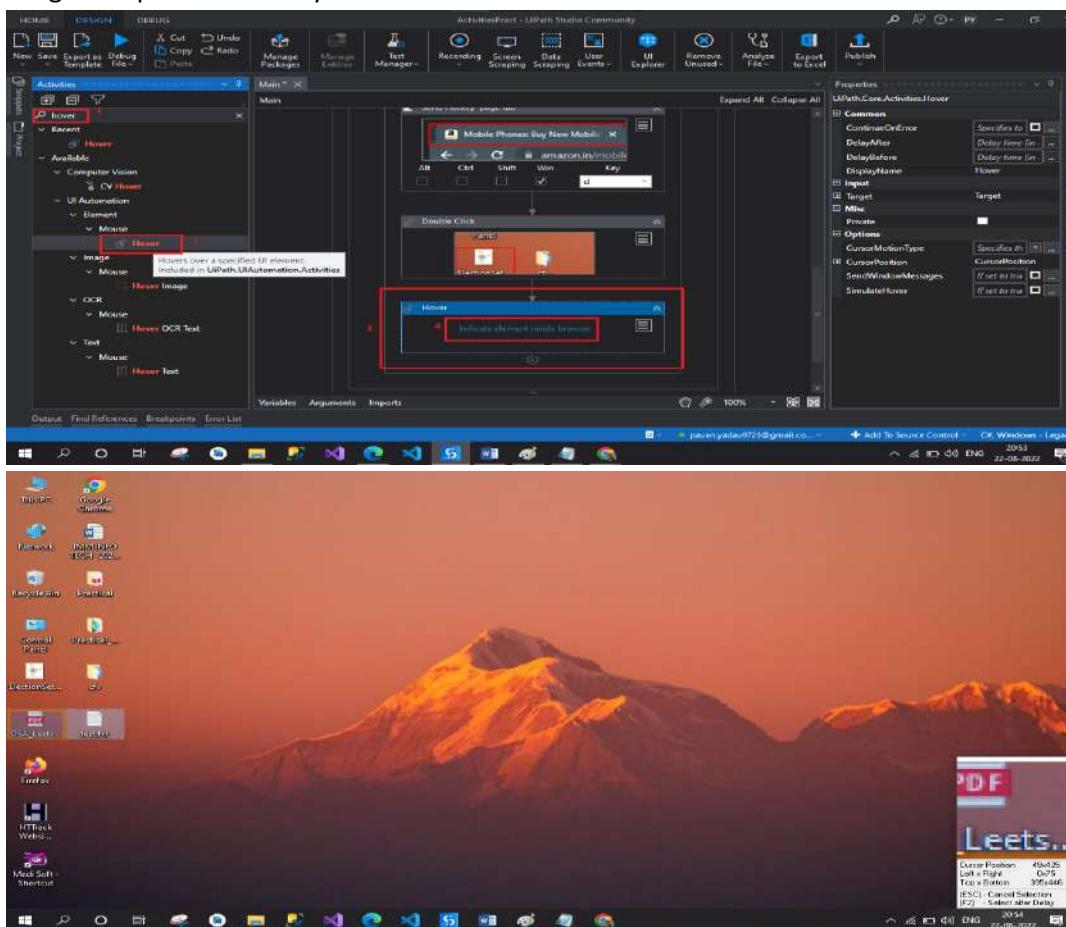
## 10. Drag &amp; drop Send HotKey activity



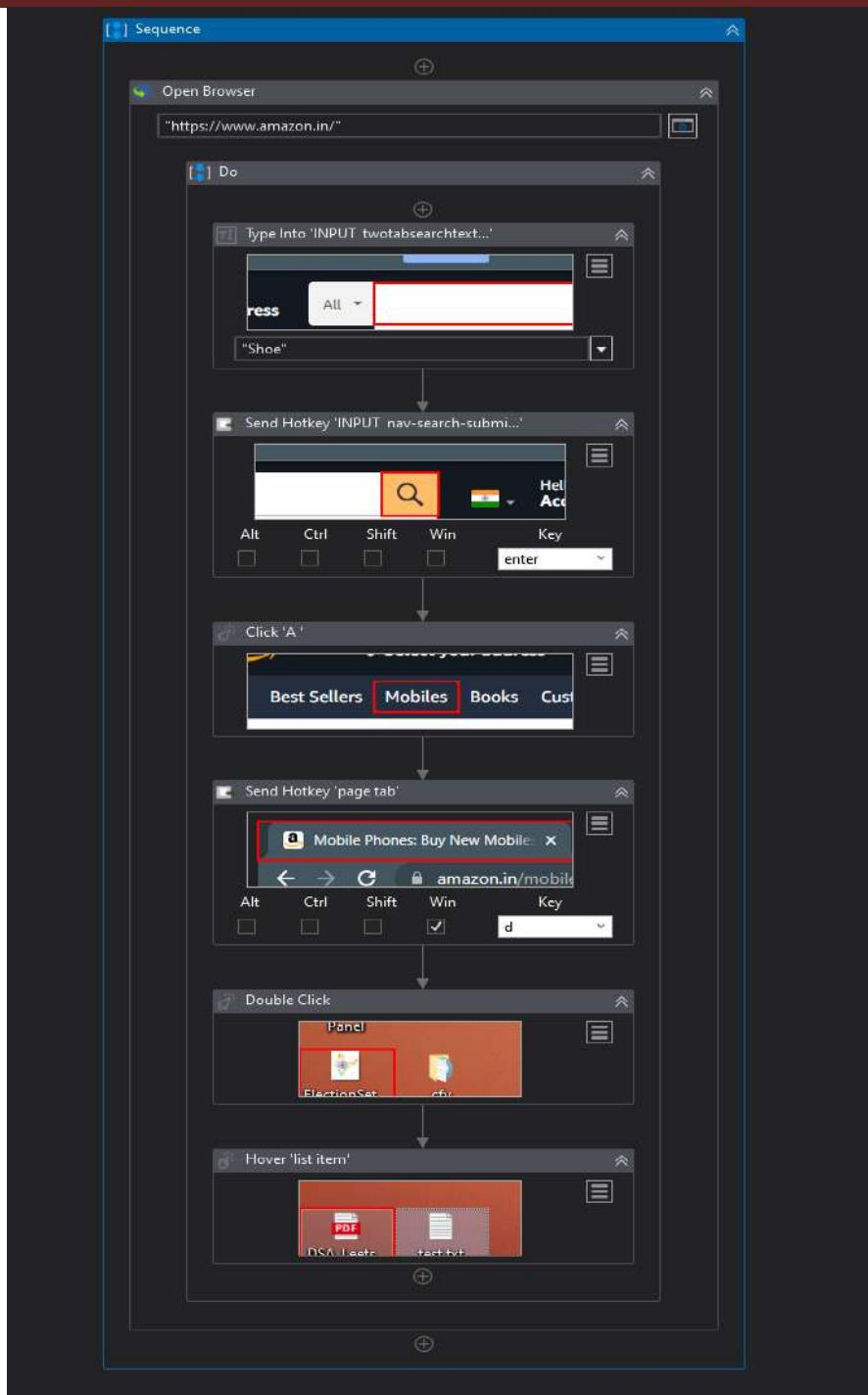
### 11. Drag & drop Double Click activity



### 12. Drag & drop Hover activity



### 13. Overview



#### 14. Output

The screenshot shows a search results page on the Amazon.in website. The search term 'Shoe' has been entered into the search bar. The results are sorted by 'Featured'. A banner for 'JOCKEY' is displayed, showing a man in a white t-shirt and blue shorts sitting on a red bench, with the text 'Easy breezy effortless summer styles' and 'Shop Jockey'. Three products are listed below the banner:

- Jockey Men's Cotton T-Shirt (Maroon) - 5 star rating, 0 reviews, 0 prime.
- Jockey Men's Cotton T-Shirt (Yellow) - 5 star rating, 0 reviews, 0 prime.
- Jockey Men's Regular Fit V Neck Half Sleeved (Teal) - 5 star rating, 54,735 reviews, 0 prime.

A 'RESULTS' section at the bottom notes that prices and other details may vary based on product size and colour. The status bar at the bottom of the screen shows 'Waiting for ask-eu.amazon.in...' and the system clock indicates it is 20:56 on 22-01-2012.

## Practical 8:

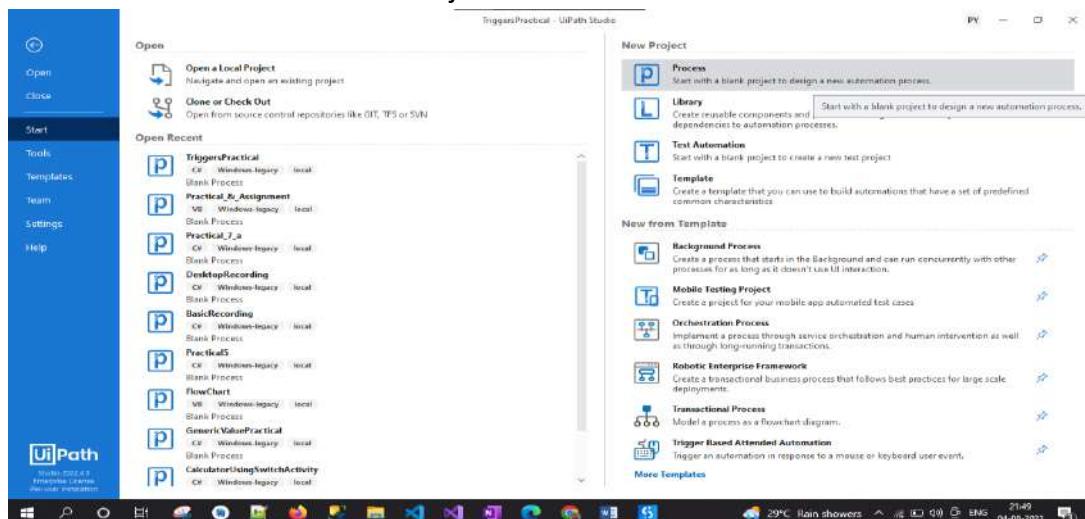
### A] Demonstrate the following events in UI Path:

1. Element triggering event
2. Image triggering event
3. System Triggering Event

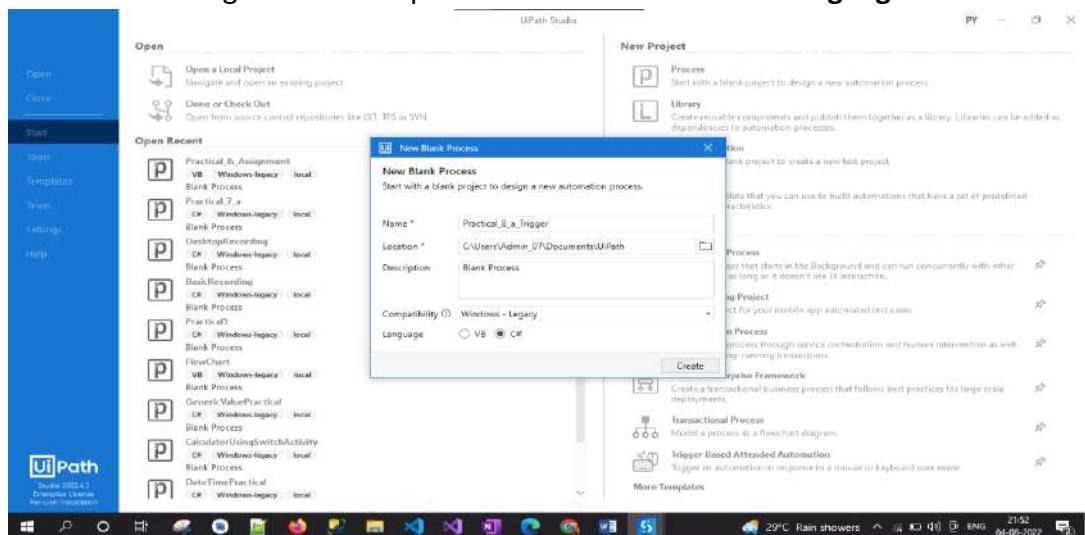
- **Element Triggering Event:** This type of Event deals with clicking and key press event
- **Click Event Trigger:** This event occurs when a Specified UI Element is Clicked
- **Key Press Trigger:** A Key press trigger event occurs when keystrokes have been performed on some particular UI element.
- **Image Triggering Event:** The Click image trigger is an image triggering event.
- **System Triggering Event:** The following are System triggering events:
  - **Hotkey trigger:** This event is raised when special keys are pressed
  - **Mouse trigger:** This event is fired when the mouse button is pressed
  - **System trigger:** This event is used when you have to use all of the keyboard events, all of the mouse events, or both

#### Element triggering event

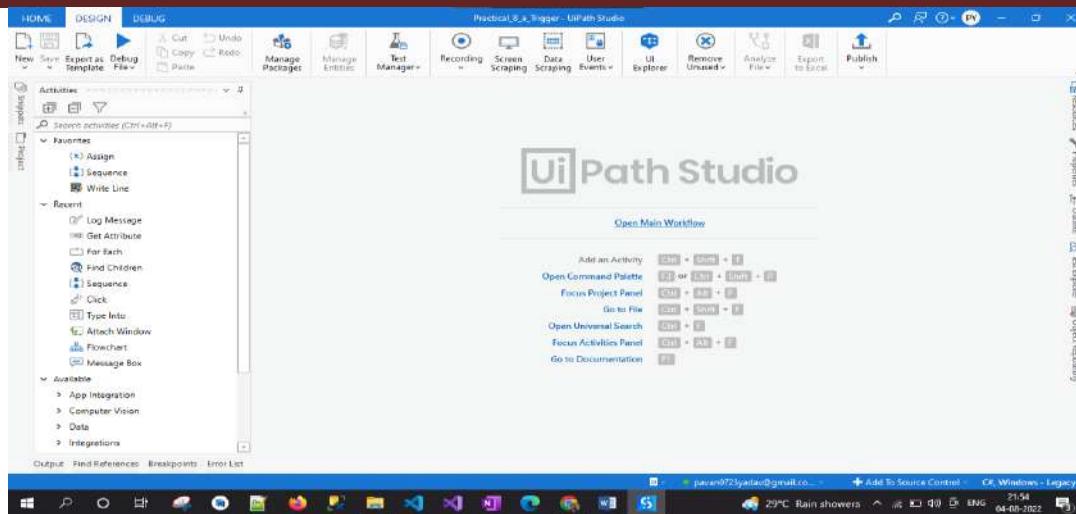
1. Click on the Process to New Project



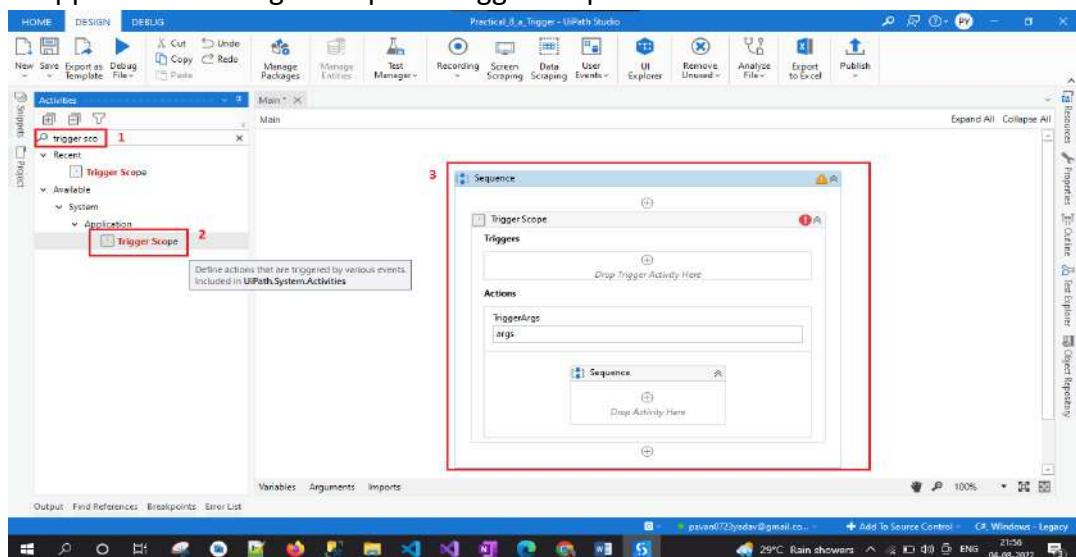
2. Write following detail of the process. Note: Select the C# Language



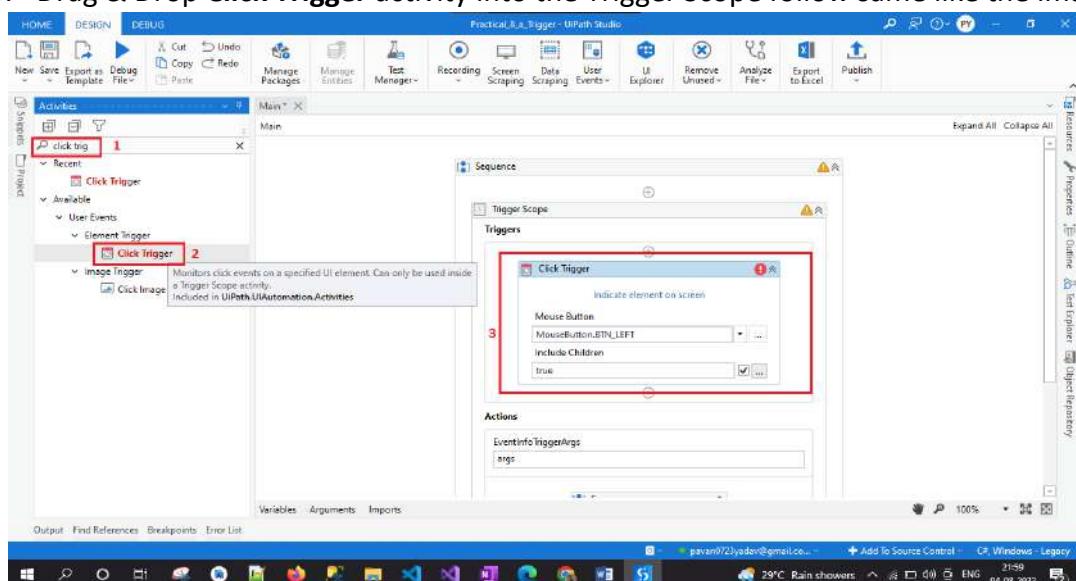
3. Click on the Open Main Workflow



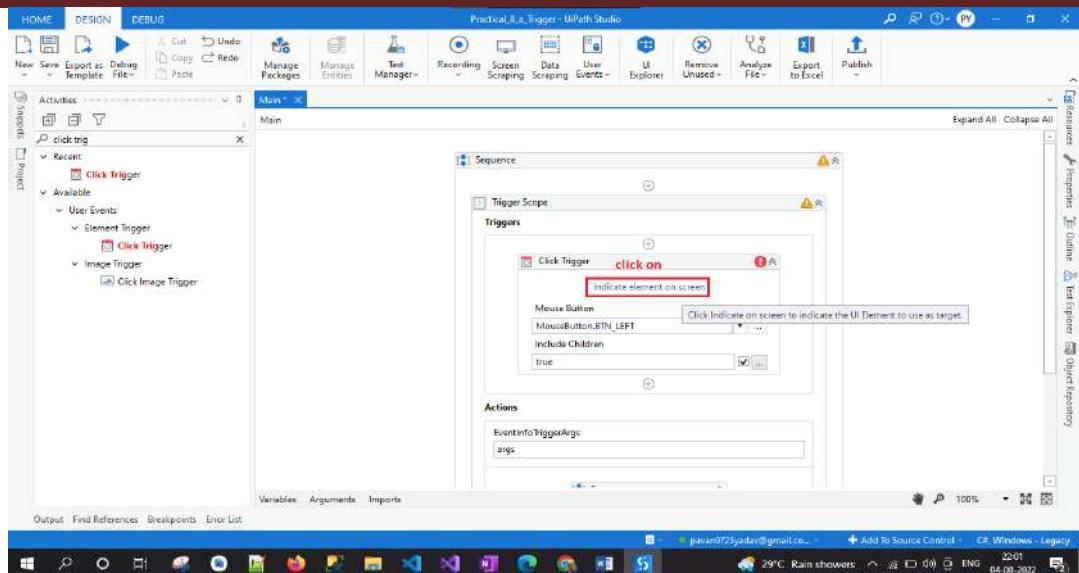
4. Follow the step of below image i.e. 1. Search the Trigger Scope activity 2. Trigger Scope inside the Application 3. Drag & Drop the Trigger Scope to Main Workflow



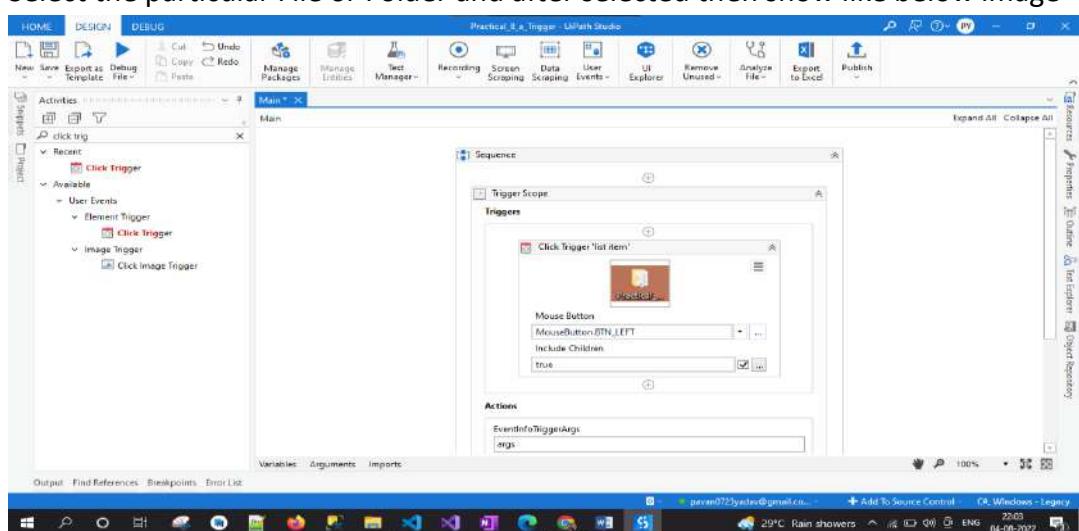
5. Drag & Drop Click Trigger activity into the Trigger Scope follow same like the image



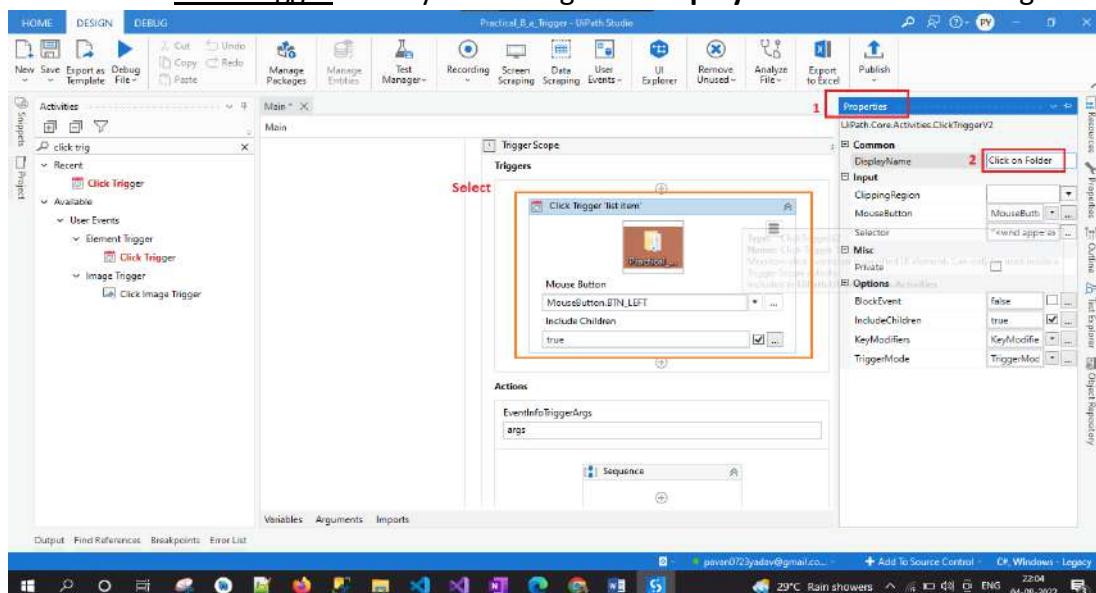
6. Click on the Incident element on screen



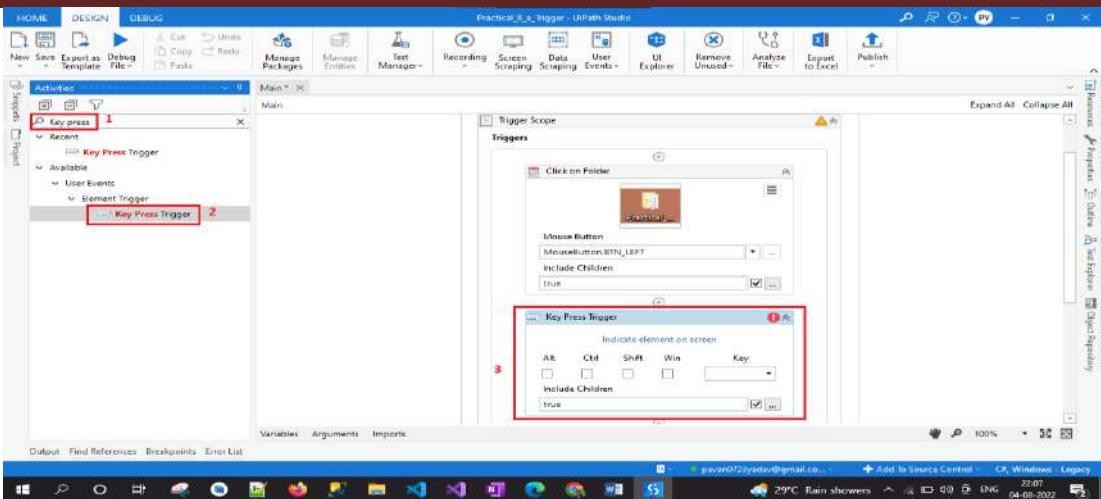
Select the particular File or Folder and after selected then show like below image



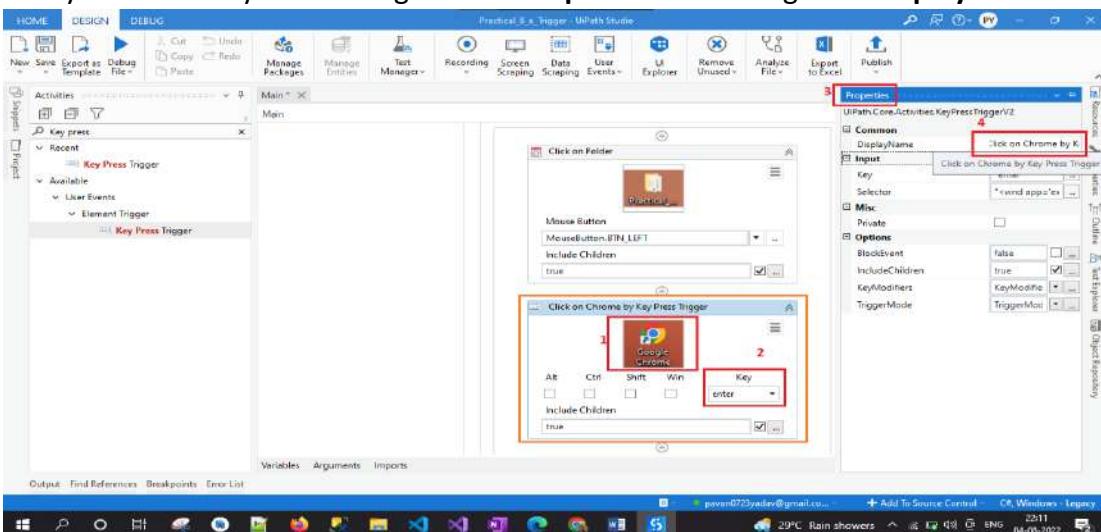
7. Select the Click Trigger activity and change the **DisplayName** like below image



8. Drag & Drop the **Key Press Trigger** activity same like below image

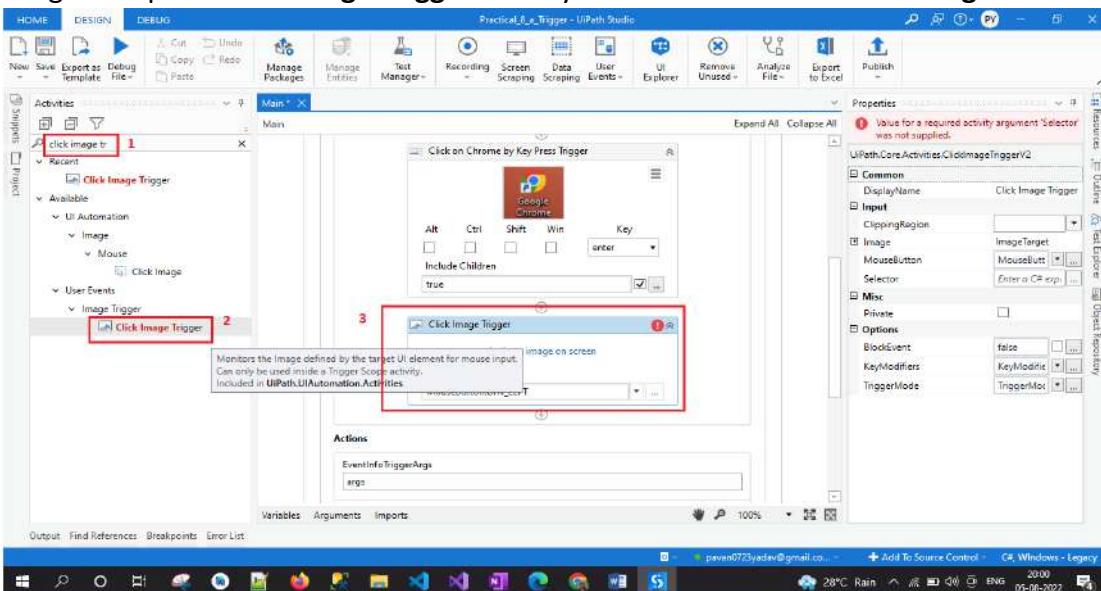


9. Follow the below image 1. Click on the **Incident element on screen** and give some Hot Key, select the **Key Press activity** after that go to the **Properties** and change the **DisplayName** same like the image

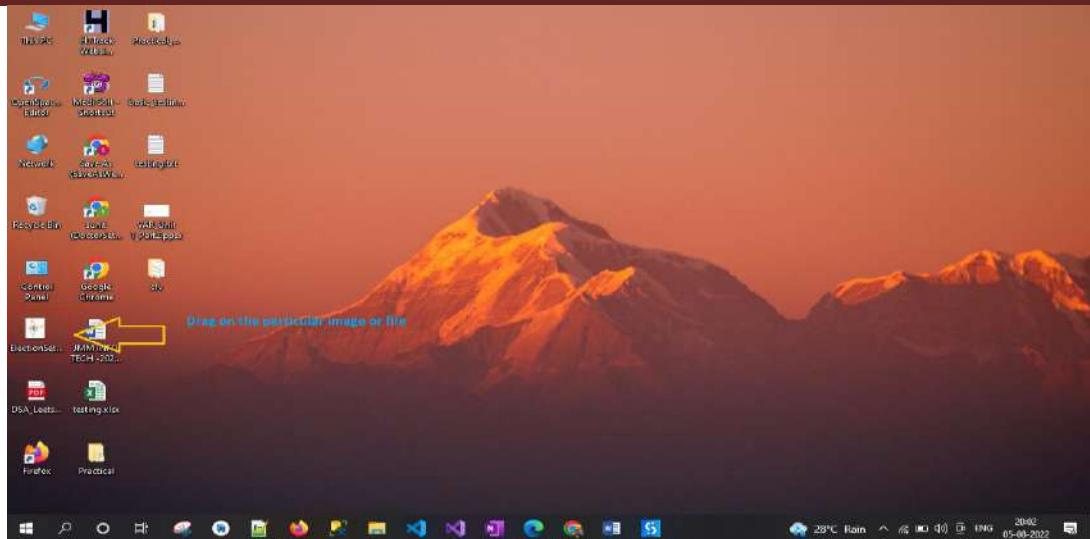


### Image triggering event

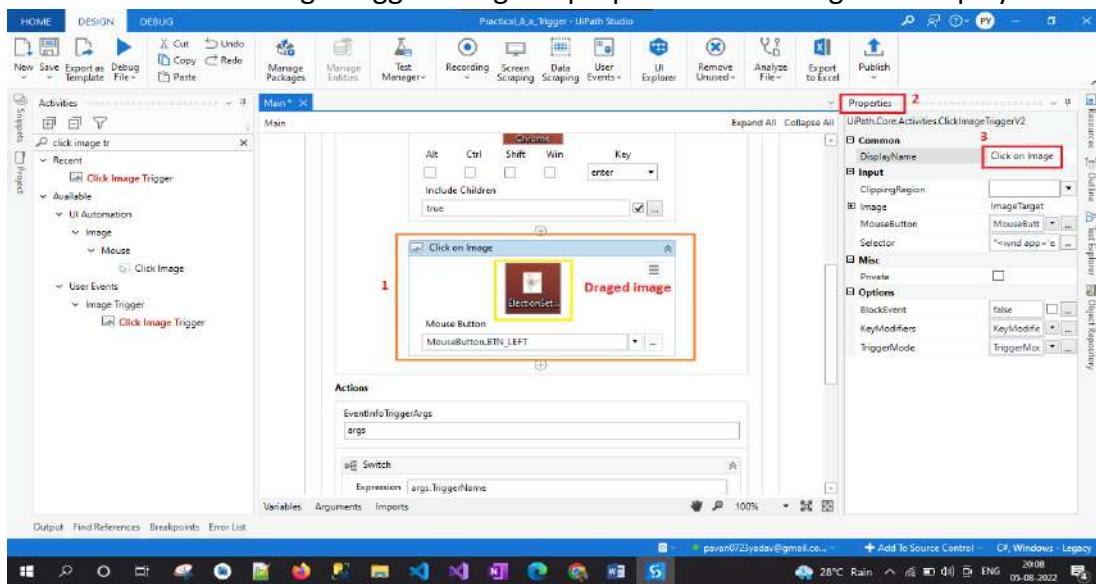
10. Drag & Drop the **Click Image Trigger** activity and Click on the **Incident image on screen**



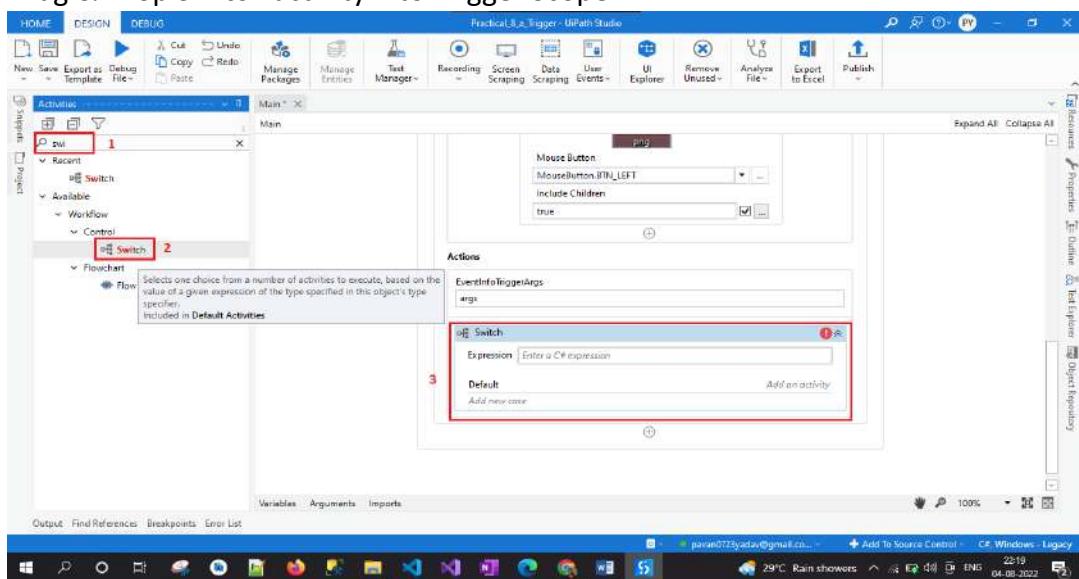
Follow the below image



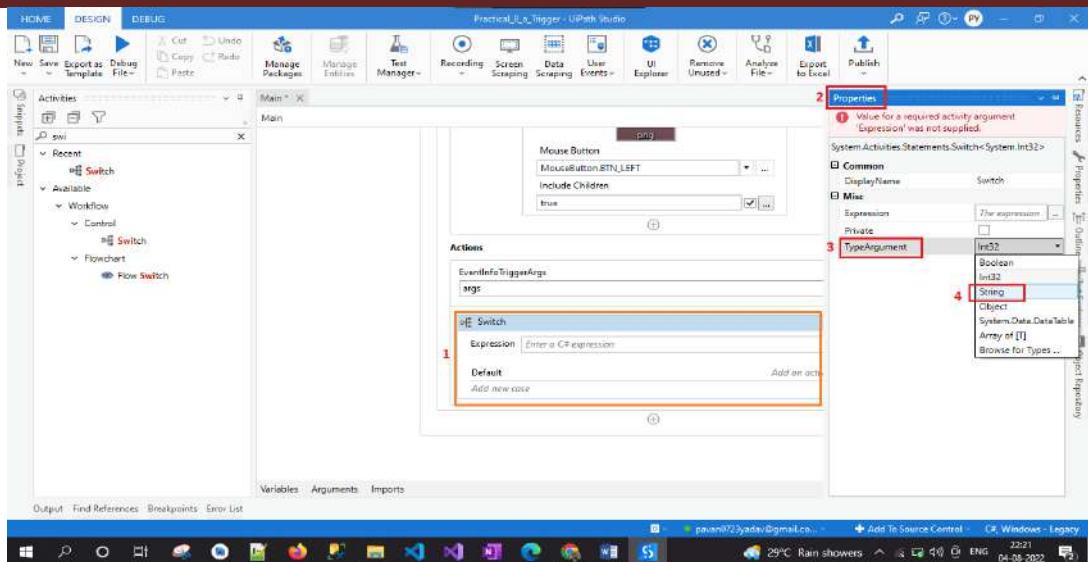
11. Select the Click on Image Trigger and go to properties and change the DisplayName



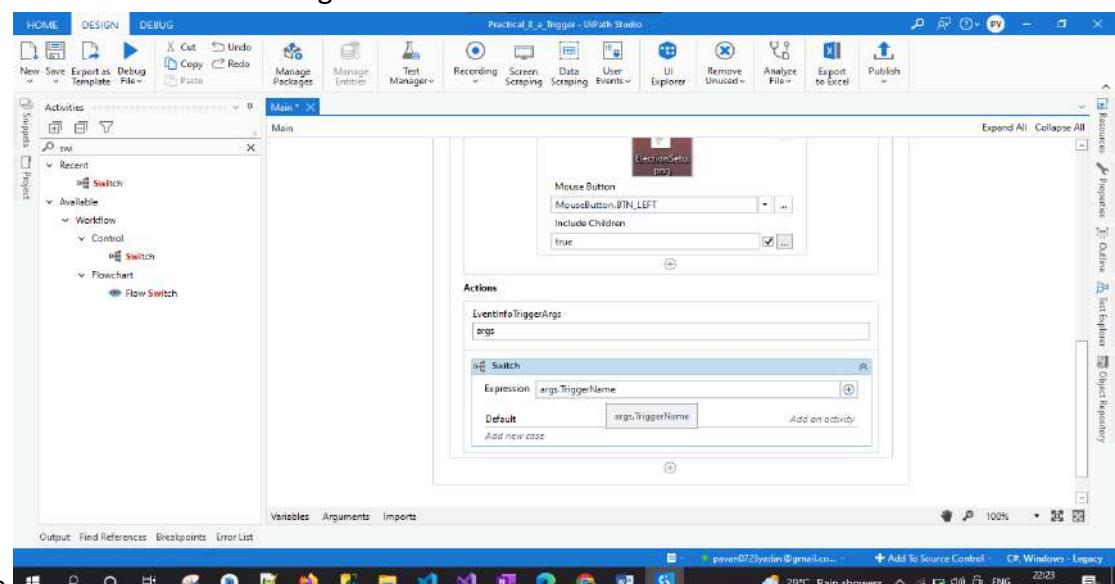
12. Drag & Drop Switch activity into Trigger Scope



13. Change the Properties of Switch same like below image

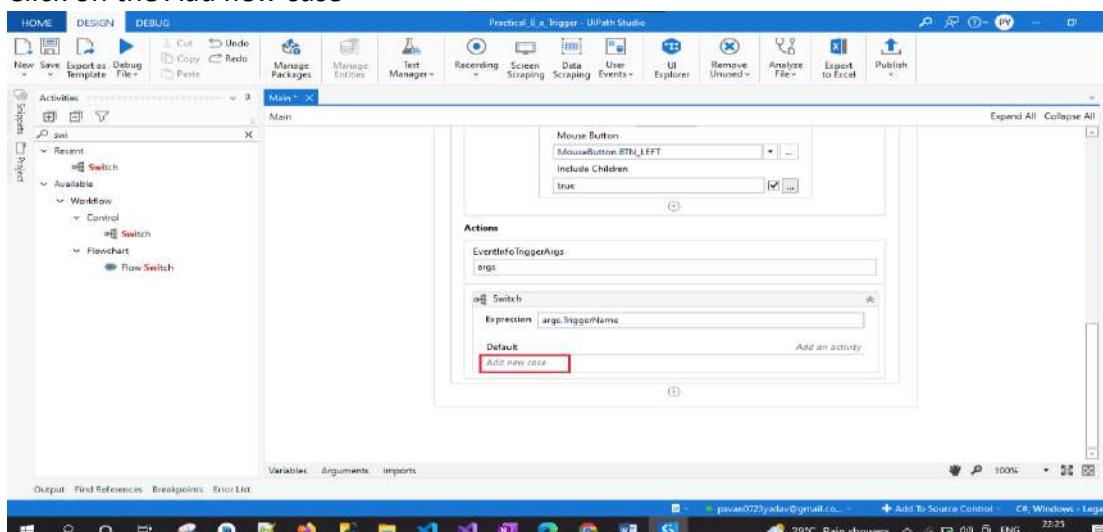


Write Expression same like the below image

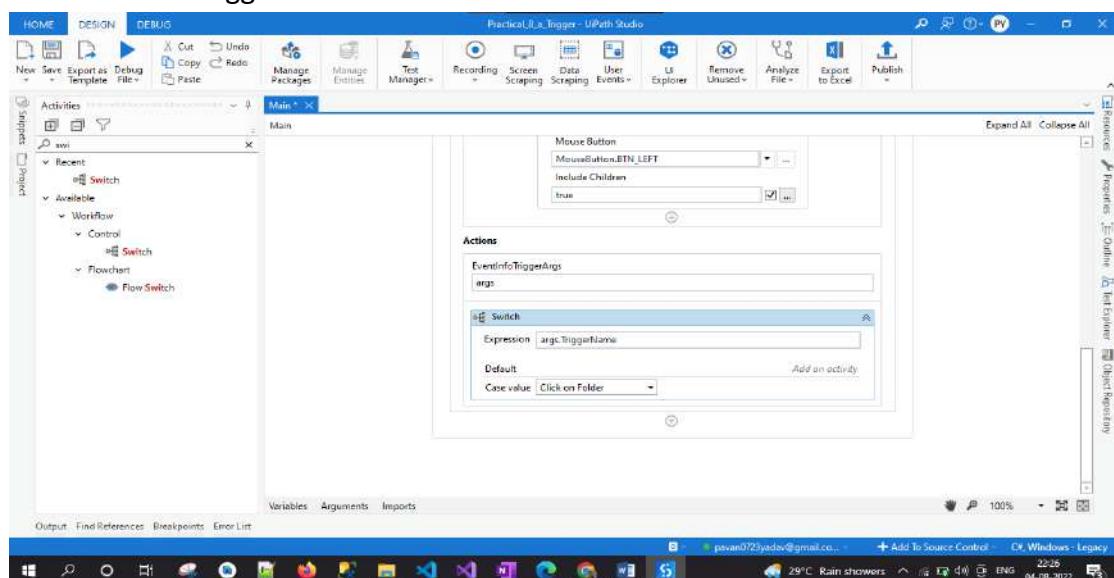


args.TriggerName

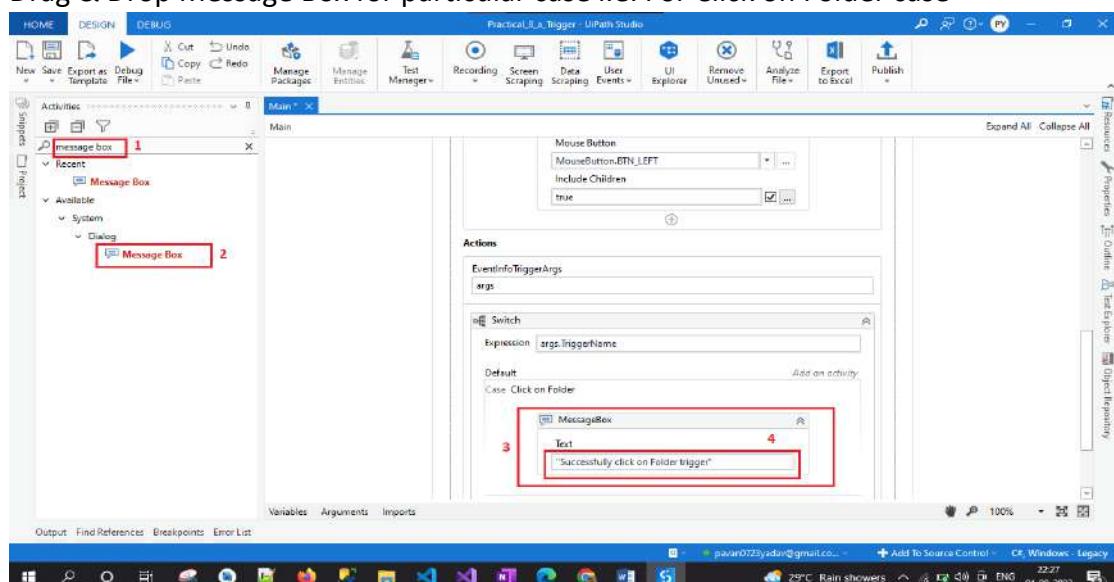
#### 14. Click on the Add new case



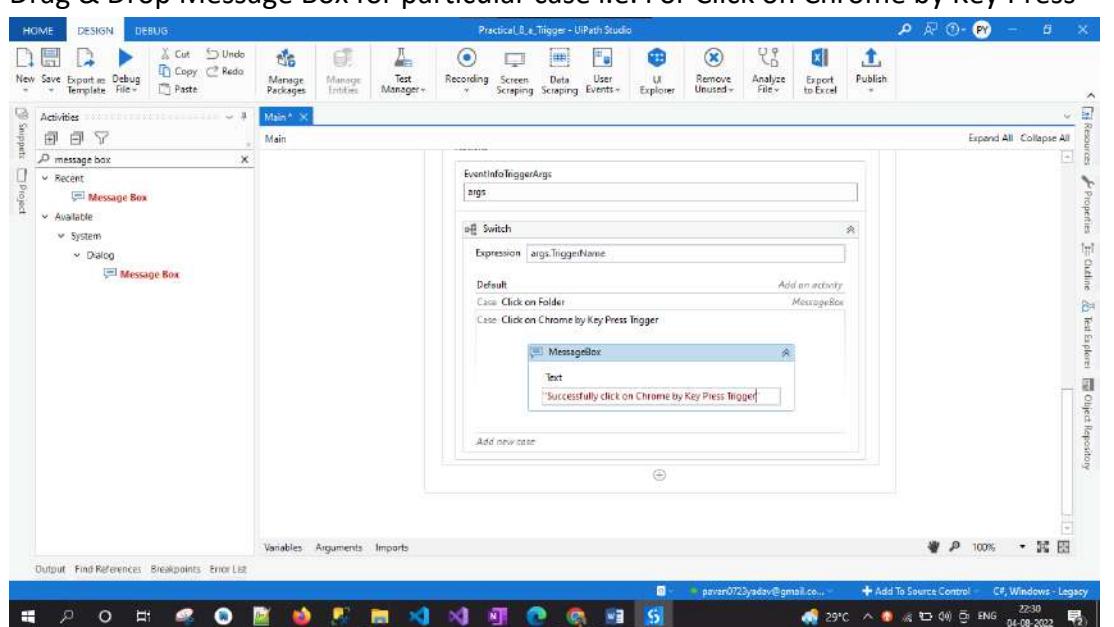
Enter the first trigger case that is “Click on Folder”



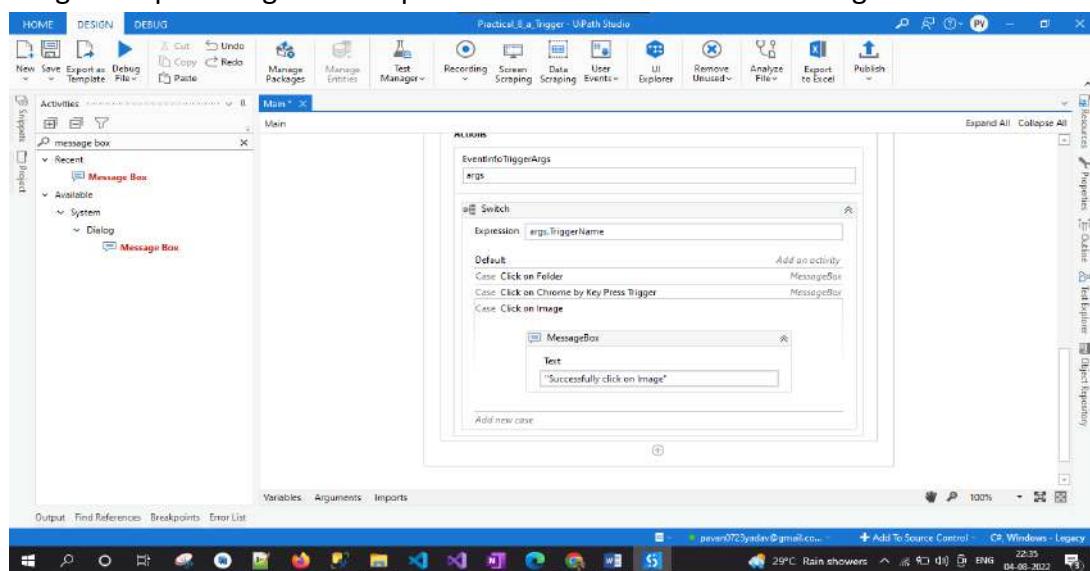
### 15. Drag & Drop Message Box for particular case i.e. For Click on Folder case



Drag & Drop Message Box for particular case i.e. For Click on Chrome by Key Press

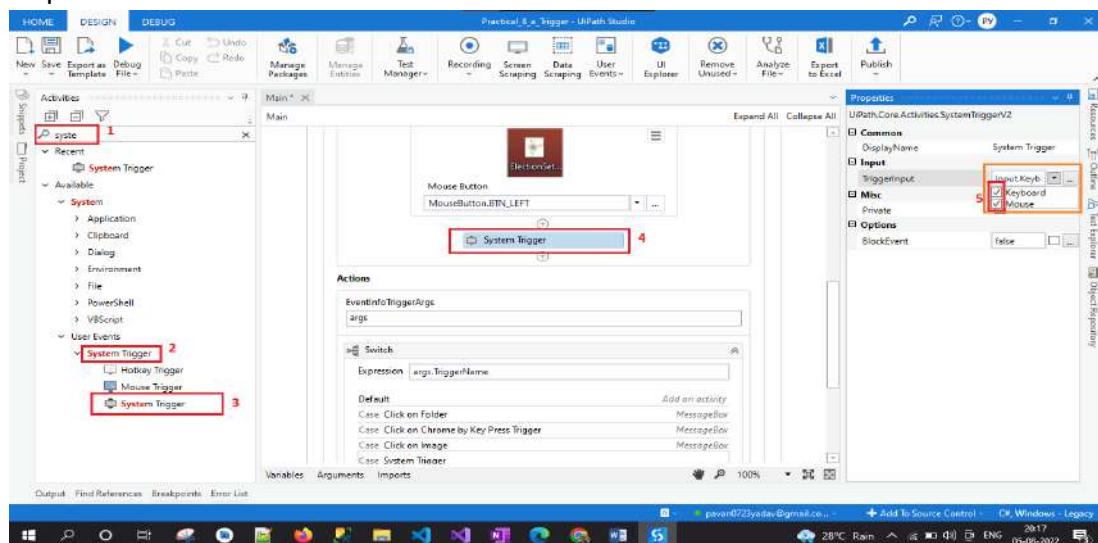


**Drag & Drop Message Box for particular case i.e. For Click on Image**

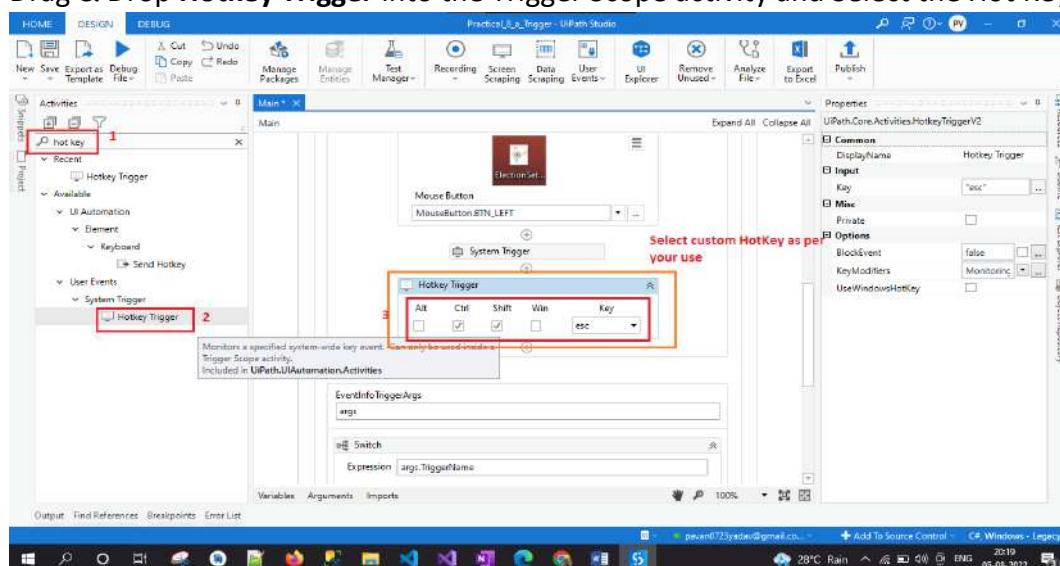


### System Triggering Event

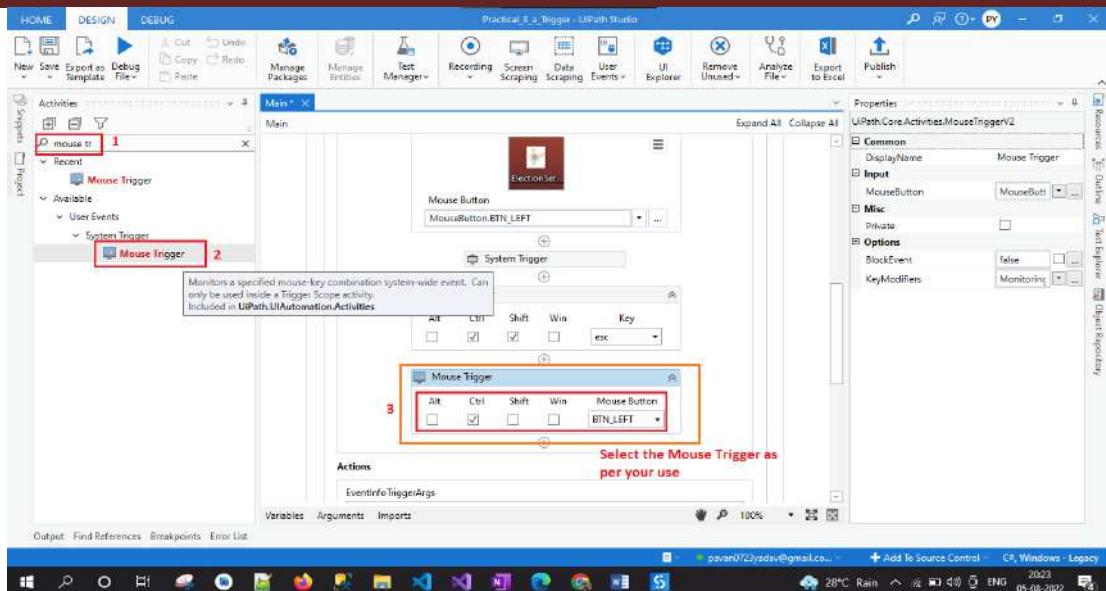
16. Drag & Drop **System Trigger** into the Trigger Scope activity and change some properties as per requirement



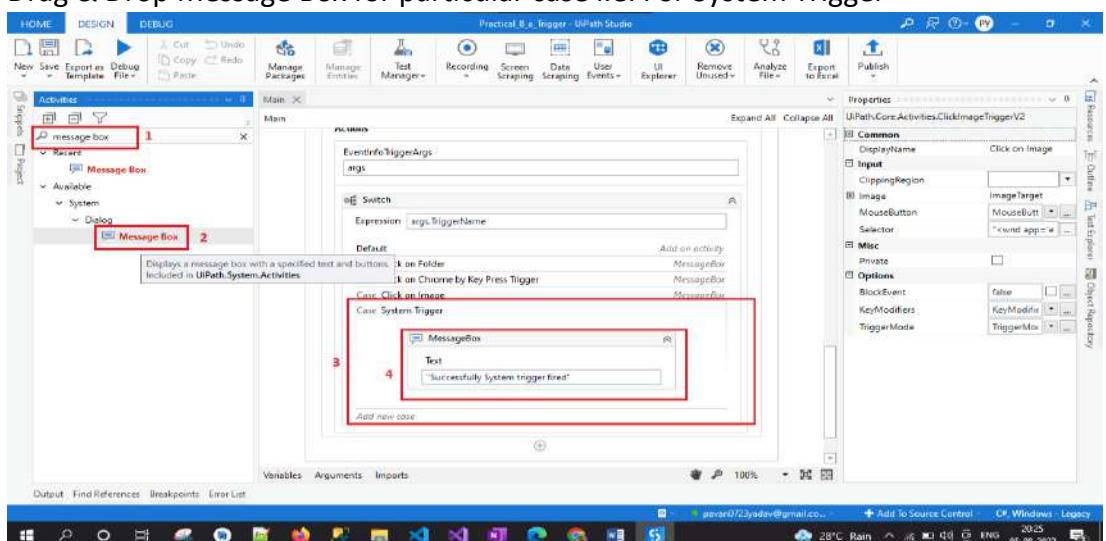
17. Drag & Drop **Hotkey Trigger** into the Trigger Scope activity and Select the Hot Key as per requirement



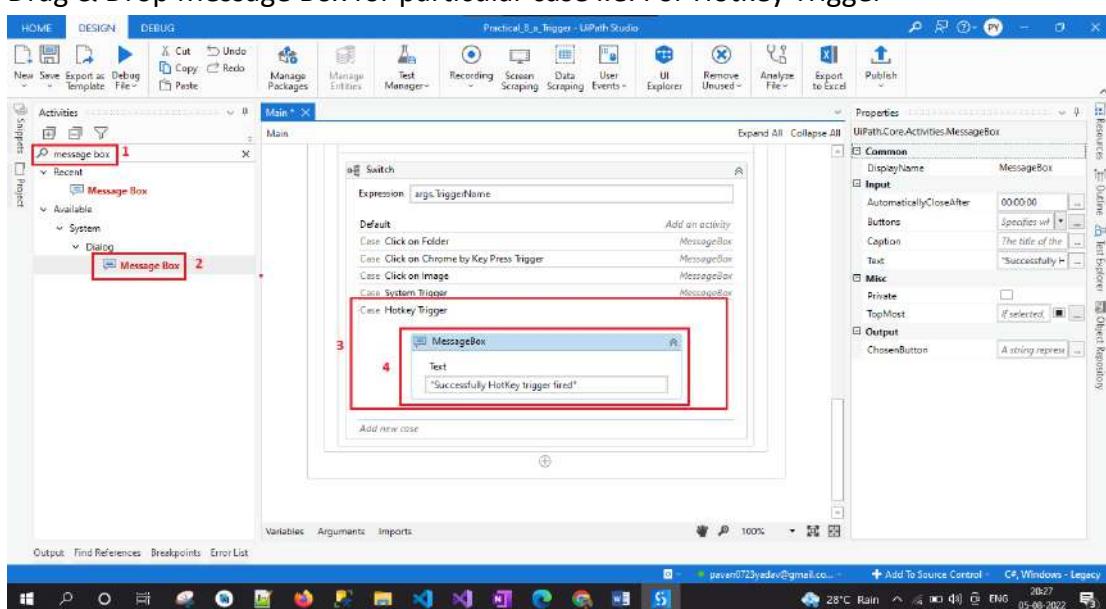
18. Drag & Drop **Mouse Trigger** into the Trigger Scope activity and Select the **Mouse Button** as per requirement



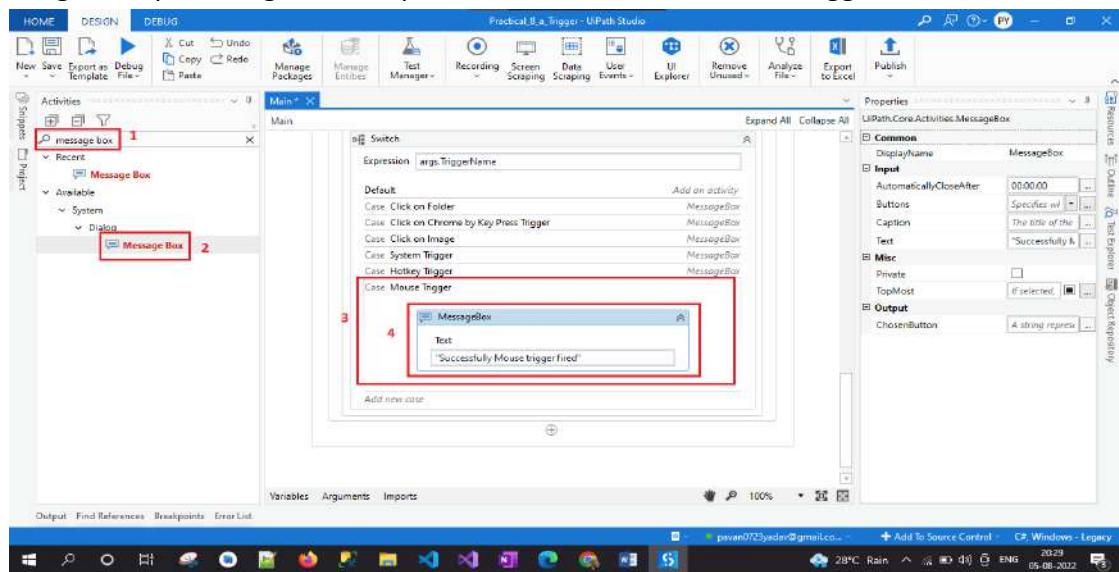
### 19. Drag & Drop Message Box for particular case i.e. For System Trigger



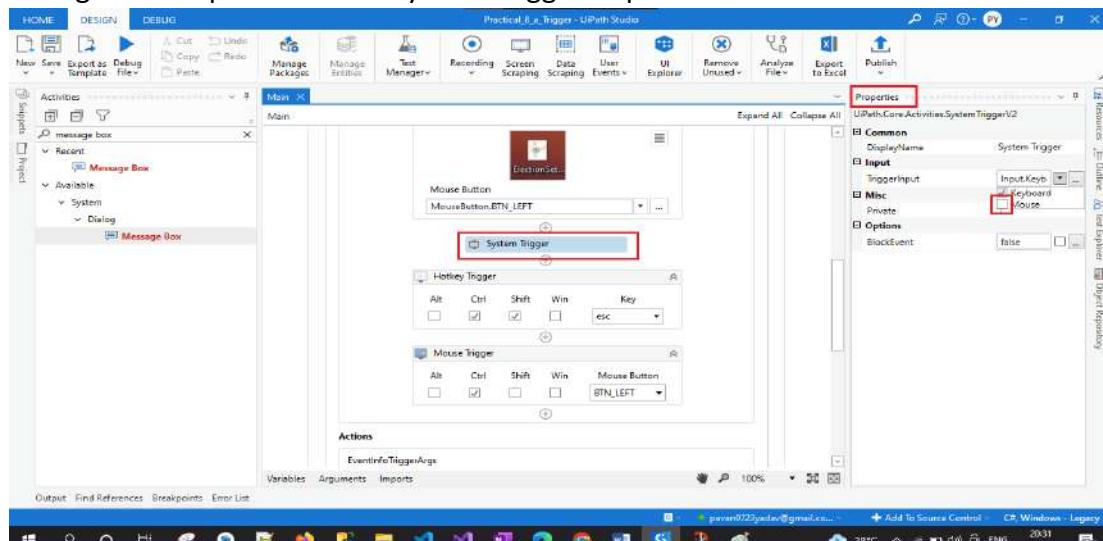
### Drag & Drop Message Box for particular case i.e. For Hotkey Trigger



### Drag & Drop Message Box for particular case i.e. For Mouse Trigger



### 20. Change the Properties of the System Trigger as per use that is in this case disable the Mouse Trigger



### 21. Video Link

[https://drive.google.com/file/d/1Hjiv1YYFd8Lbmne9B\\_XJT-Dvt-3PFphn/view?usp=sharing](https://drive.google.com/file/d/1Hjiv1YYFd8Lbmne9B_XJT-Dvt-3PFphn/view?usp=sharing)

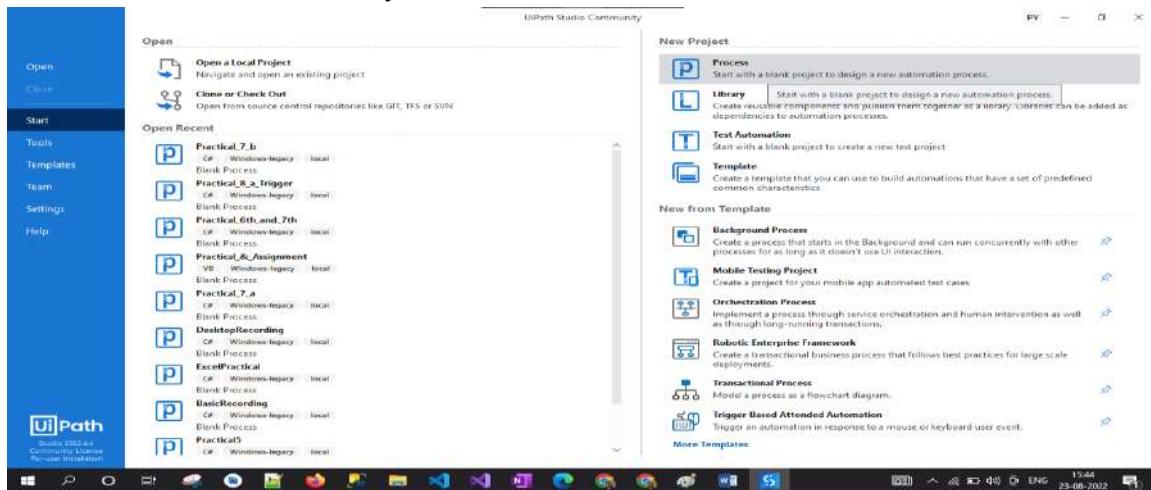
## B) Automate the following screen scraping methods using UI Path

- 1) Full Text
- 2) Native
- 3) OCR

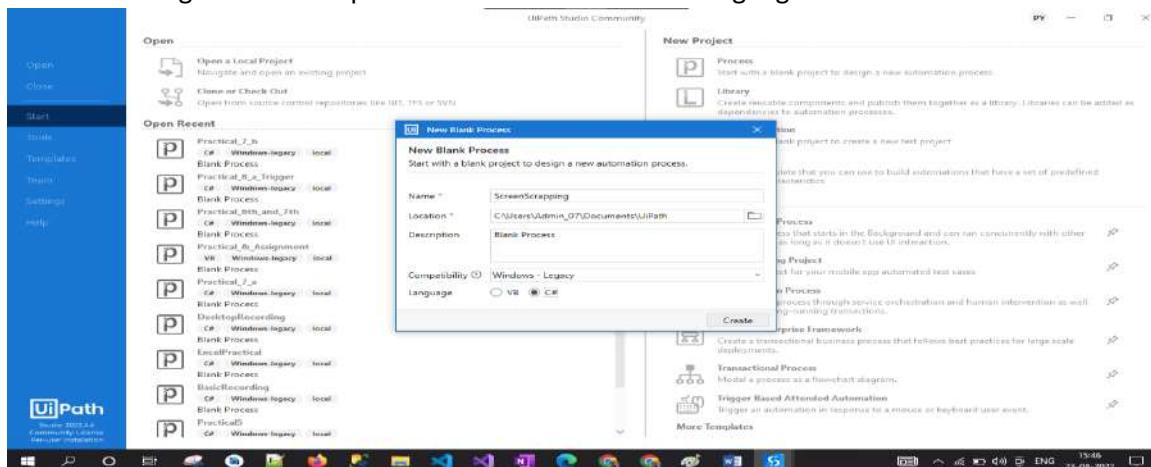
### 1) Full Text:

The Full text activity is used to extract information from various types of documents and websites. It has a 100% accuracy rate. It is the fastest method among all three methods. It even works in the background. It is also capable of extracting hidden text.

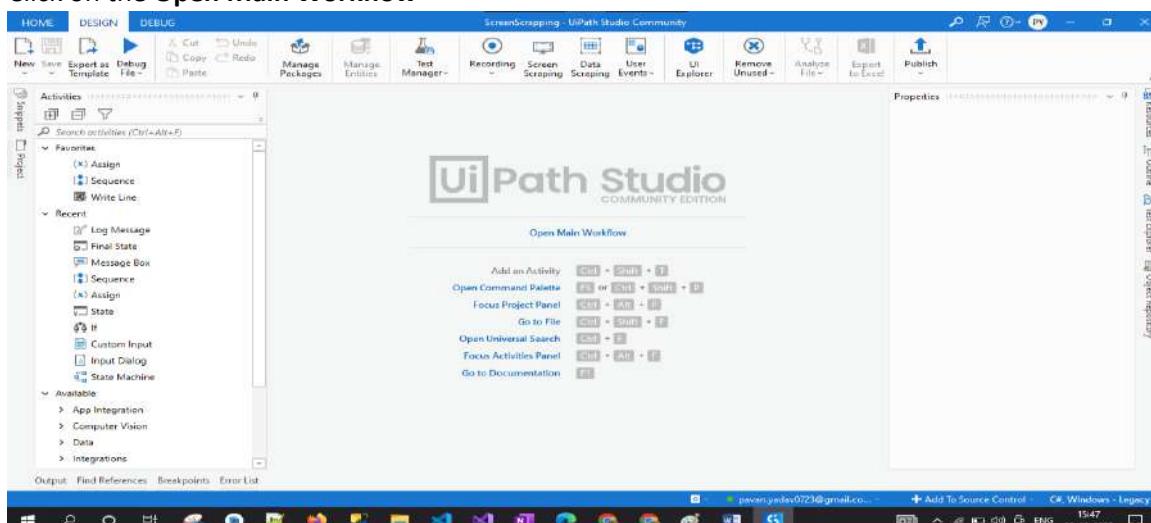
#### 10. Click on the Process to New Project



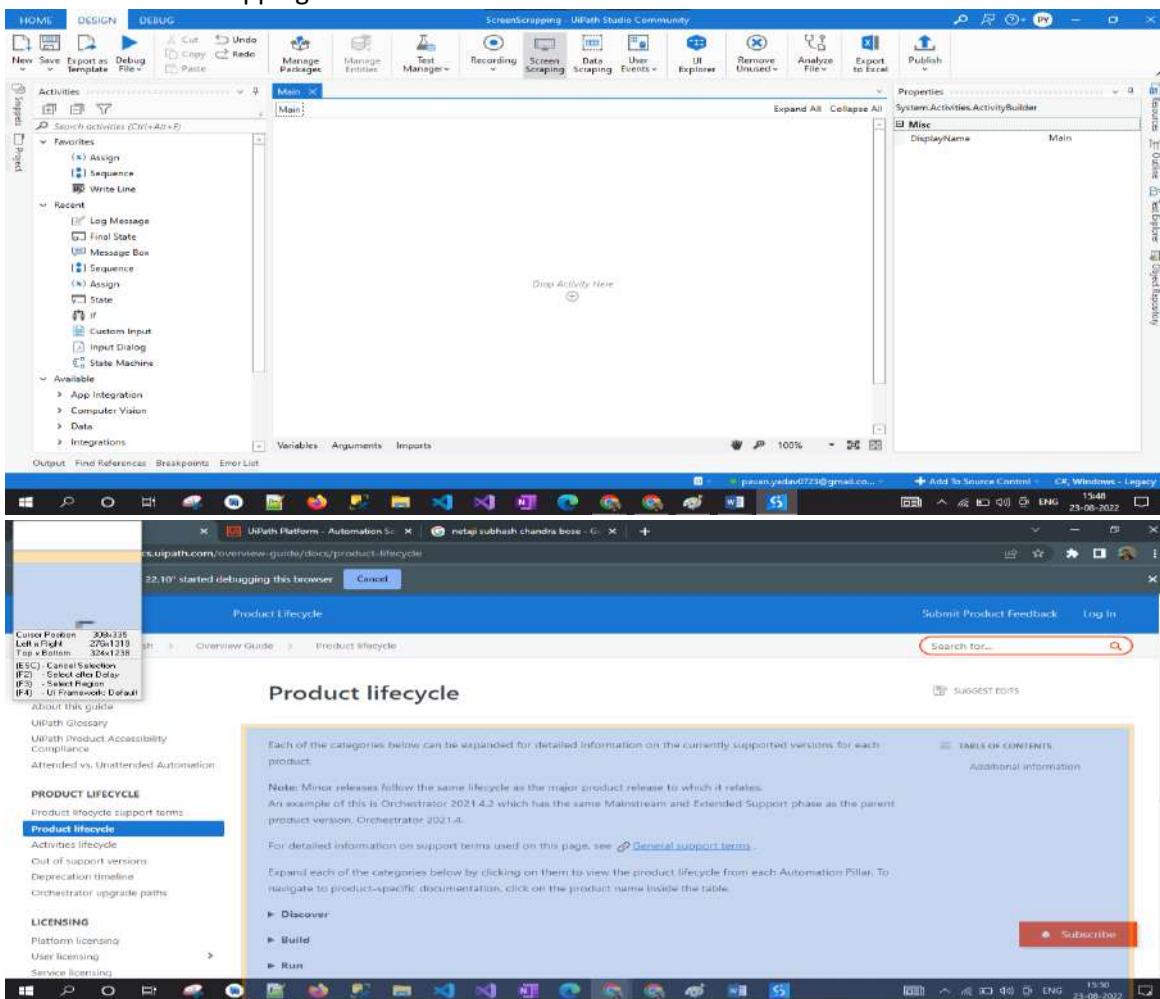
#### 11. Write following detail of the process. Note: Select the C# Language



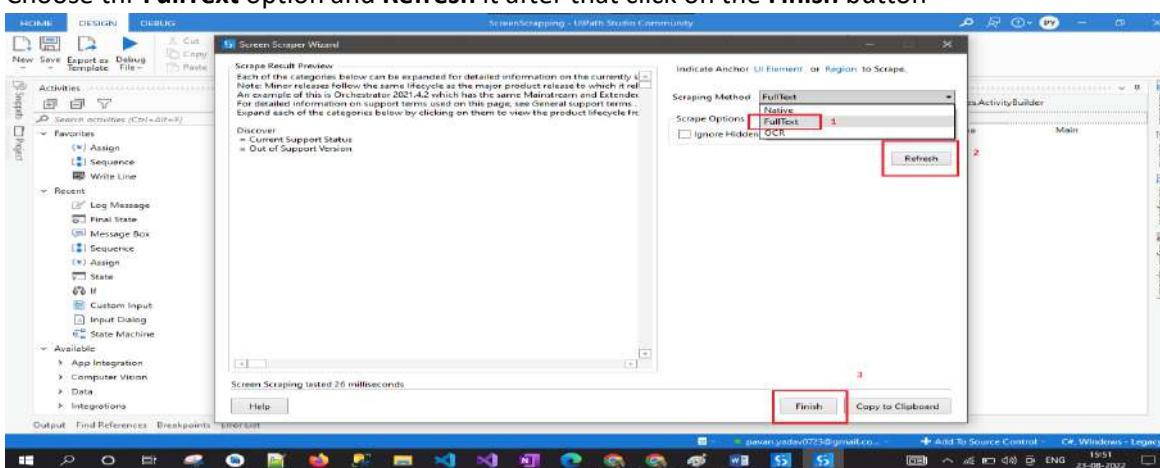
#### 12. Click on the Open Main Workflow

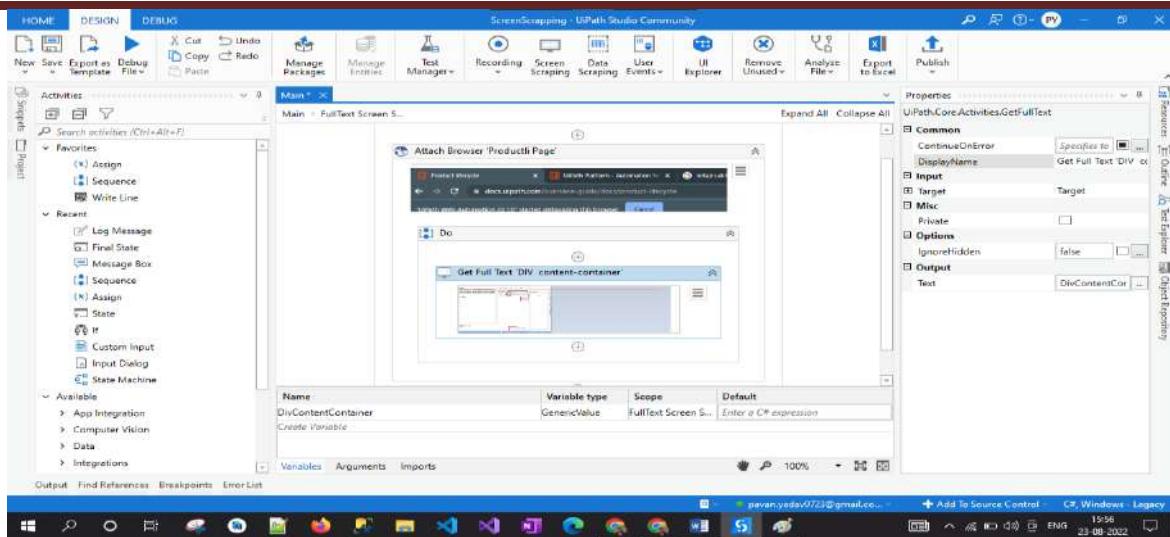


**13. Click on Screen Scrapping in the Ribbon Panel**

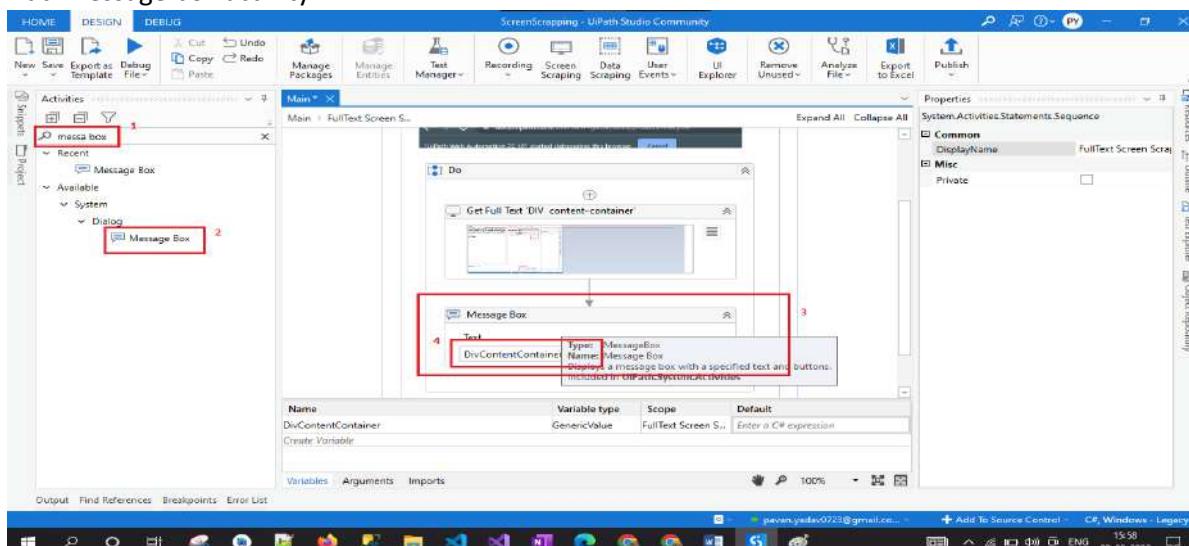


**14. Choose the FullText option and Refresh it after that click on the Finish button**

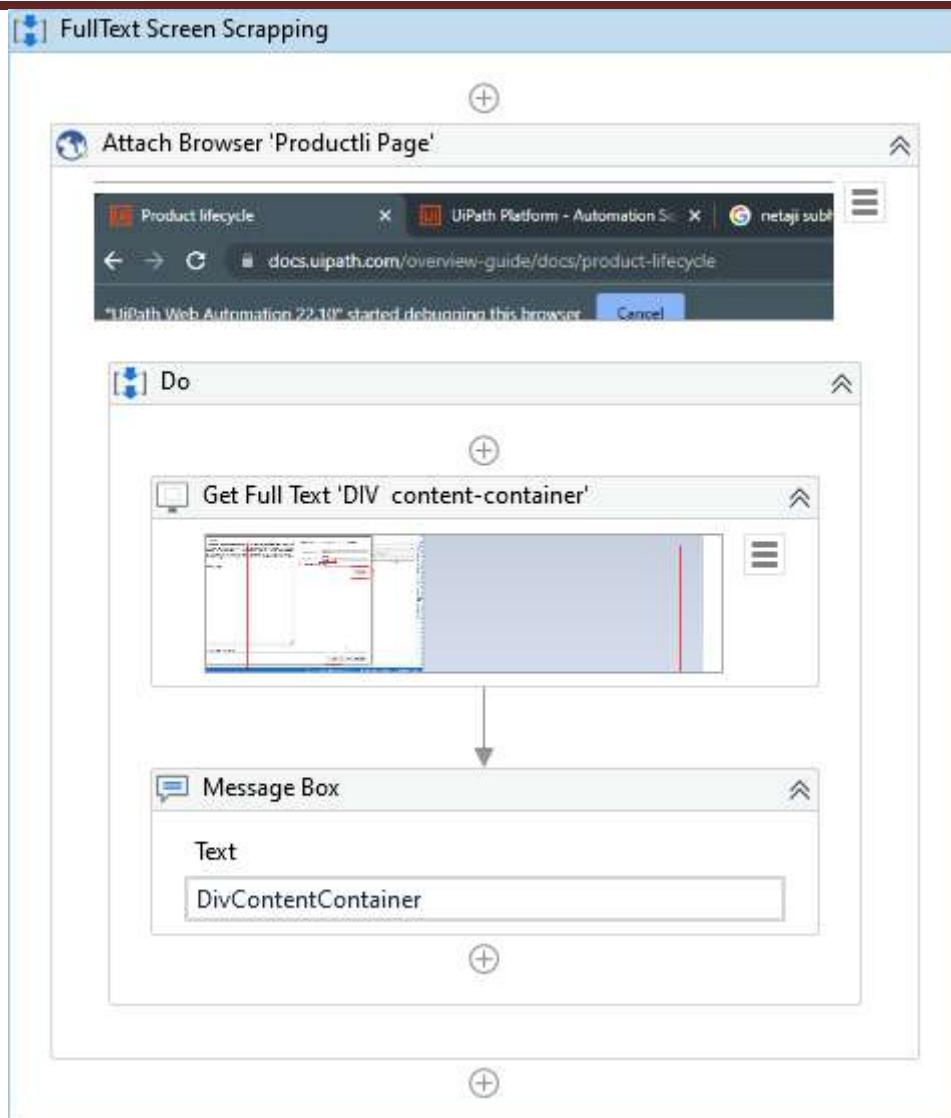




### 15. Add Message box activity



### 16. Overview



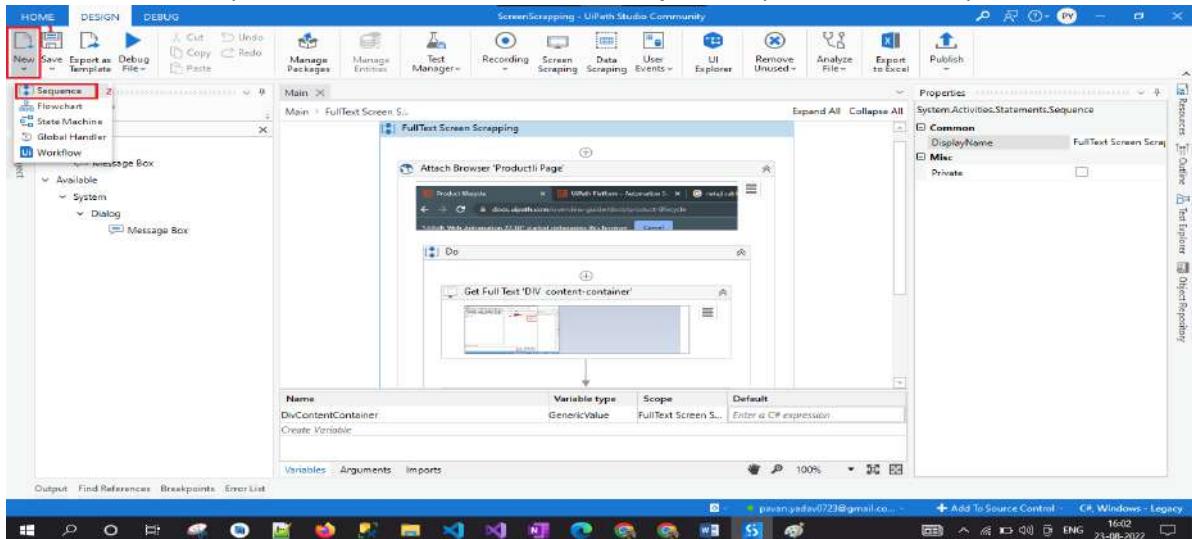
### 17. Output



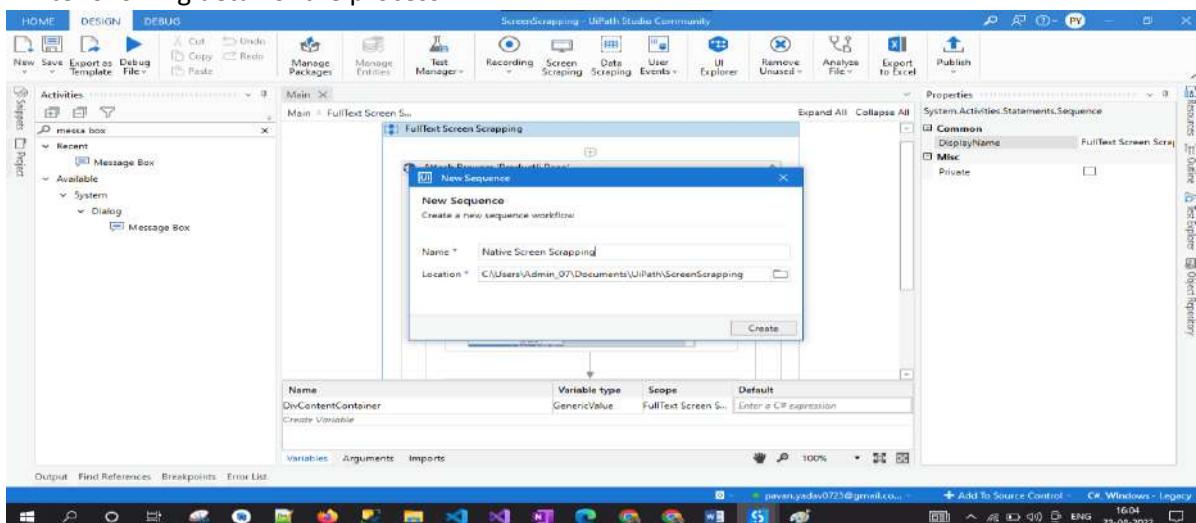
## 2) Native:

This is similar to the Full text method but has some differences. It has a slower speed than the FullText method. It has a 100% accuracy rate, like the Full text method. It does not work in the background. It has an advantage over the Full text method in that it is also capable of extracting the text's position. It cannot extract hidden text.

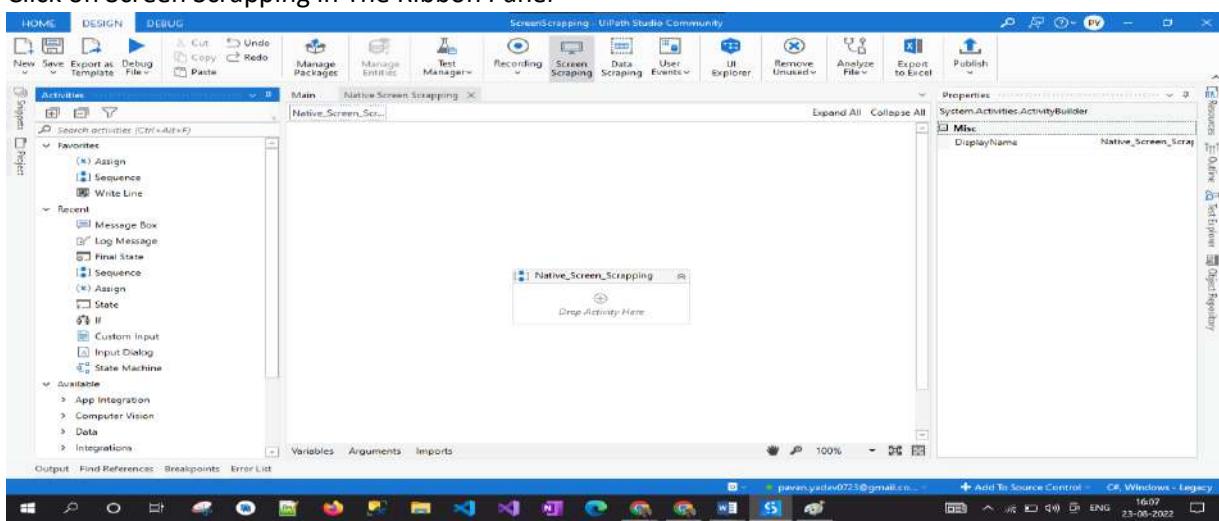
- Click on the **New** option and select and click on the **Sequence** option for new sequence

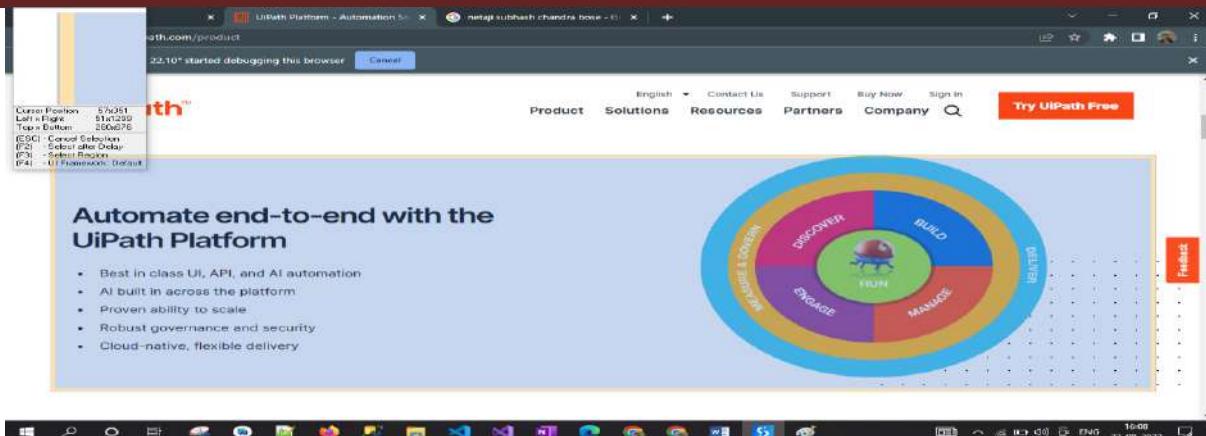


- Write following detail of the process.

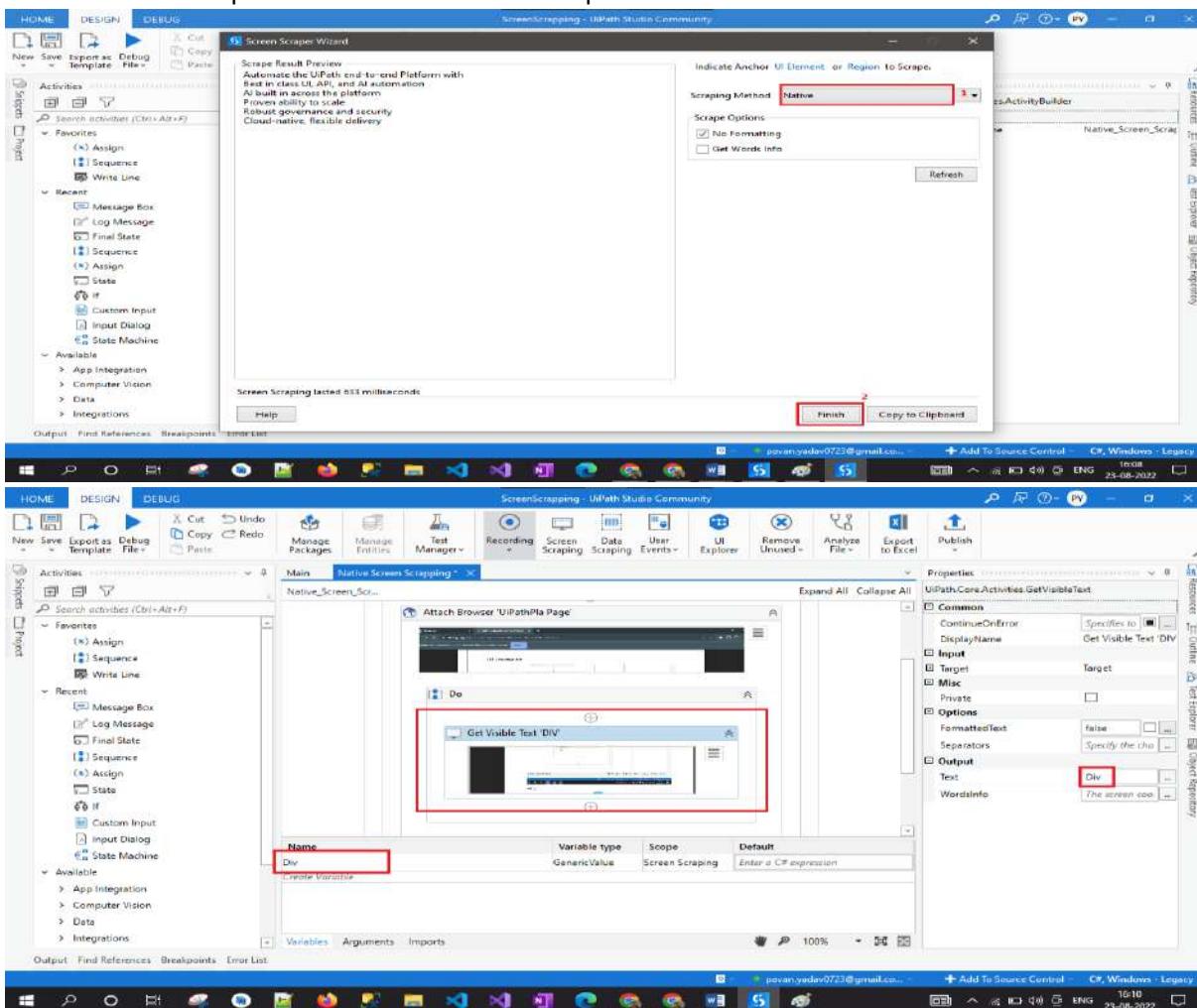


- Click on Screen Scrapping in The Ribbon Panel

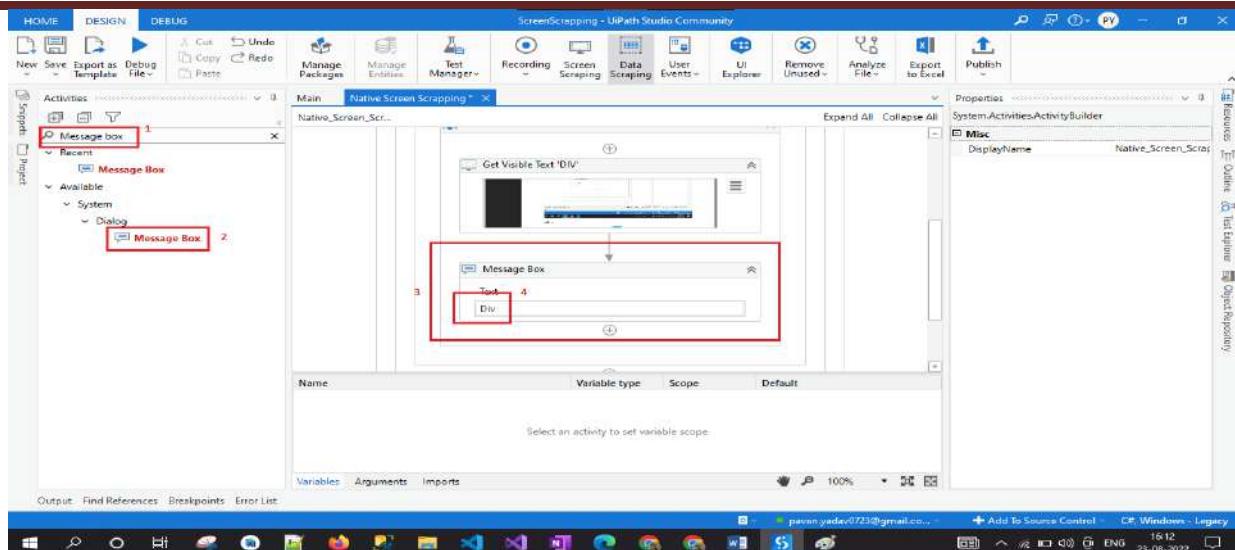




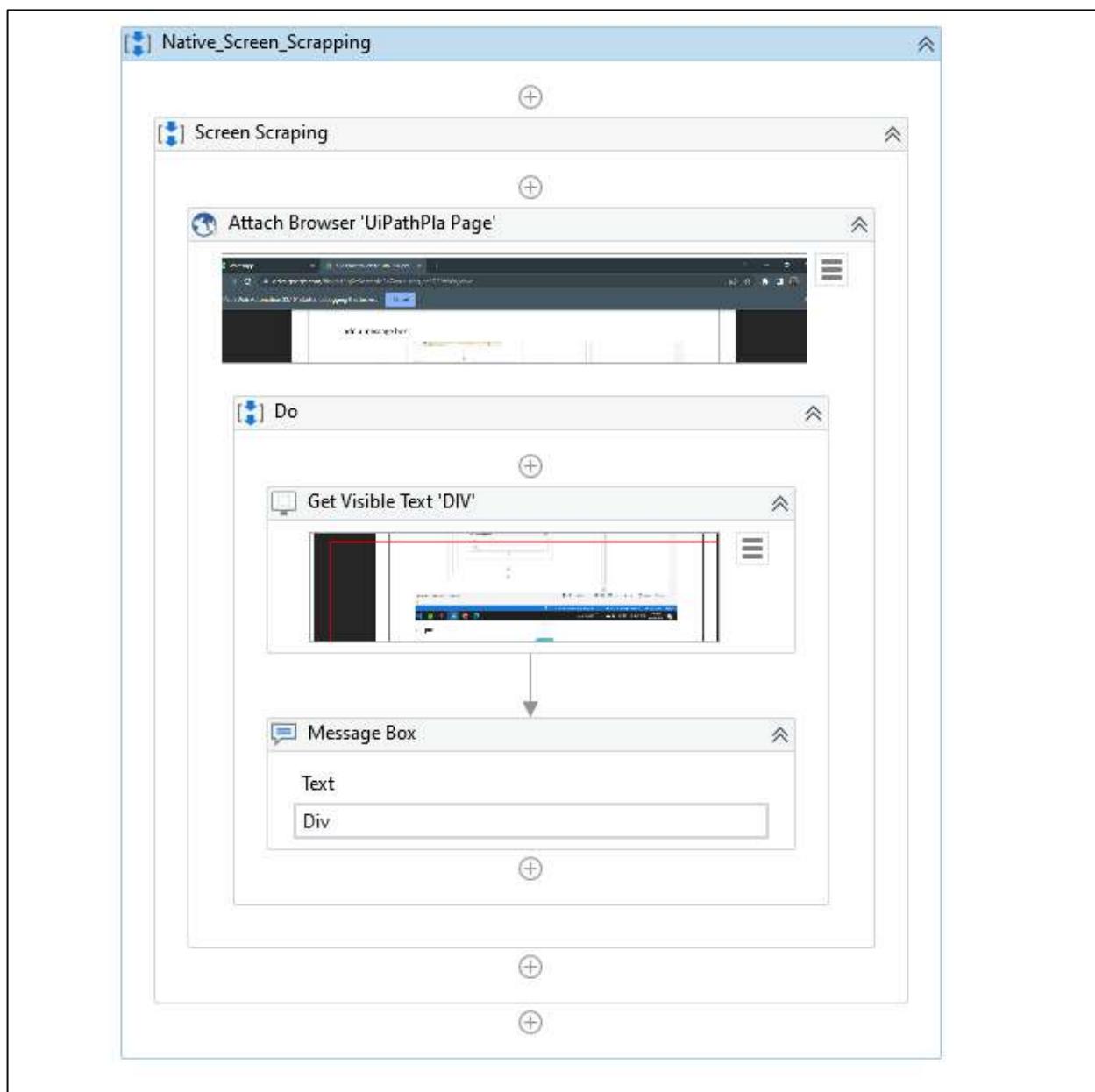
#### 4. Select the Native option and click on the Finish option



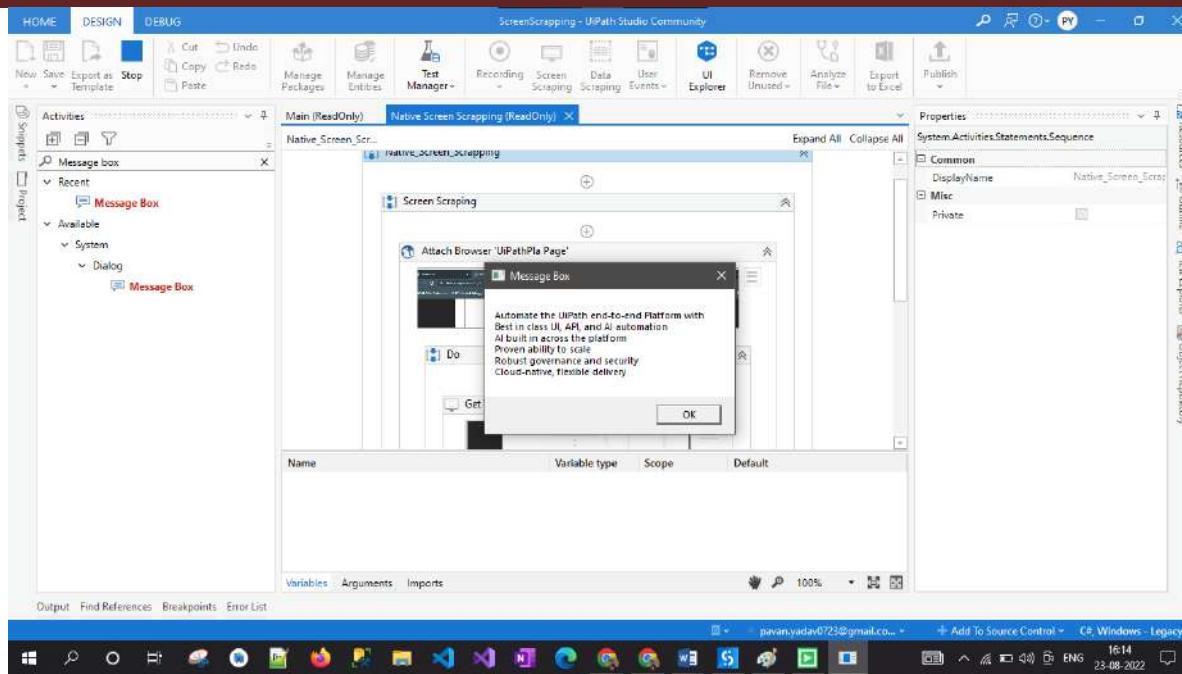
#### 5. Add Message box activity in the Sequence



## 6. Overview



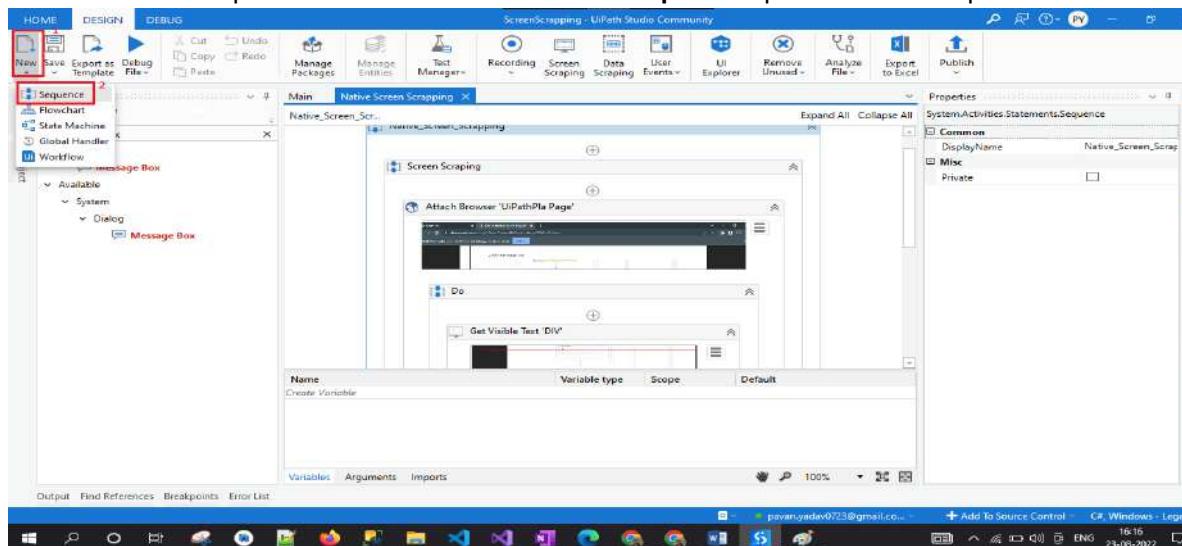
## 7. Output



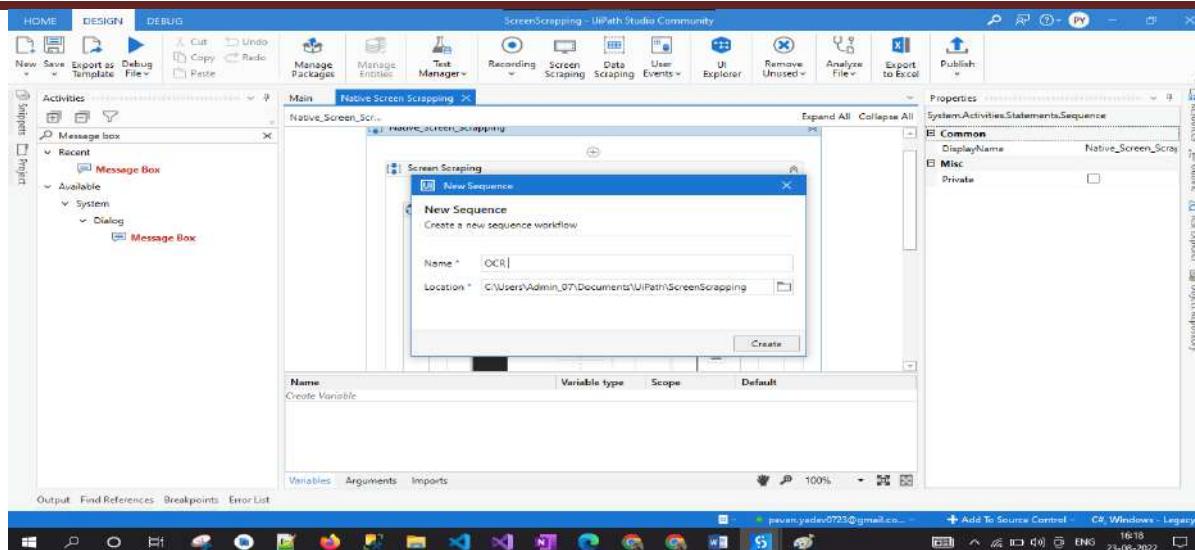
**3) OCR:** This method is used when the previous two methods fail to extract information. It uses the two OCR engines: Microsoft OCR and Google OCR.

It has also a scale property: you can choose the scale level as per your need. Changing the scale property will give the best results Microsoft OCR

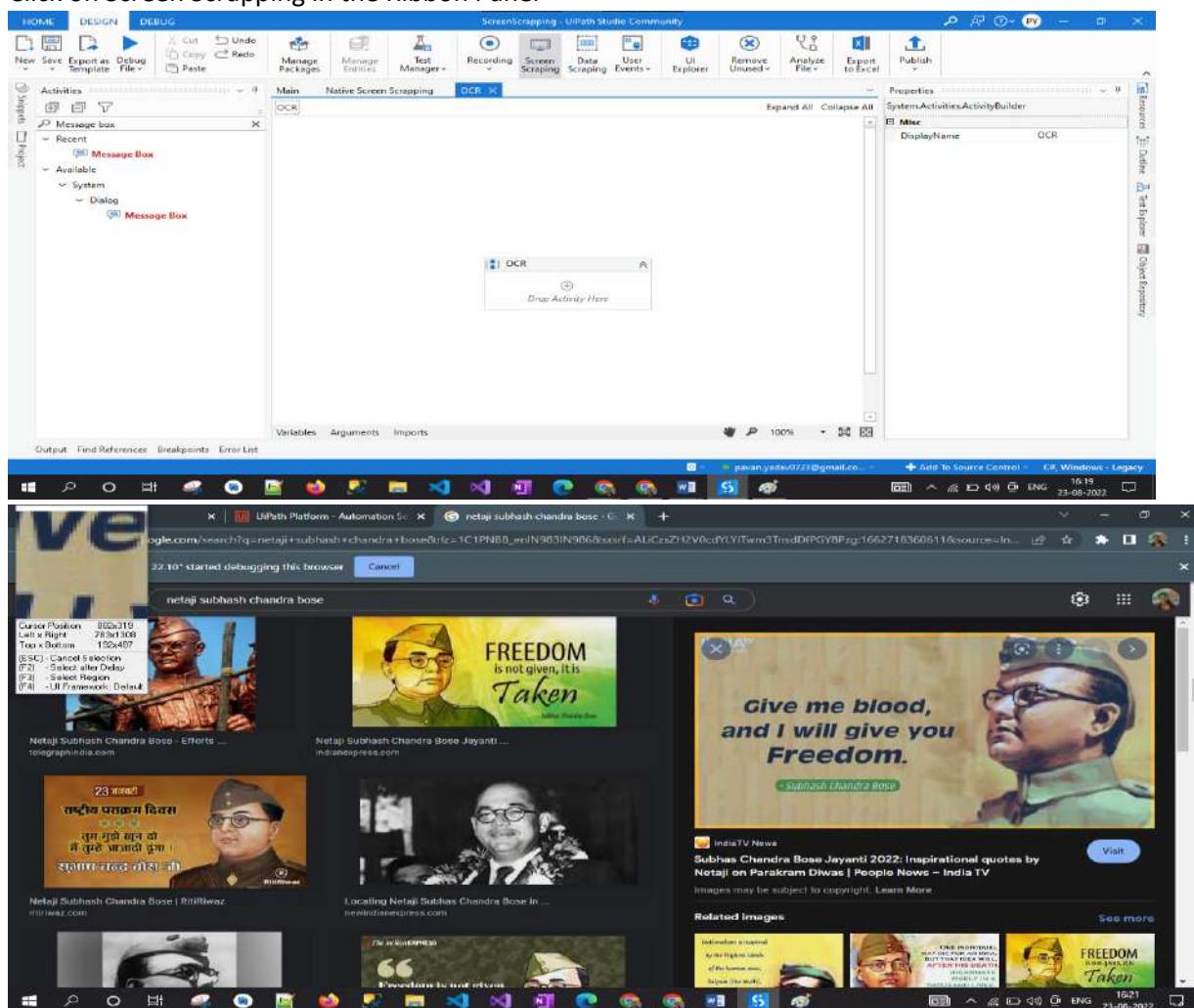
1. Click on the **New** option and select and click on the **Sequence** option for new sequence



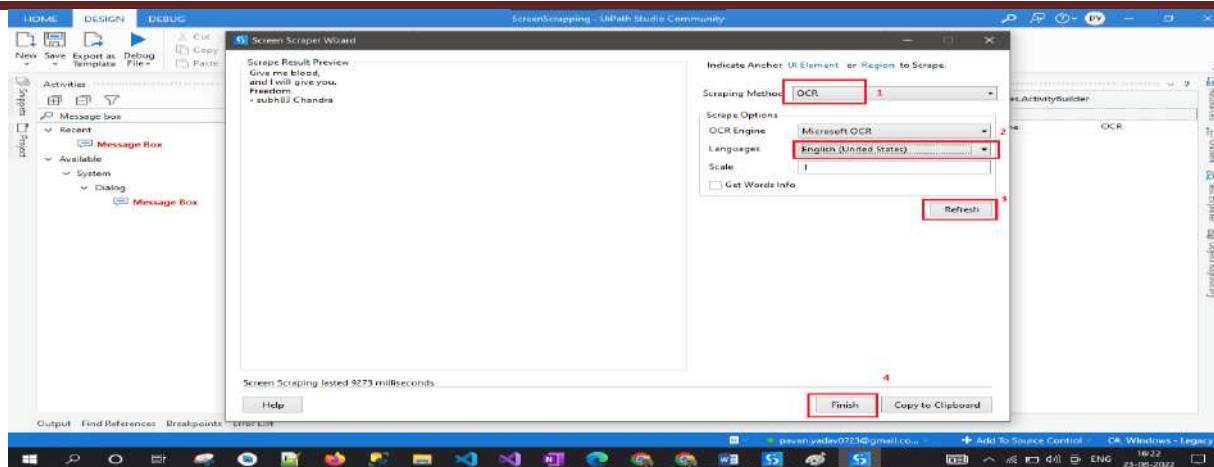
2. Write following detail of the process.



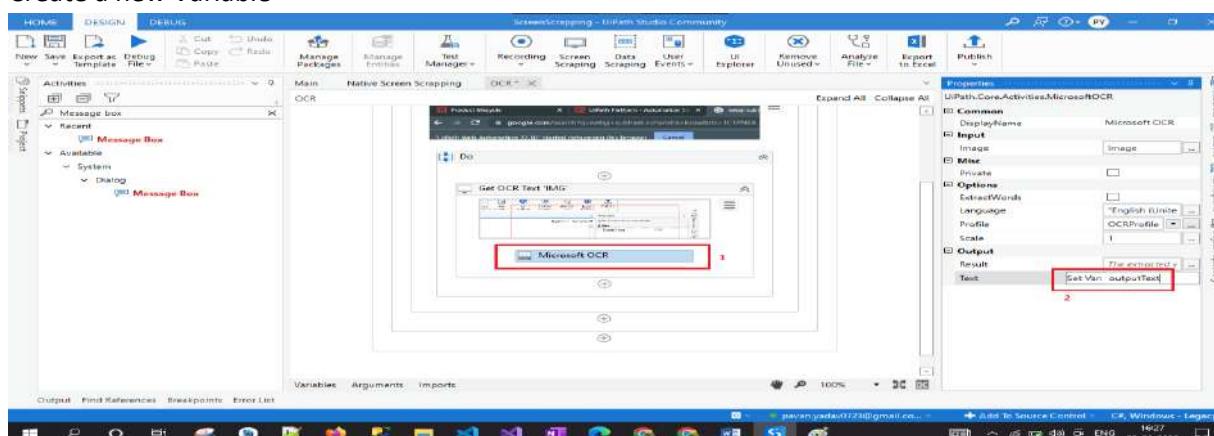
**3. Click on Screen Scrapping in the Ribbon Panel**



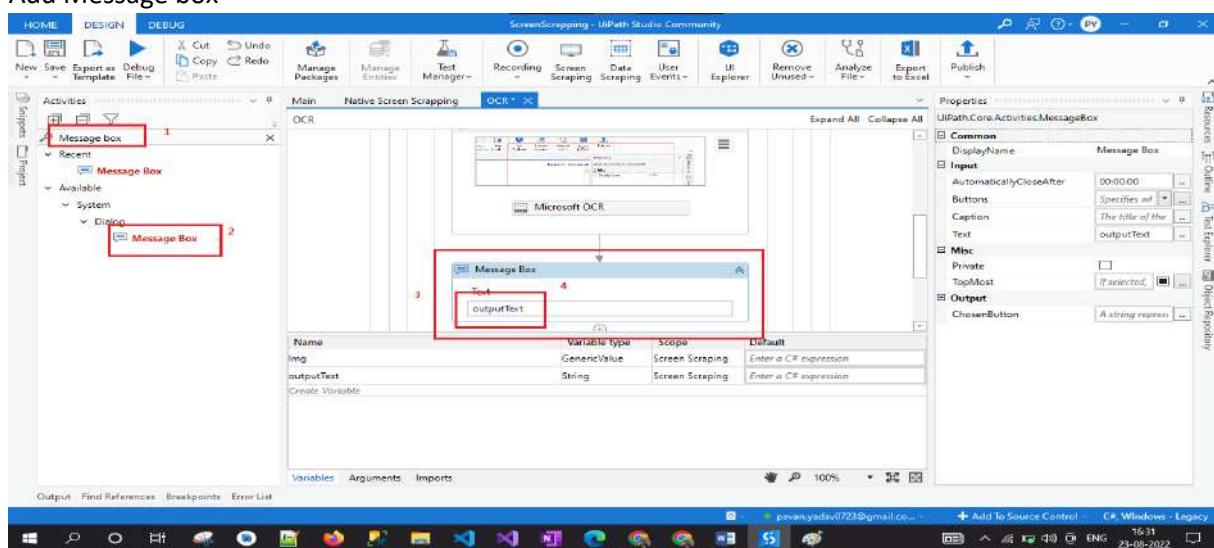
**4. Select the OCR option, language that is English (US) and click on the Finish option**



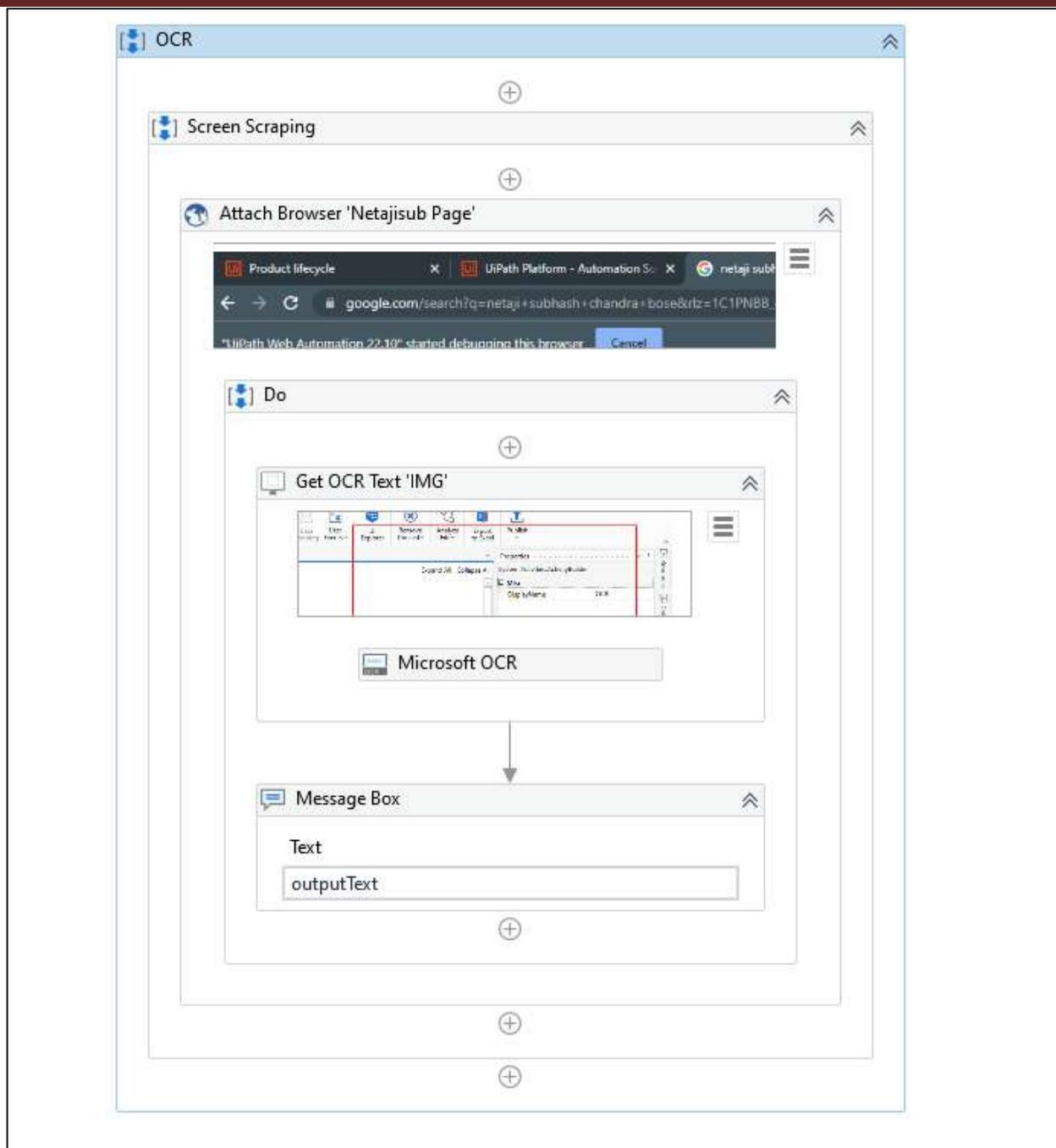
### Create a new Variable



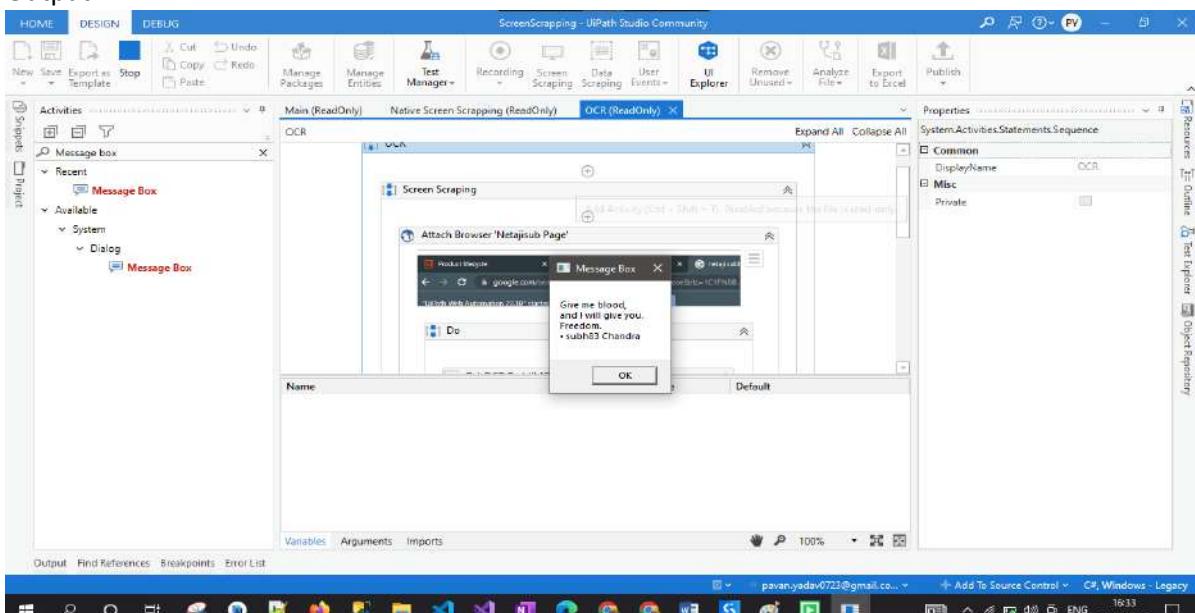
### 5. Add Message box



### 6. Overview



## 7. Output

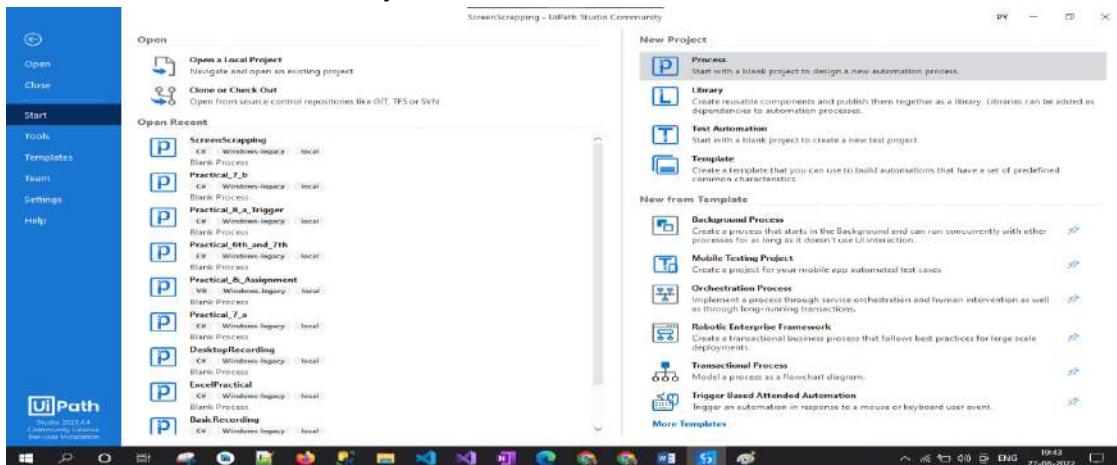


## C] Install and automate any process using UI Path with the following plugins

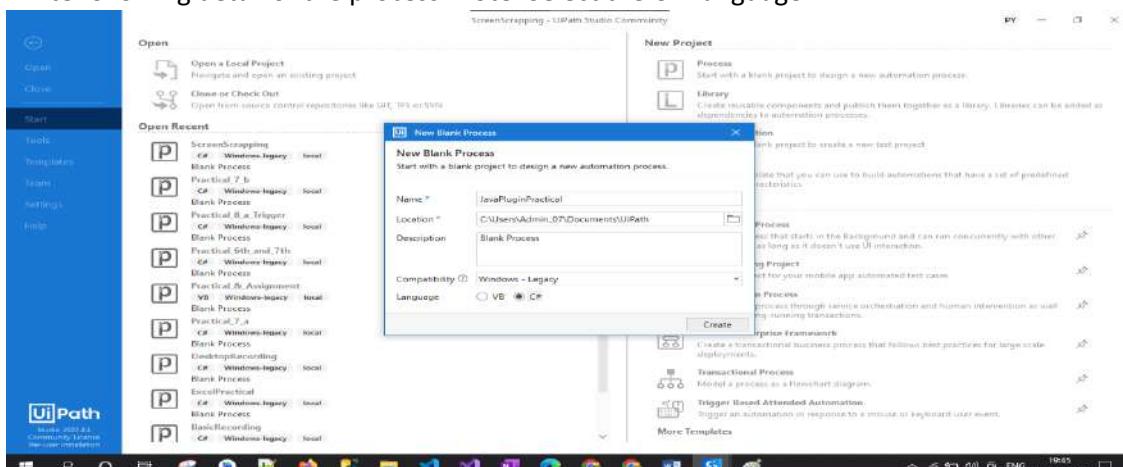
- Java Plugin
- Mail Plugin
- PDF Plugin
- Excel Plugin
- Word Plugin
- Credential Management

**a) Java Plugin:** The Java plugin software is a component of the Java Runtime Environment (JRE). The JRE allows applets (software programs written in the Java programming language) to run in various browsers

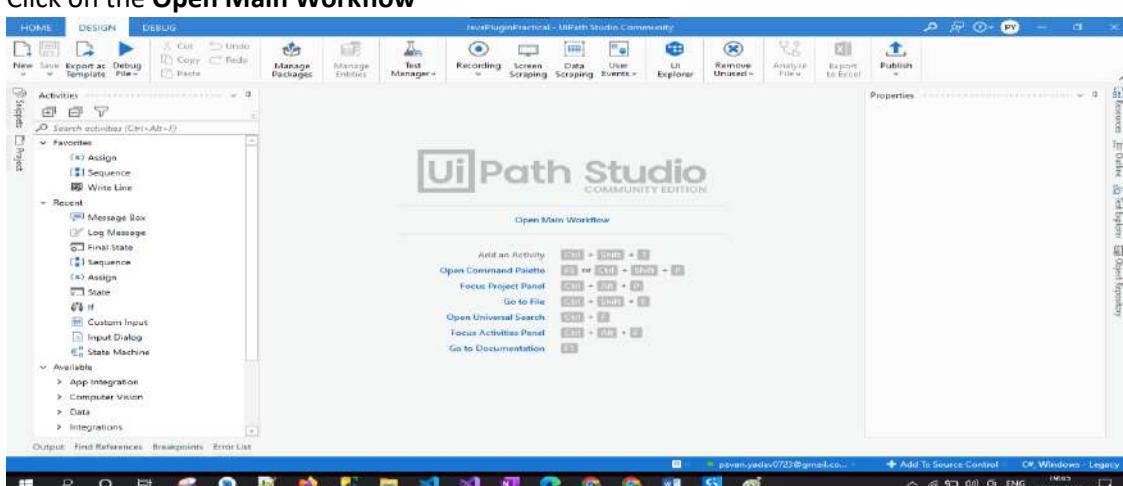
- Click on the **Process** to New Project



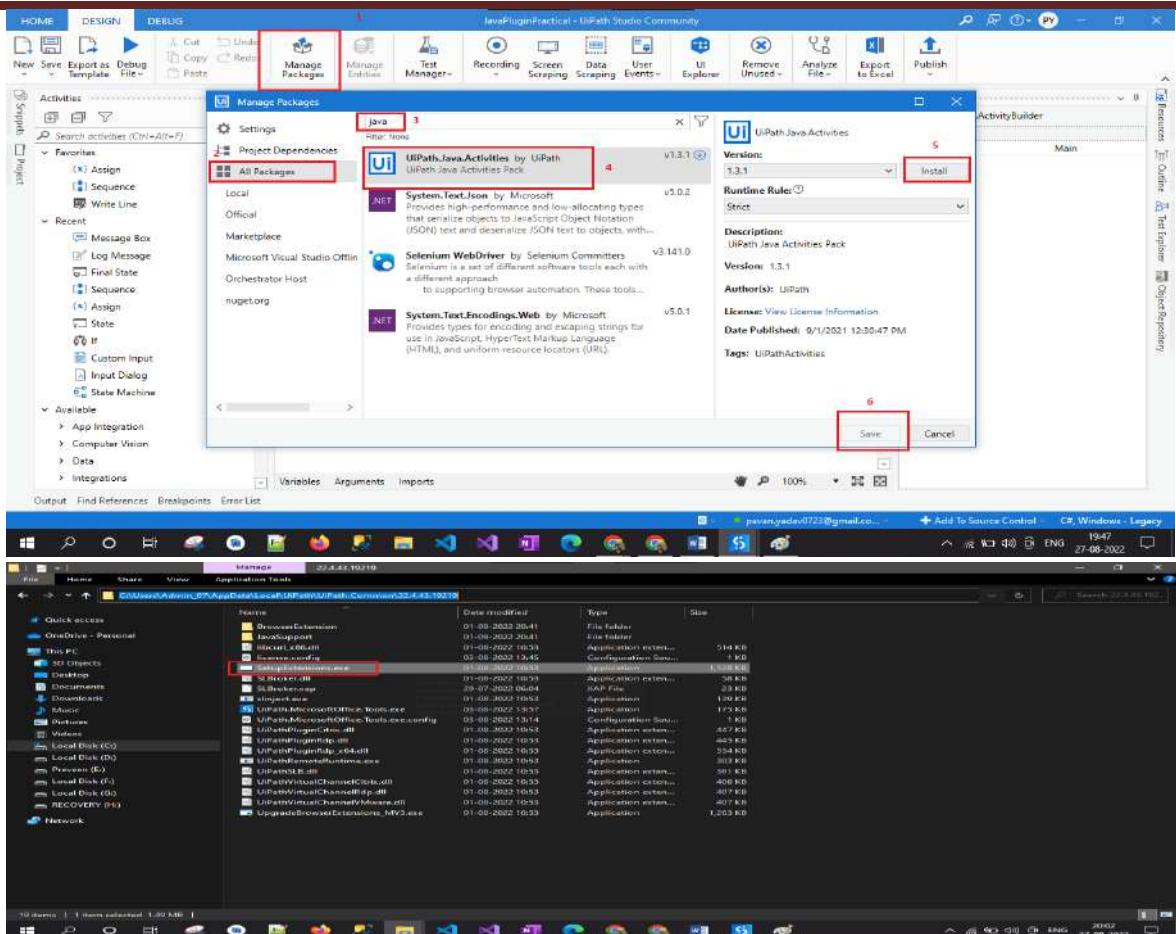
- Write following detail of the process. Note: Select the C# Language



- Click on the Open Main Workflow

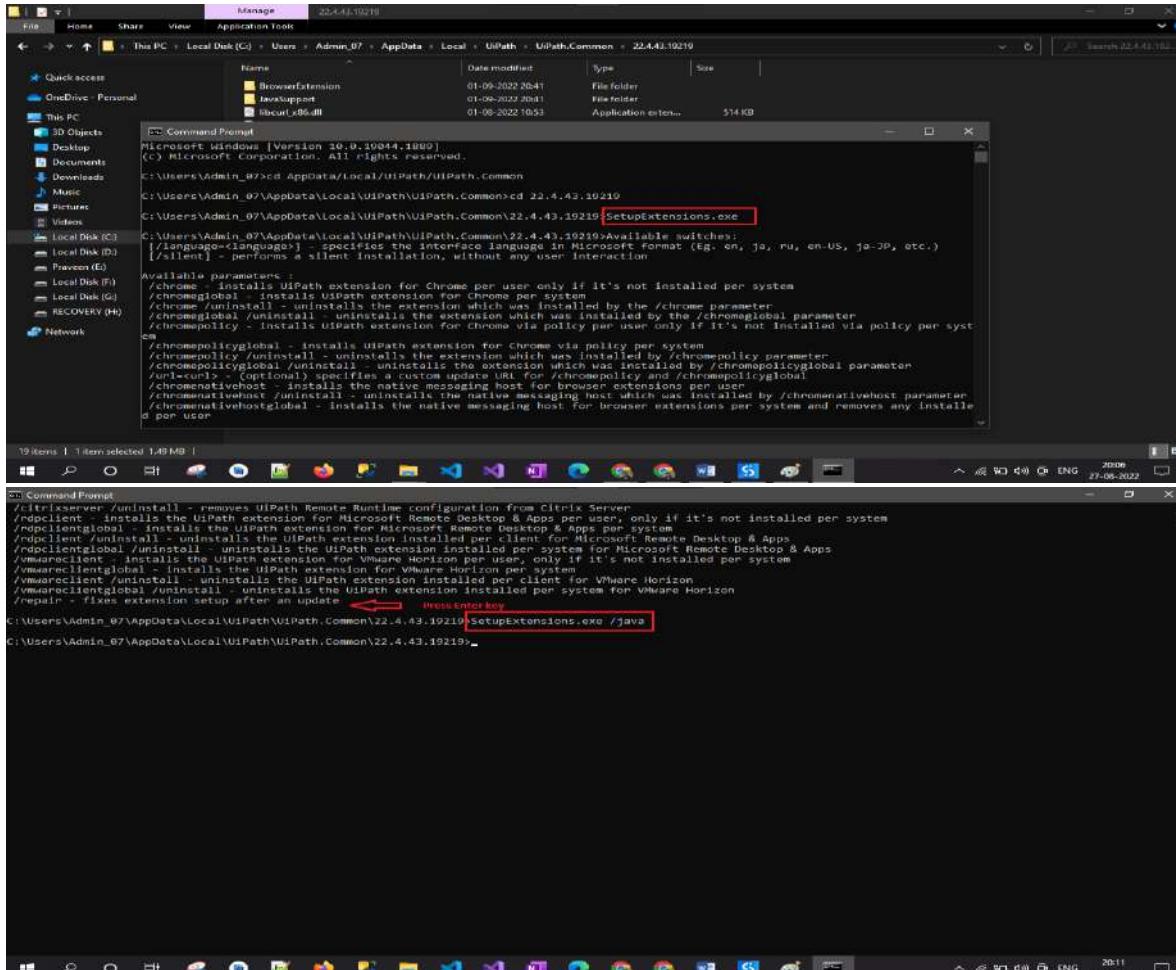


- Go to Manage package and install Java Plugin

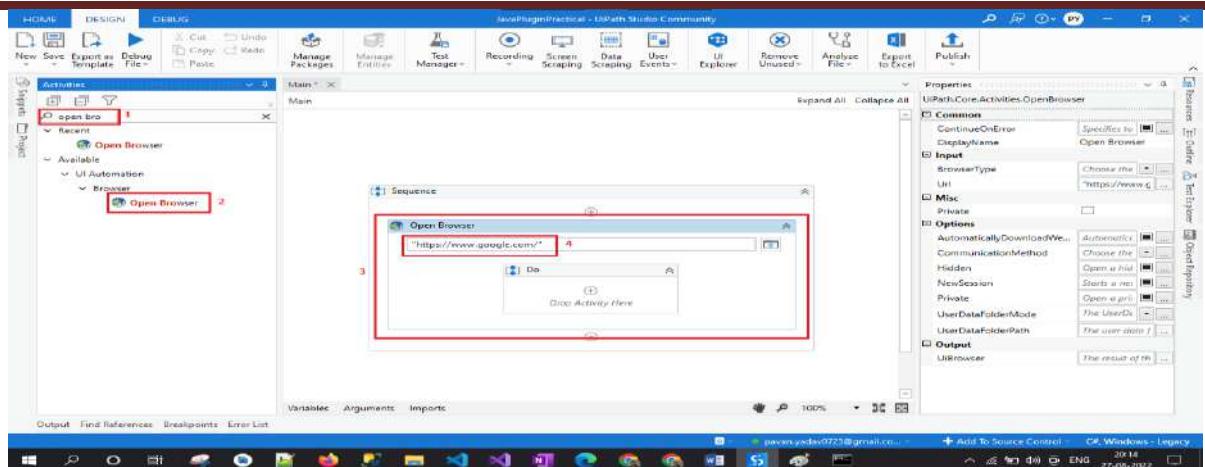


## 5. Go to Command Prompt

C:\Users\Admin\_07\AppData\Local\UiPath\UiPath.Common\22.4.43.19219



## 6. Add Open Browser activity inside the workflow

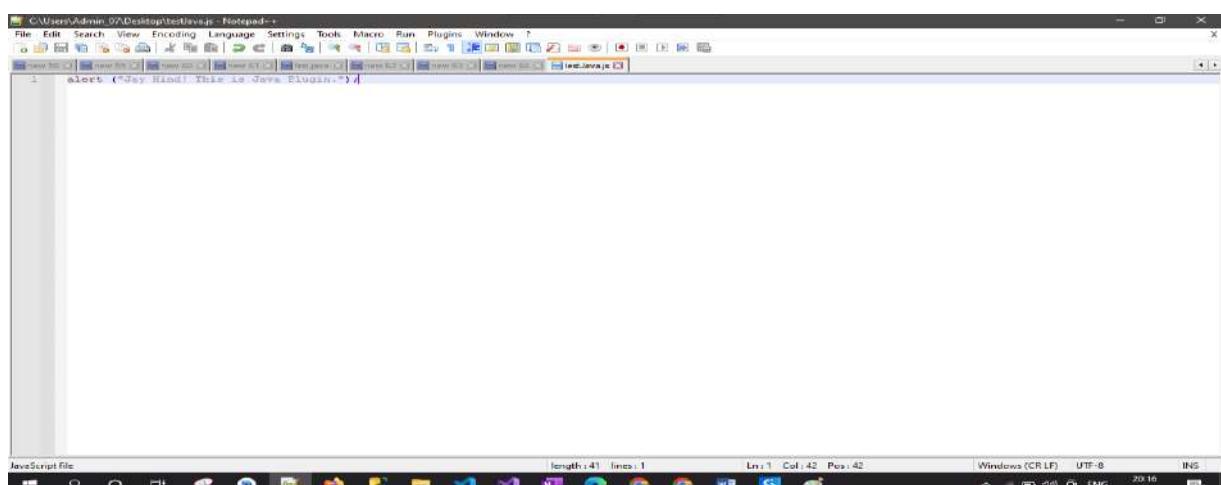


## 7. Create a JavaScript file

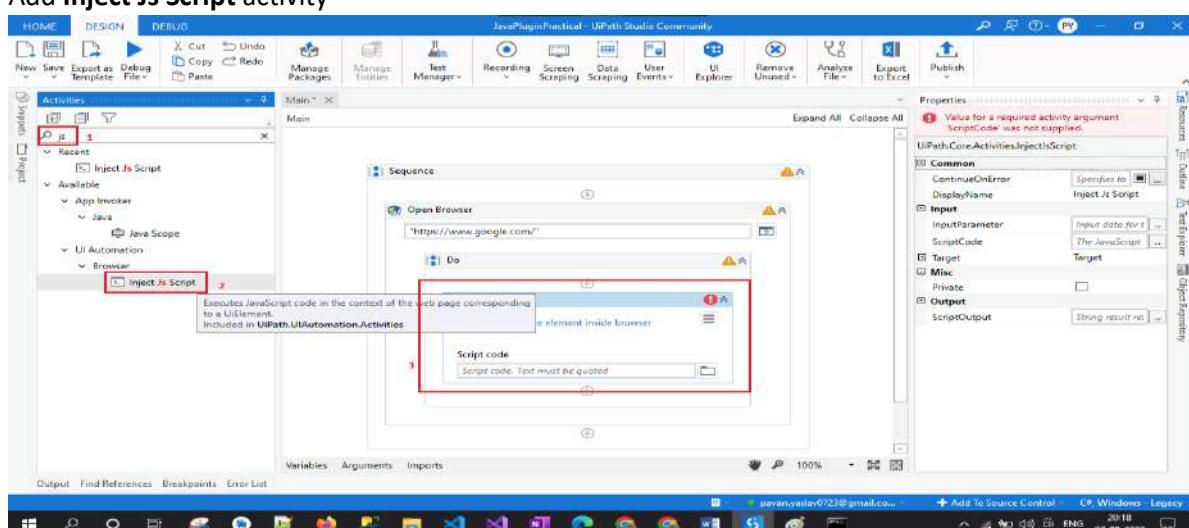
```
alert ("Jay Hind! This is Java Plugin.");
```

OR

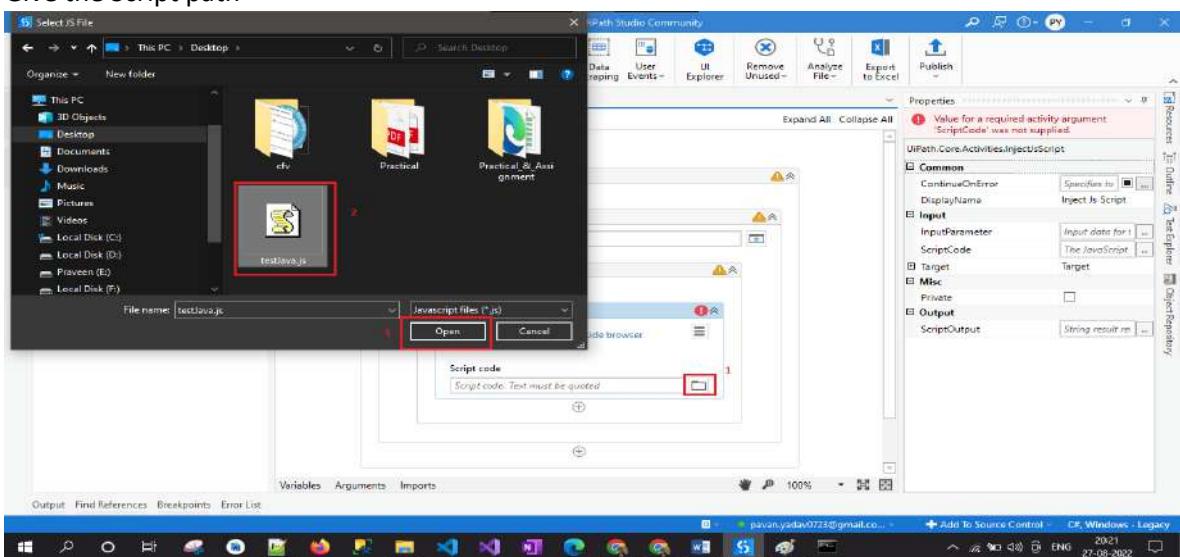
```
function (element){
    alert("Hello RPA");
}
```



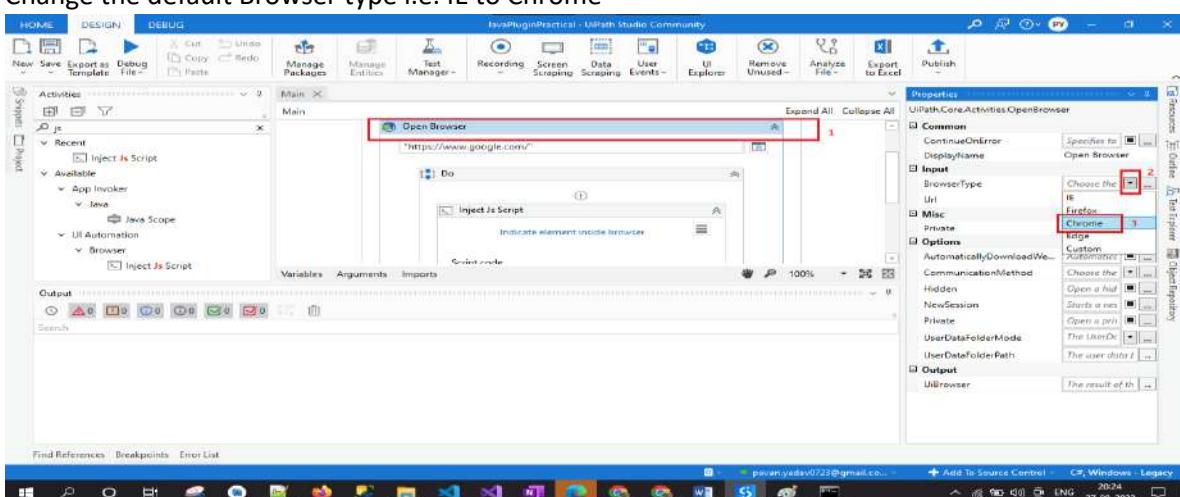
## 8. Add Inject Js Script activity



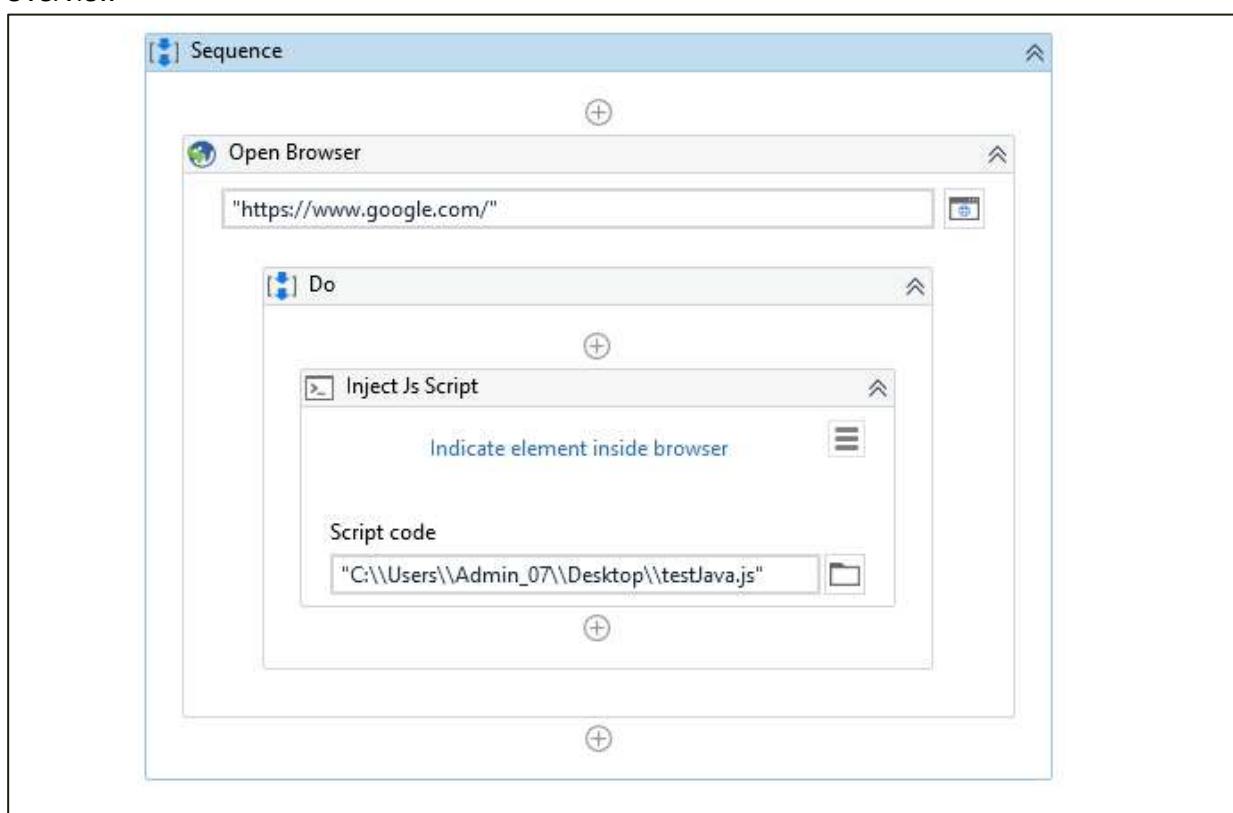
## 9. Give the Script path



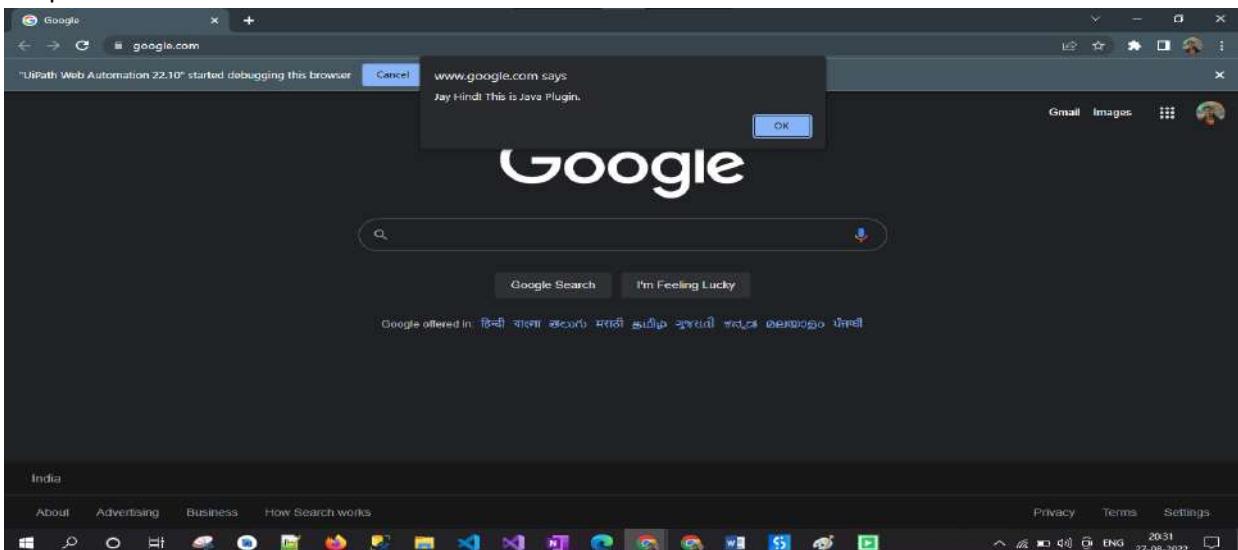
## 10. Change the default Browser type i.e. IE to Chrome



## 11. Overview



## 12. Output

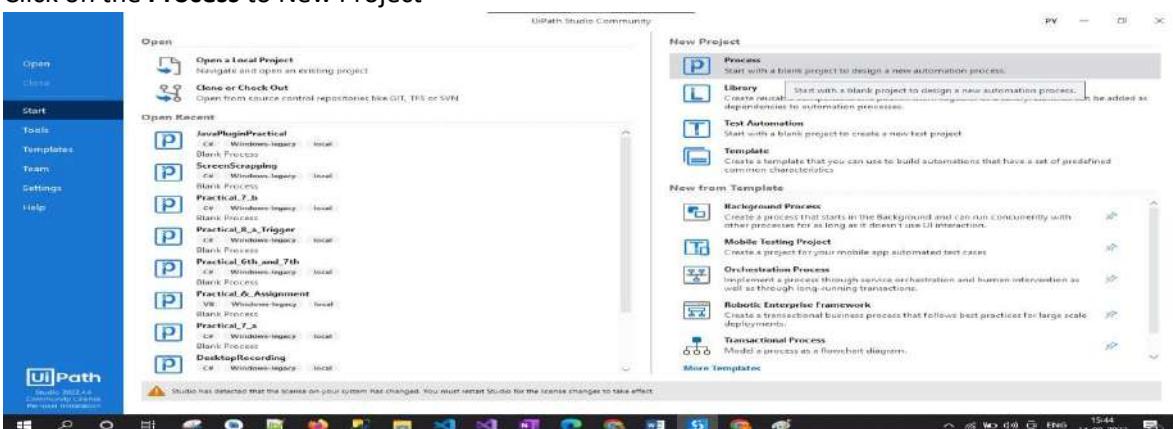


### b) Mail Plugin

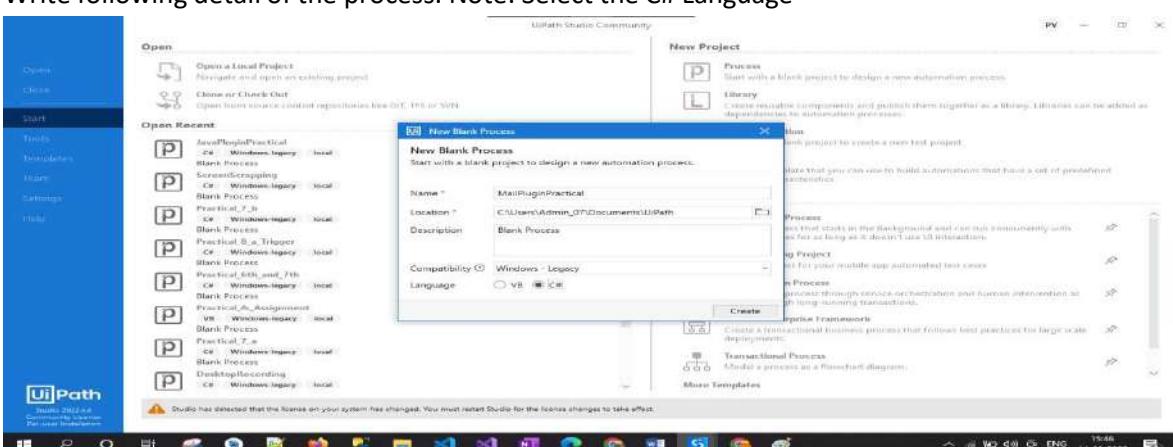
**SMTP:** It is used to send mail messages

**Send SMTP Mail messages activity:** This activity is used to send a mail to another mail.

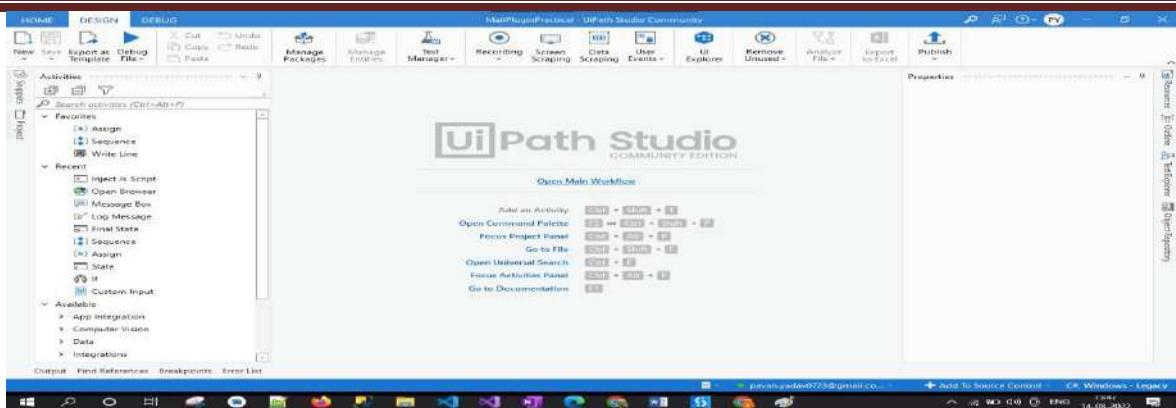
#### 1. Click on the Process to New Project



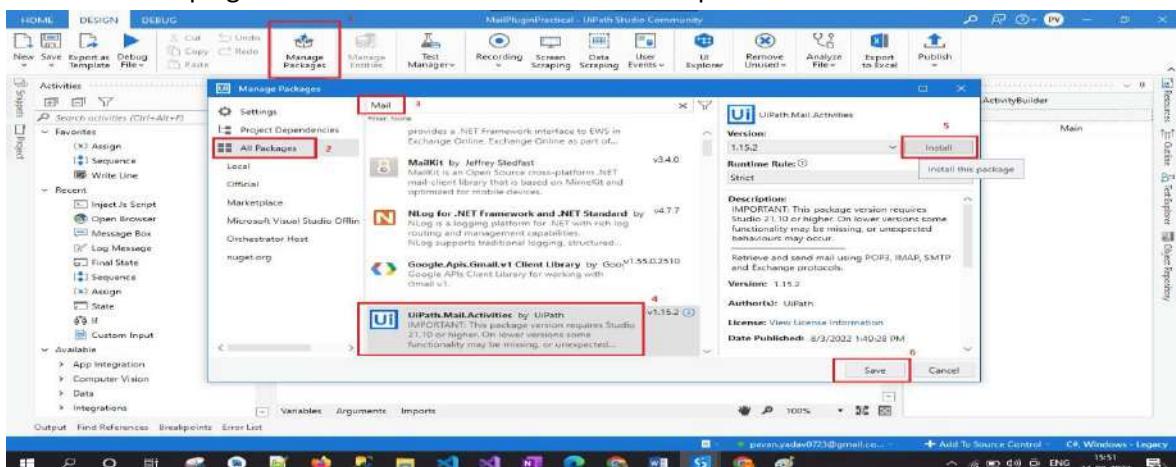
#### 2. Write following detail of the process. Note: Select the C# Language



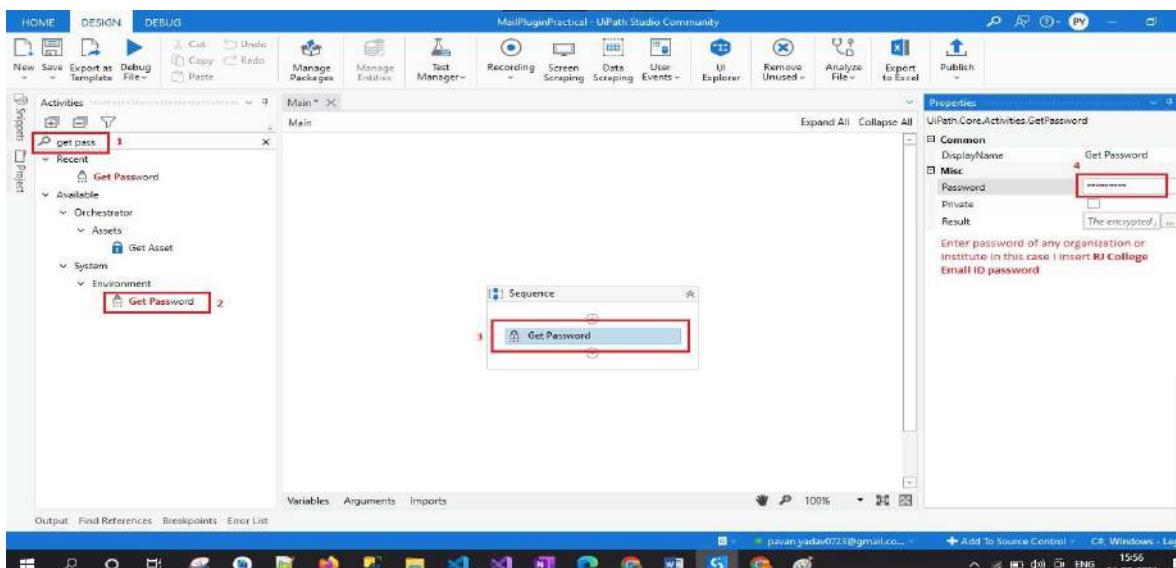
#### 3. Click on the Open Main Workflow



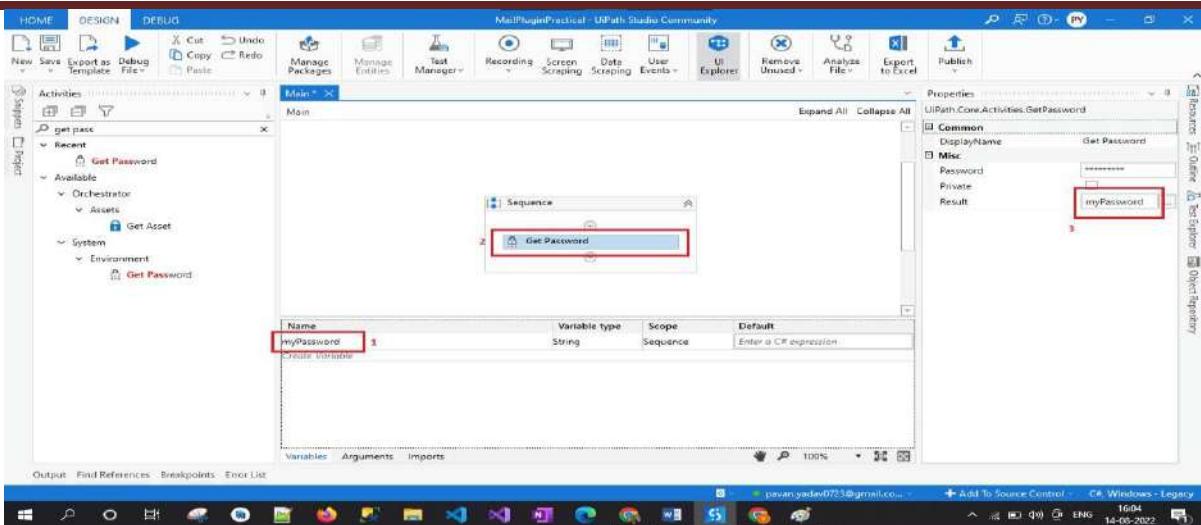
**4. Install the Mail plugin if not installed. Follow the below steps**



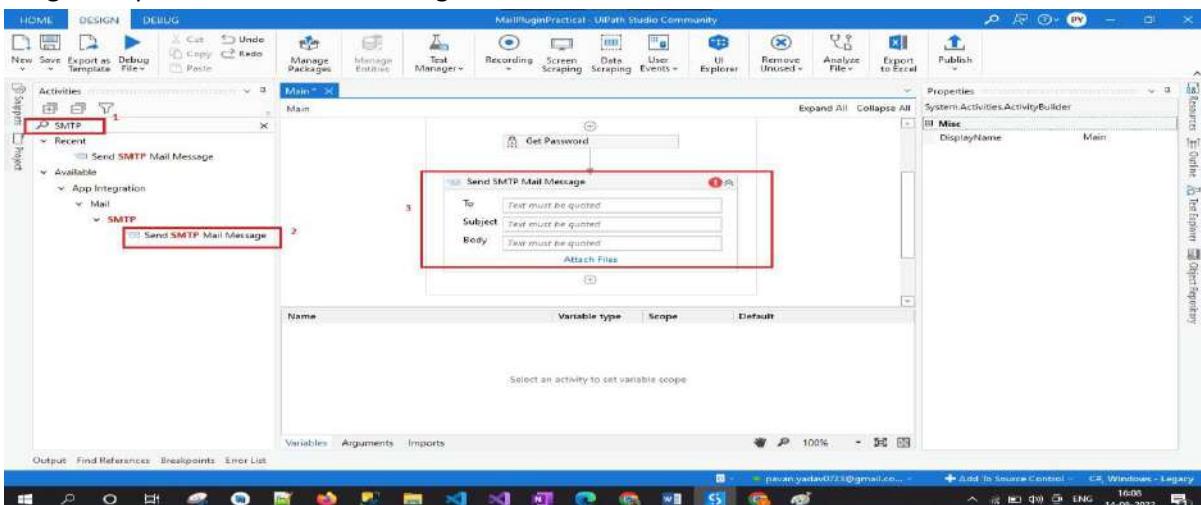
**5. Add Get Password**



**6. Create a variable i.e. myPassword and assign to Get Password**



## 7. Drag & drop Send SMTP Mail Message

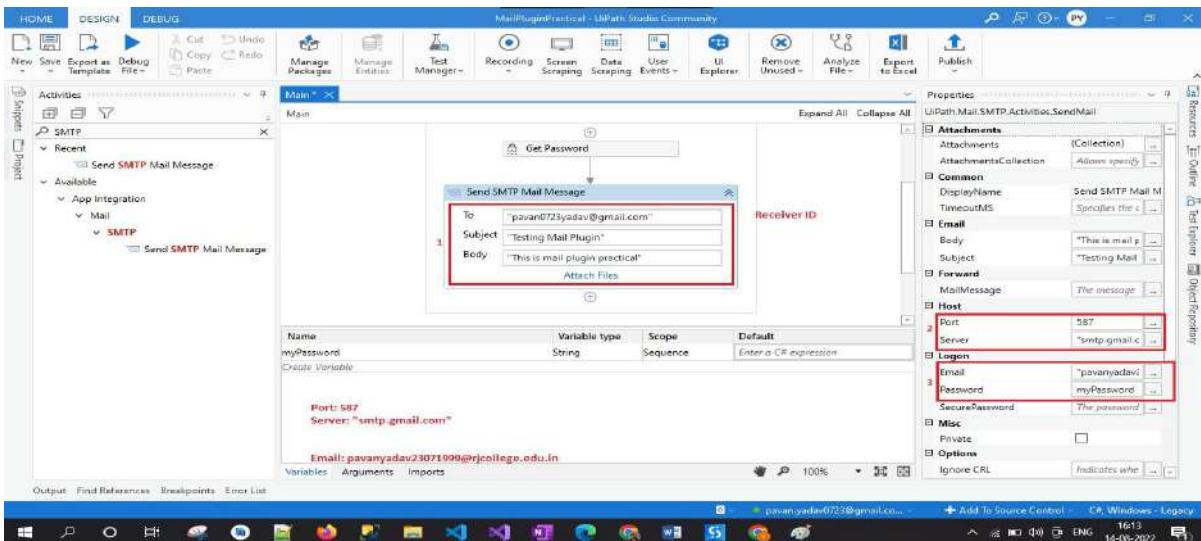


## 8. Add Sender Email ID, Body, Subject, Port, Server, and Receiver ID, Password

**Port:** 587

**Server:** "smtp.gmail.com"

**Email (Sender ID):** pavanyadav23071999@rjcollege.edu.in



## 9. Before run the file first go to institute or organization ID and enable a setting just like below image

The screenshot shows the Google Account Security settings page. The 'Security' tab is selected. A red box highlights the 'Less secure app access' section, which contains a warning about account vulnerability due to less secure sign-in technology. It includes a toggle switch labeled 'On' and a note that it's 'by default this is Off'. Below this, there are sections for 'Signing in to other sites' (Google, Password Manager, Linked Accounts) and a link to 'Learn more'.

Less secure app access  
Your account is vulnerable because you allow apps and devices that use less secure sign-in technology to access your account. To keep your account secure, Google will automatically turn this setting OFF if it's not being used.  
On by default this is Off

Signing in to other sites

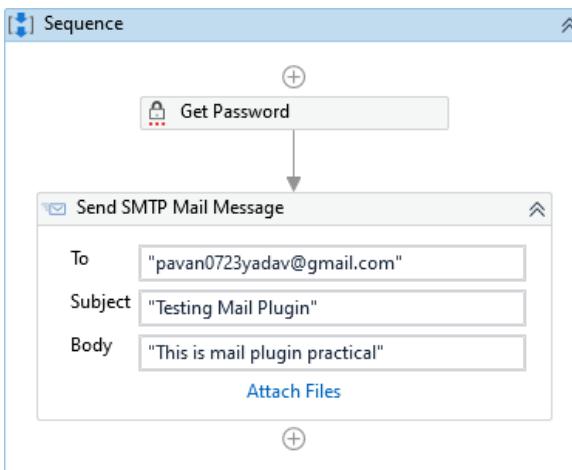
- Google Signing in with Google You use your Google Account to sign in to 1 site or app
- Password Manager You don't have passwords saved in your Google Account. Password Manager makes it easier to sign in to sites and apps you use on any signed-in device.
- Linked Accounts You have no linked accounts. You can give Google access to data from your third-party sites and apps, like your playlists.

Less secure app access

Some apps and devices use less secure sign-in technology, which makes your account vulnerable. You can turn off access for these apps, which we recommend, or turn it on if you want to use them despite the risks. Google will automatically turn this setting OFF if it's not being used. [Learn more](#)

Allow less secure apps:  [Enable or On](#)

## 10. Overview



## 11. Output

**Output Log:**

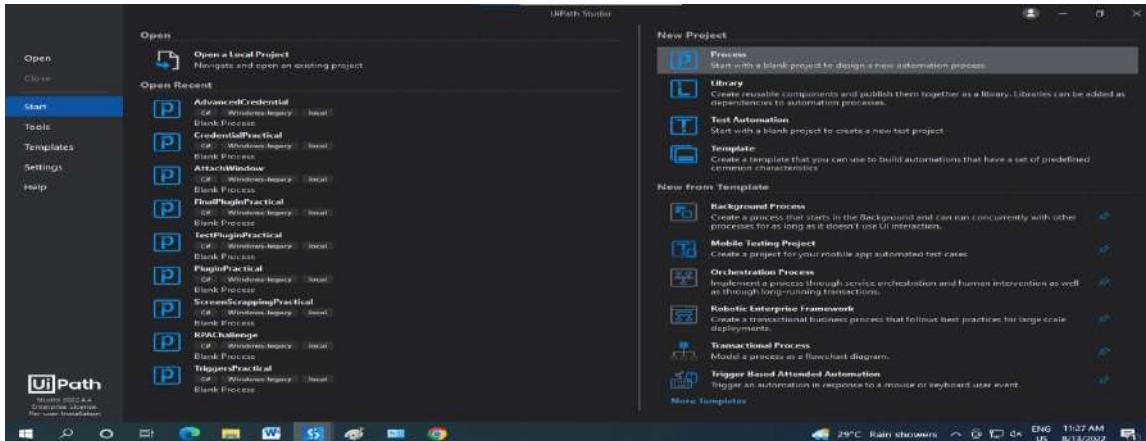
- Execution started for file: Main
- MailPluginPractical execution started
- MailPluginPractical execution ended in: 00:00:06

### c) PDF Plugin

**Read PDF Text:** It is used to read the text written on any PDF document.

**Read PDF with OCR:** It is used to read the image part of the PDF

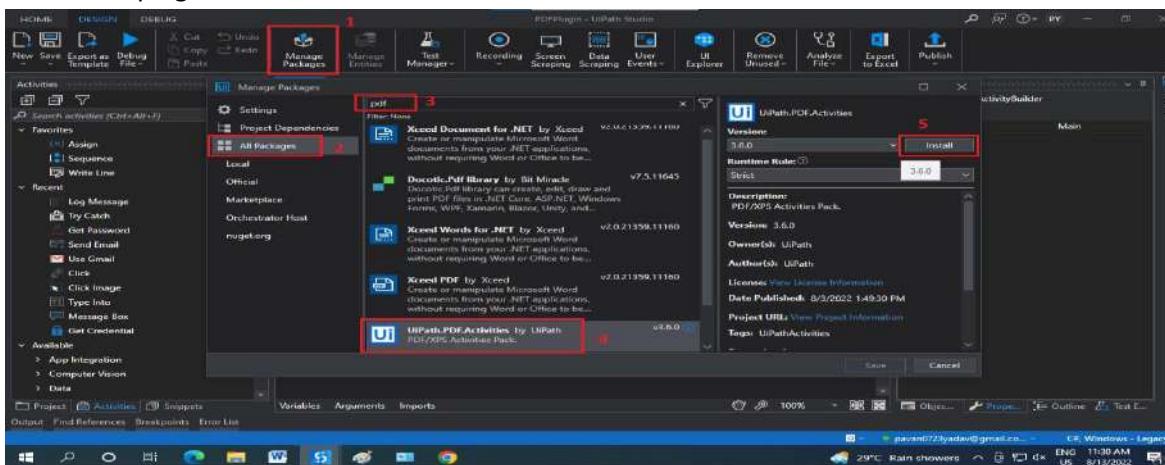
#### 1. Click on the Process to New Project



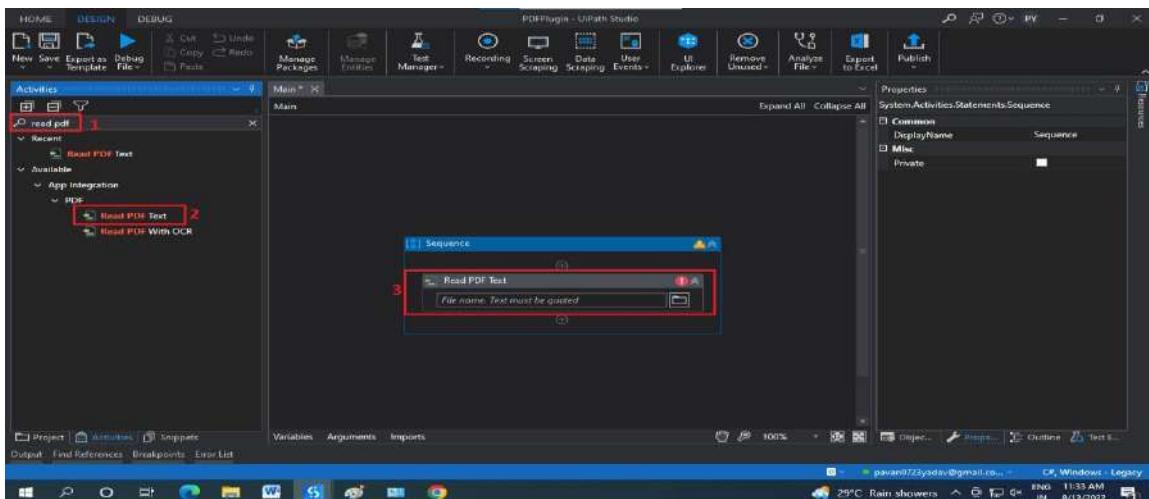
#### 2. Click on the Open Main Workflow



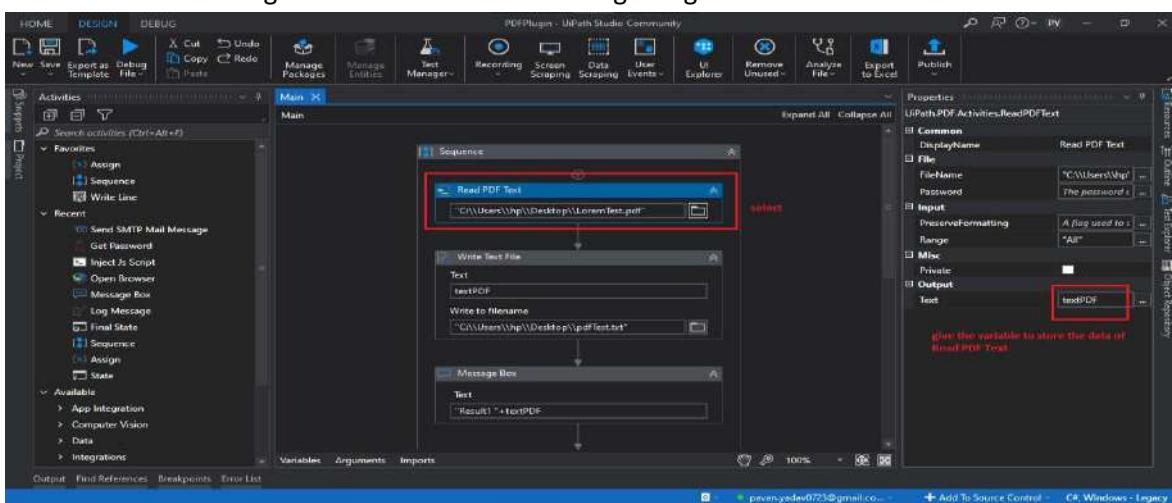
#### 3. Install PDF plugin if not installed



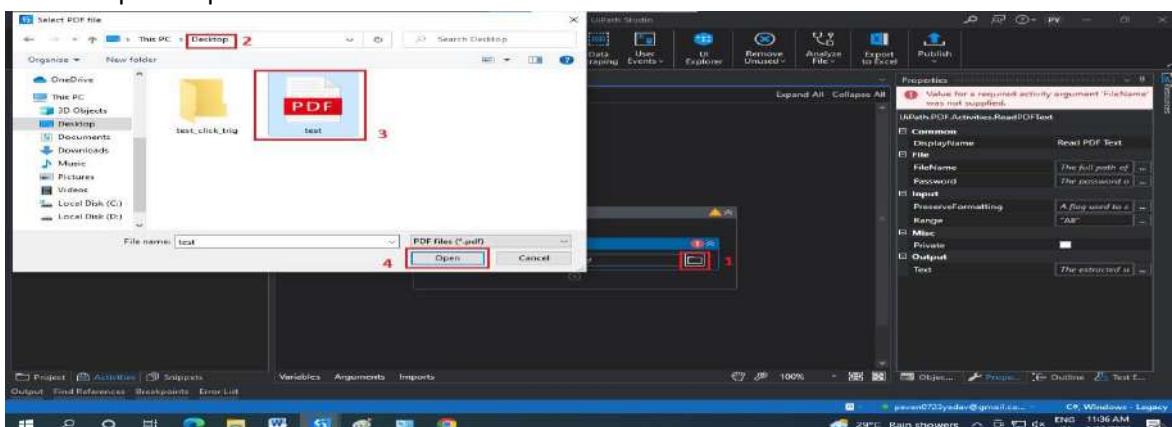
#### 4. Add Read PDF Text



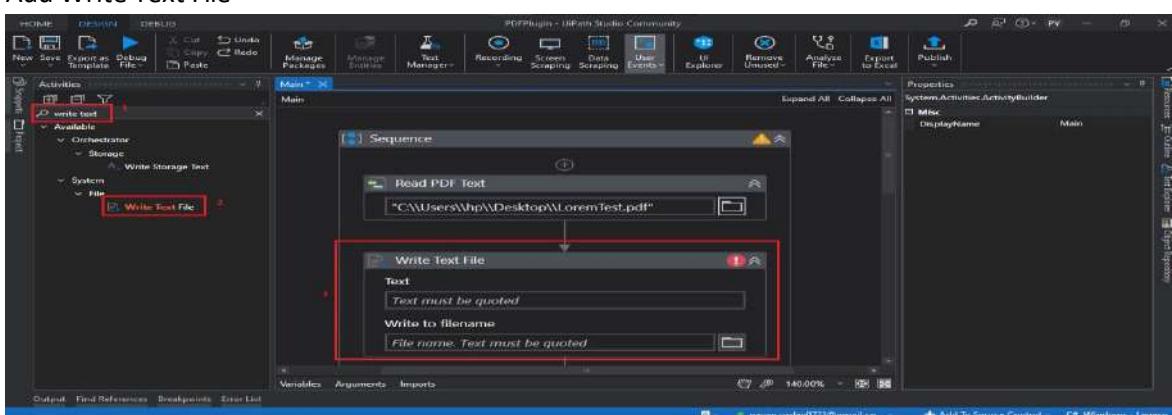
#### 5. Create a variable and give to the Read PDF Text for getting the data



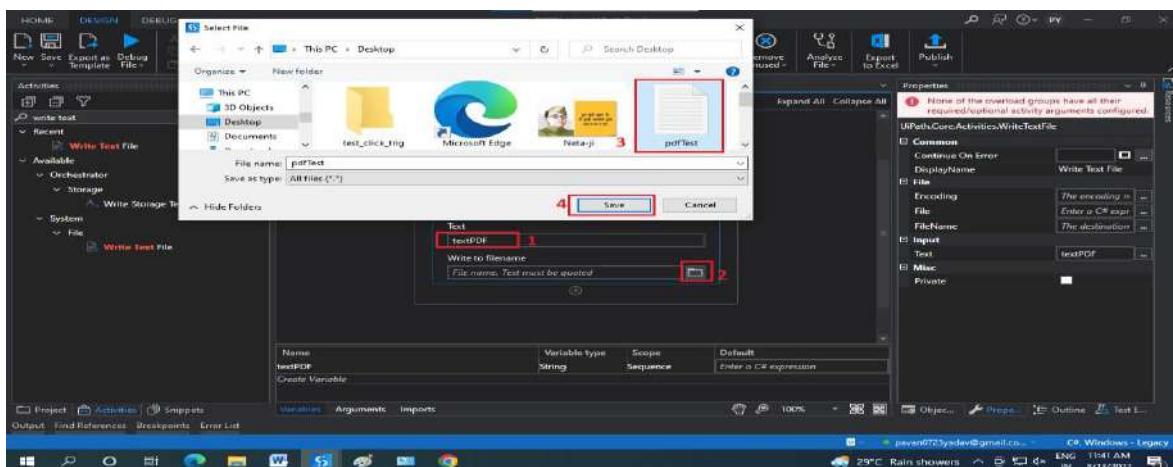
#### 6. Give the .pdf file path to read the content inside the PDF file



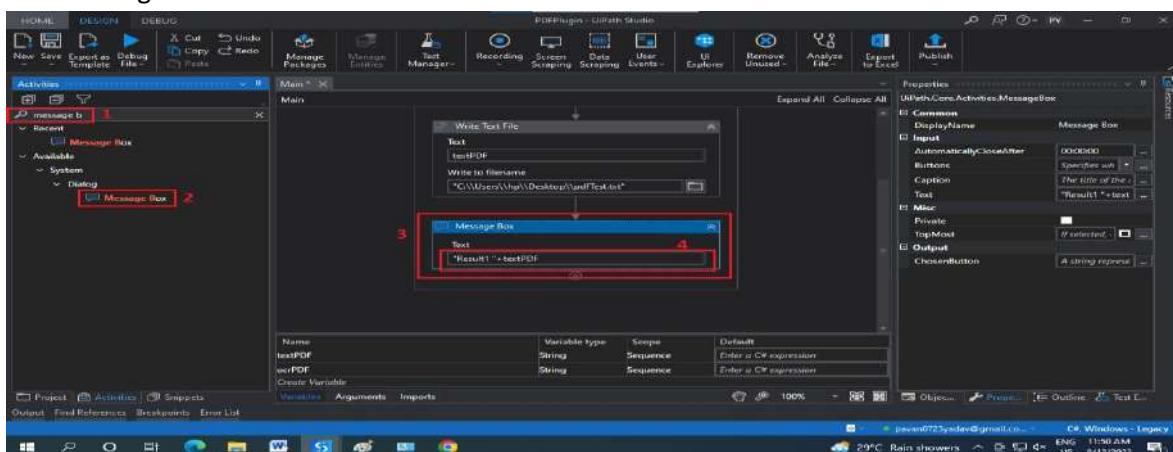
#### 7. Add Write Text File



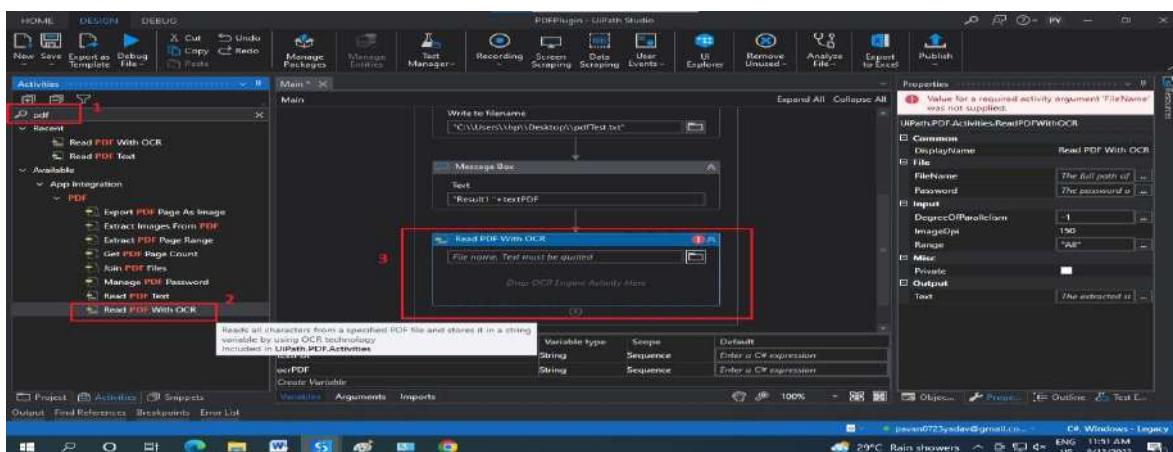
## 8. Give the .txt file to be write the data of PDF file



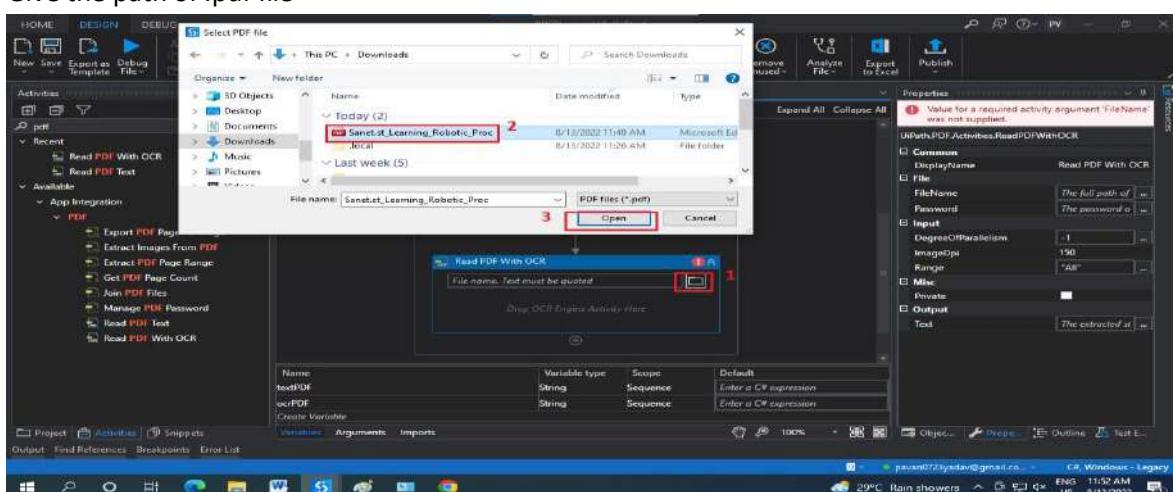
## 9. Add Message Box



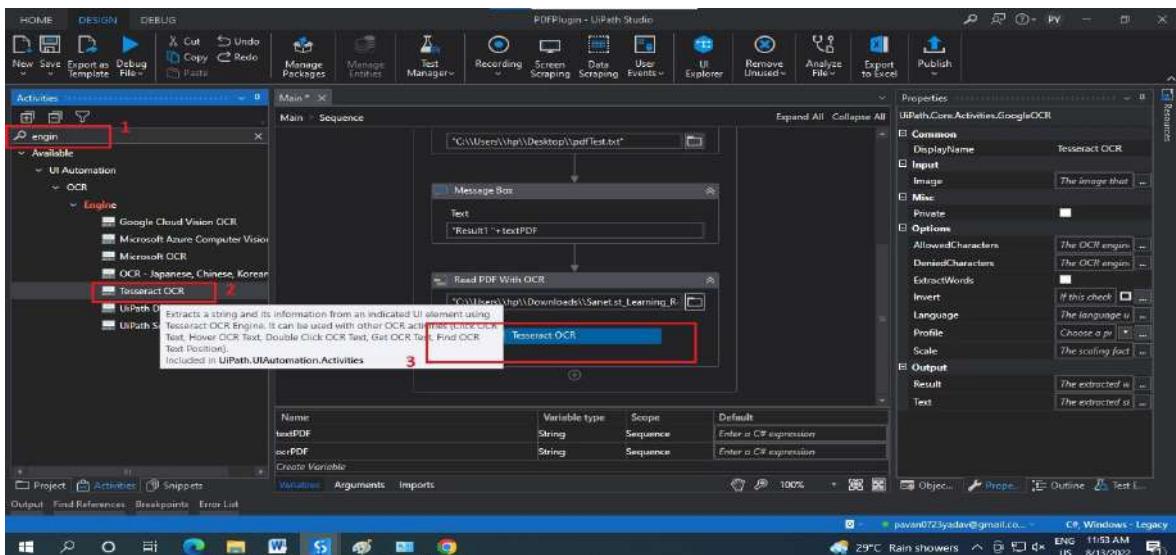
## 10. Add Read PDF With OCR



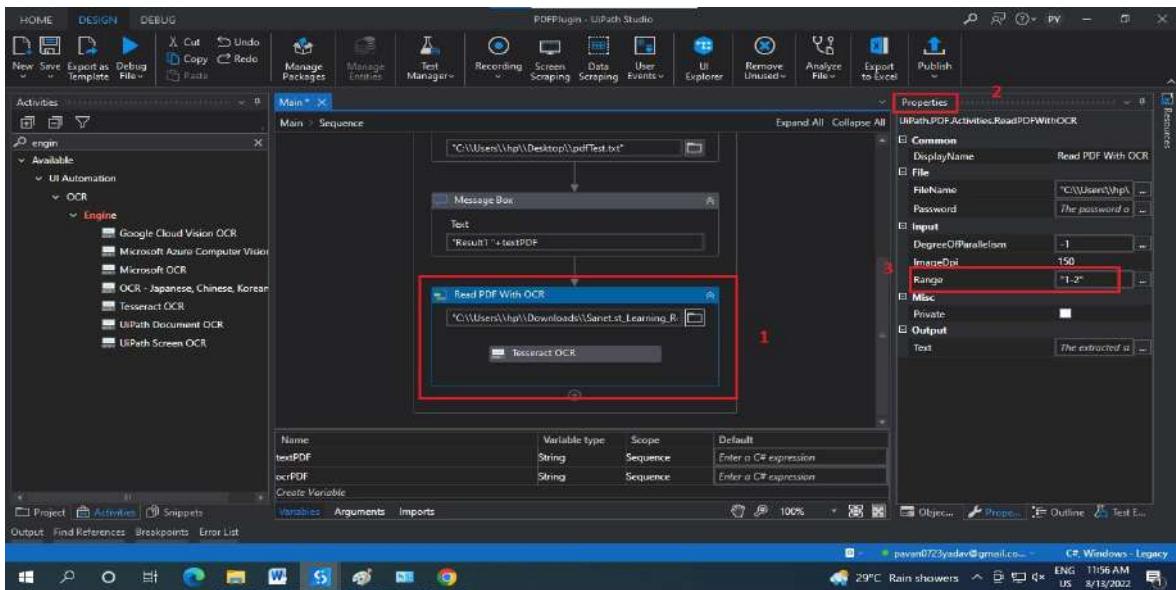
## 11. Give the path of .pdf file



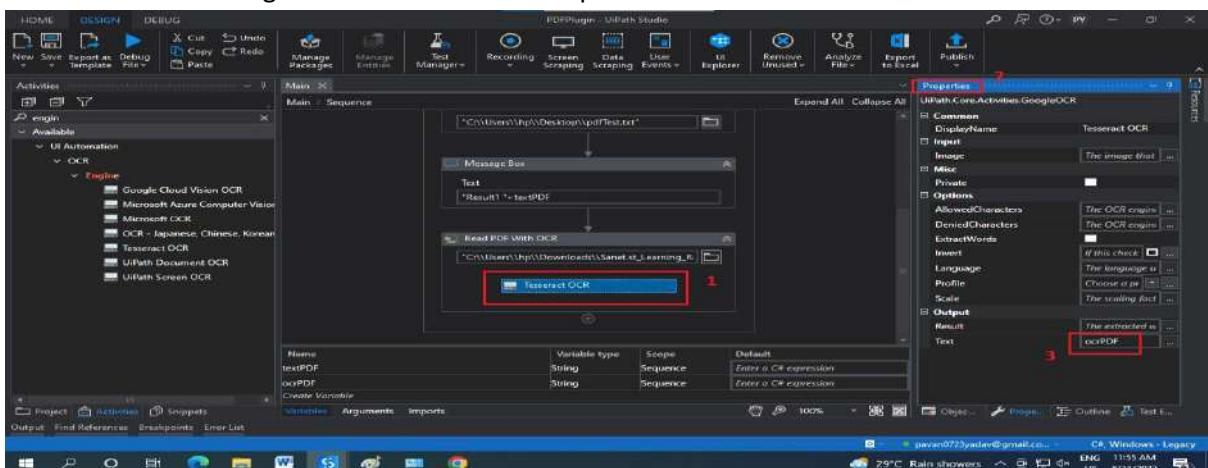
## 12. Add Tesseract OCR



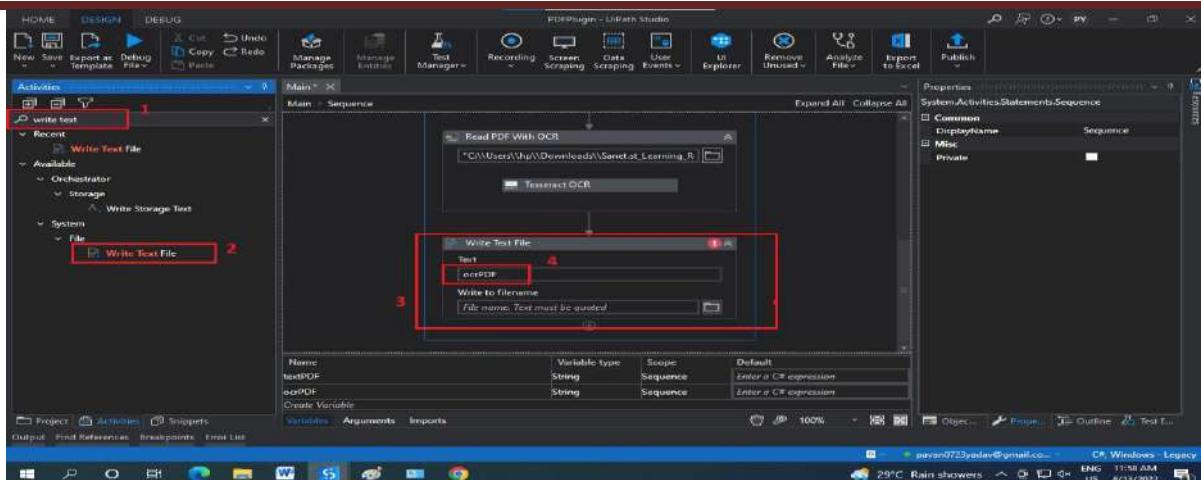
13. Give the range of pdf to extract the data. For example suppose a 15 pages pdf file is there if we use only 2 pages of pdf data is require for use certain work then give the range of pdf file



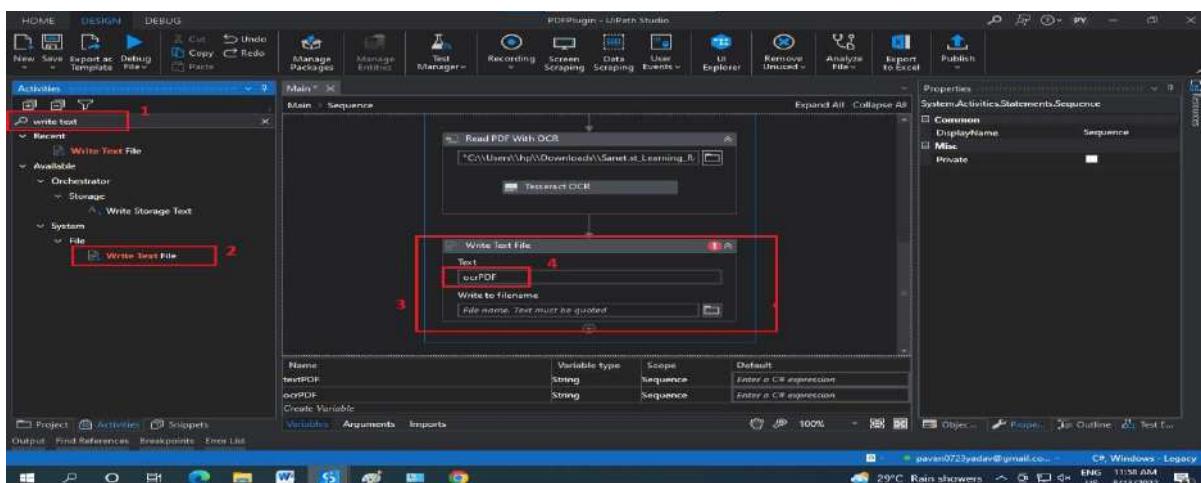
14. Create a variable and give the Tesseract OCR output



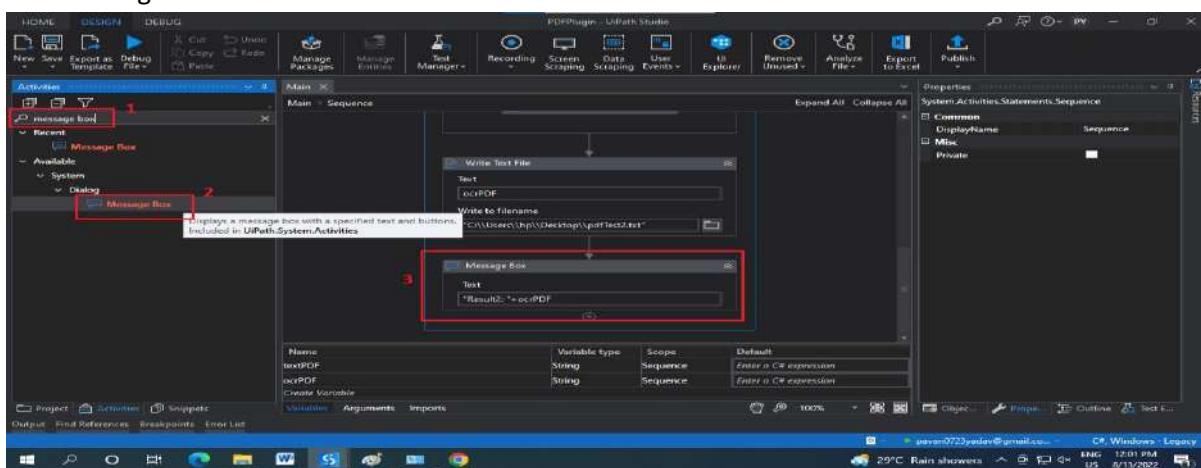
15. Add Write Text File



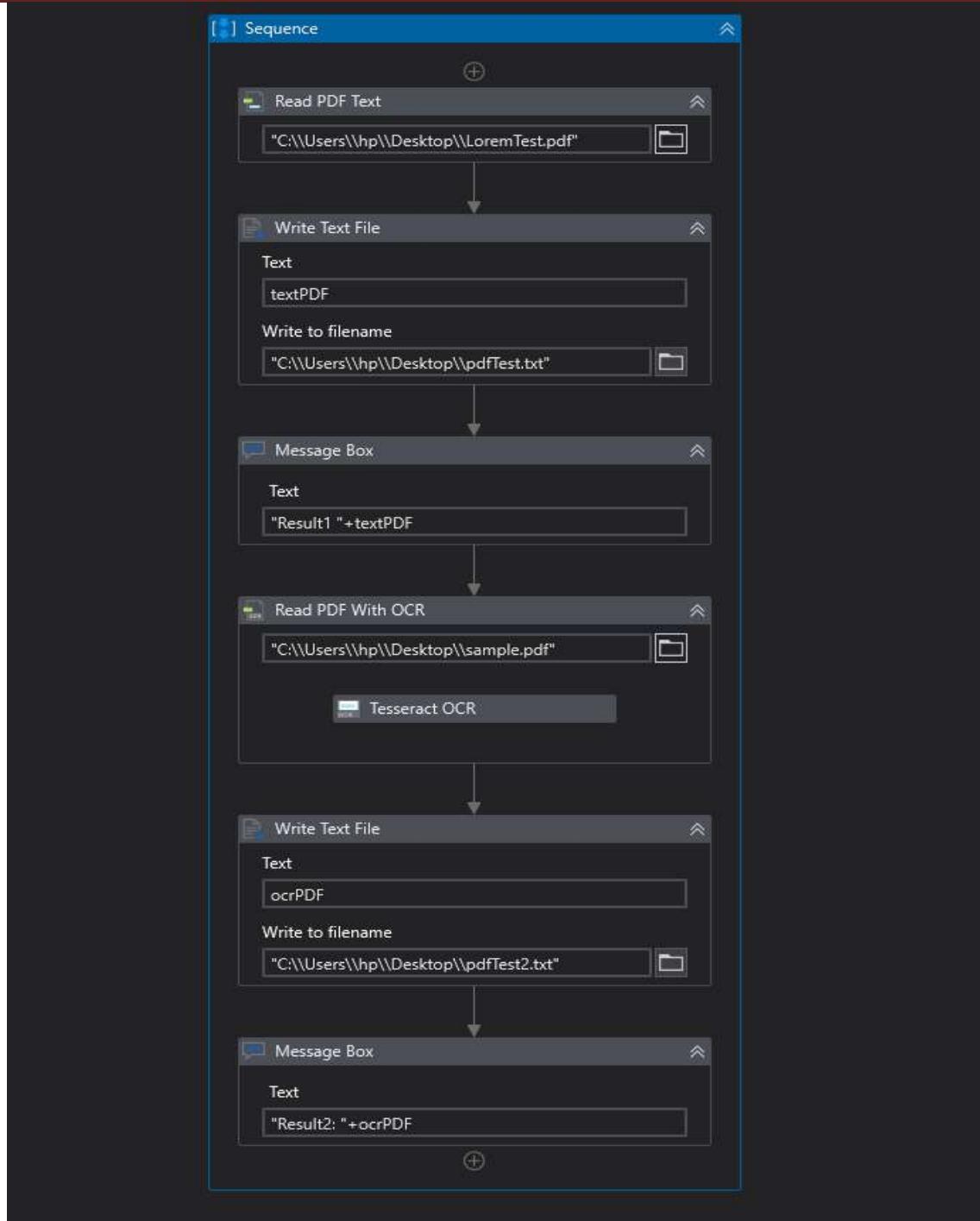
16. Give the .txt file to be write the data of PDF file



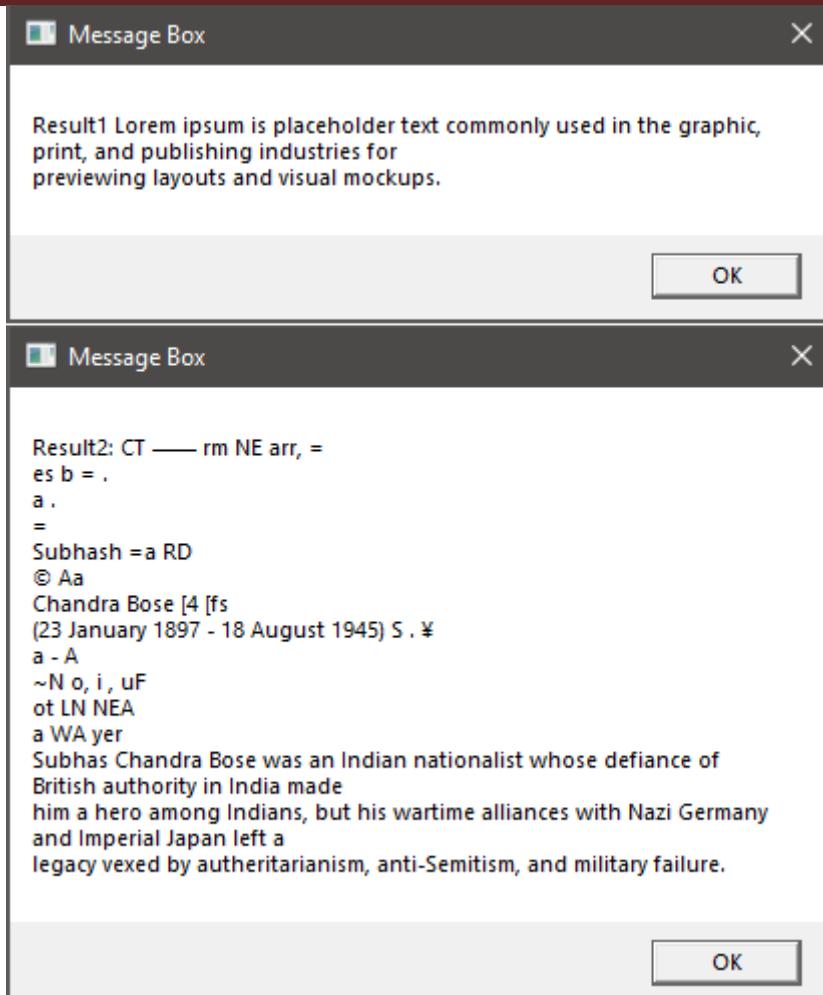
17. Add Message Box



18. Overview

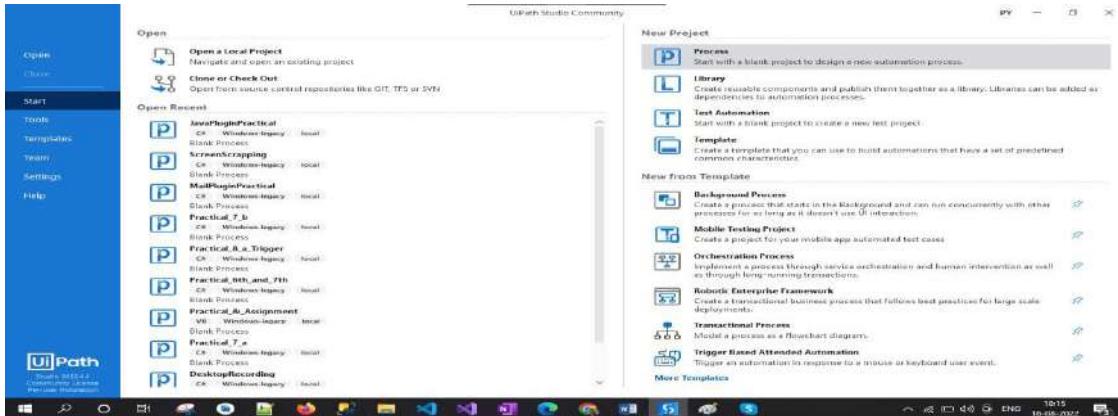


#### 19. Output

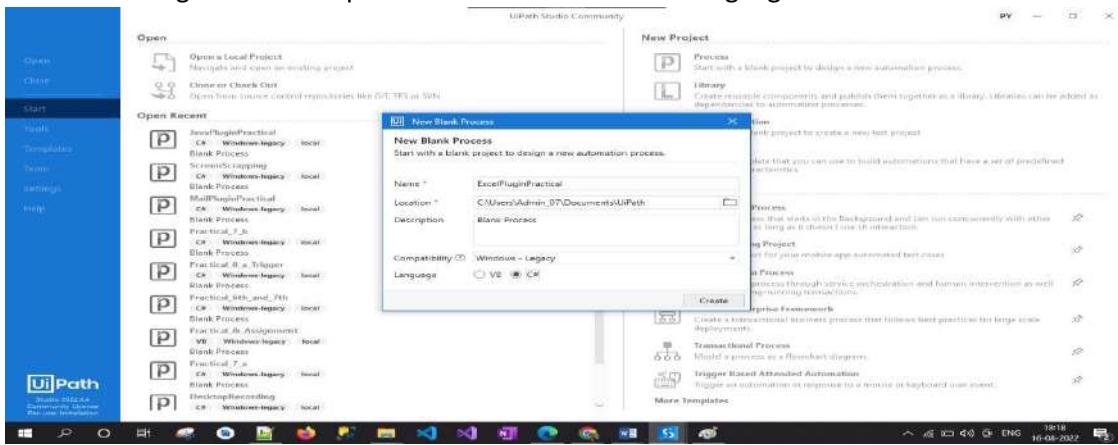


## d) Excel Plugin

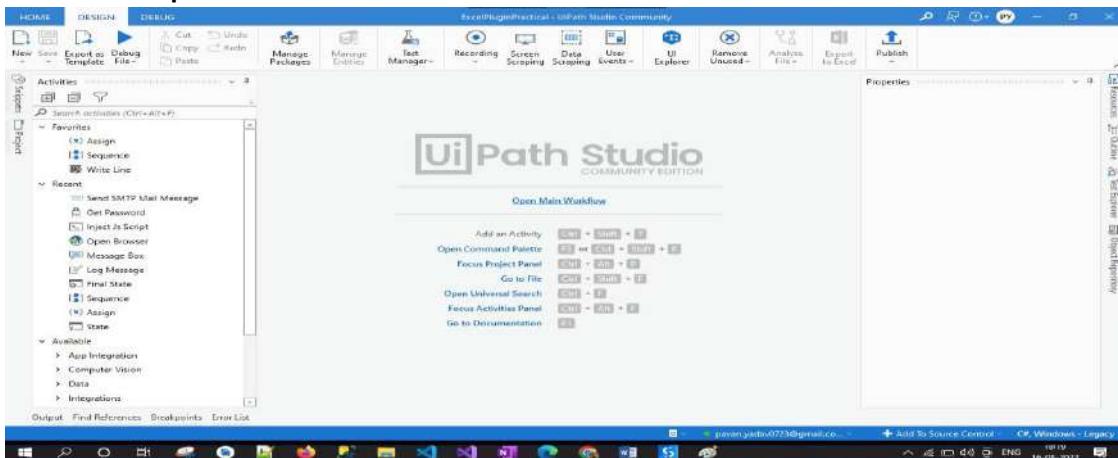
### 1. Click on the Process to New Project



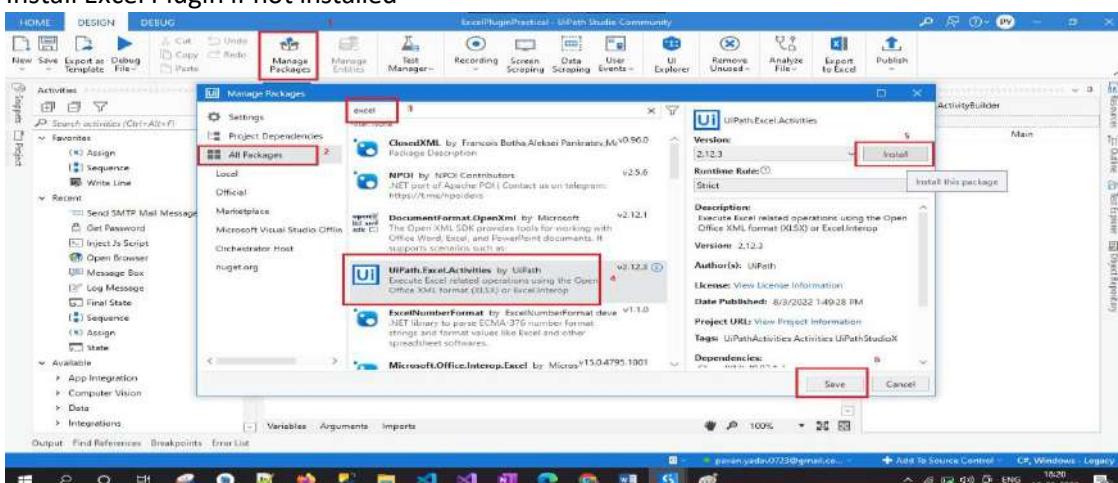
### 2. Write following detail of the process. Note: Select the C# Language



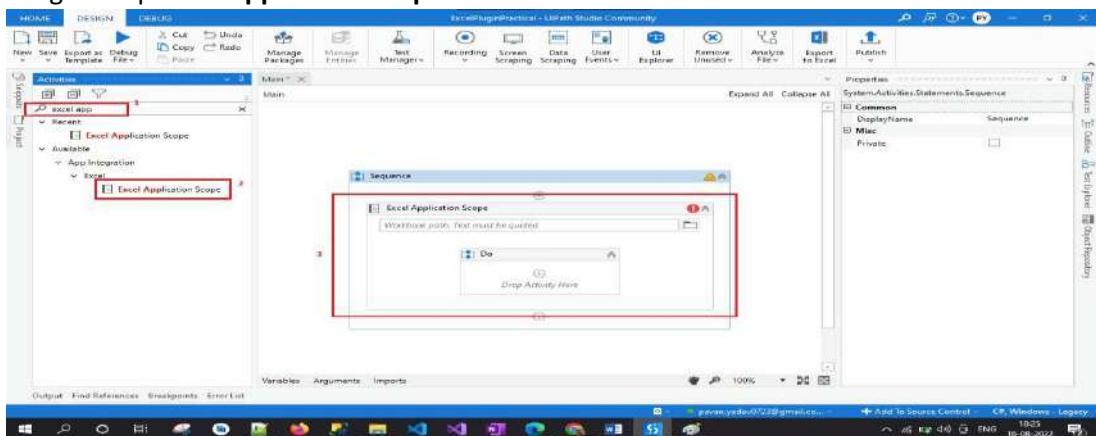
### 3. Click on the Open Main Workflow



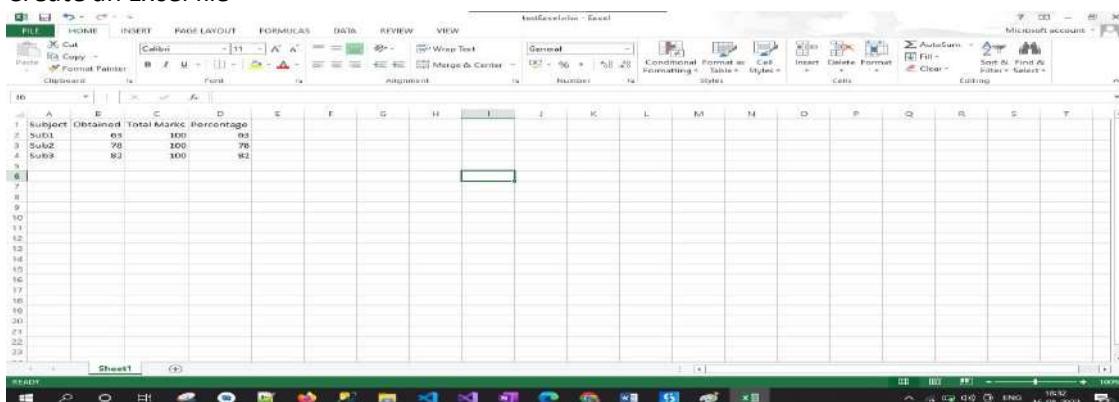
### 4. Install Excel Plugin if not installed



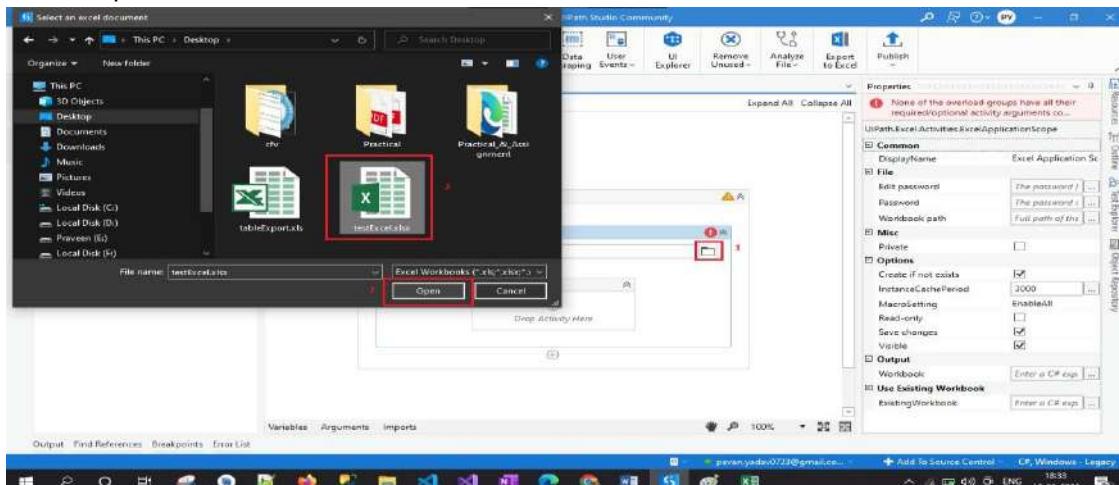
### 5. Drag & drop Excel Application Scope



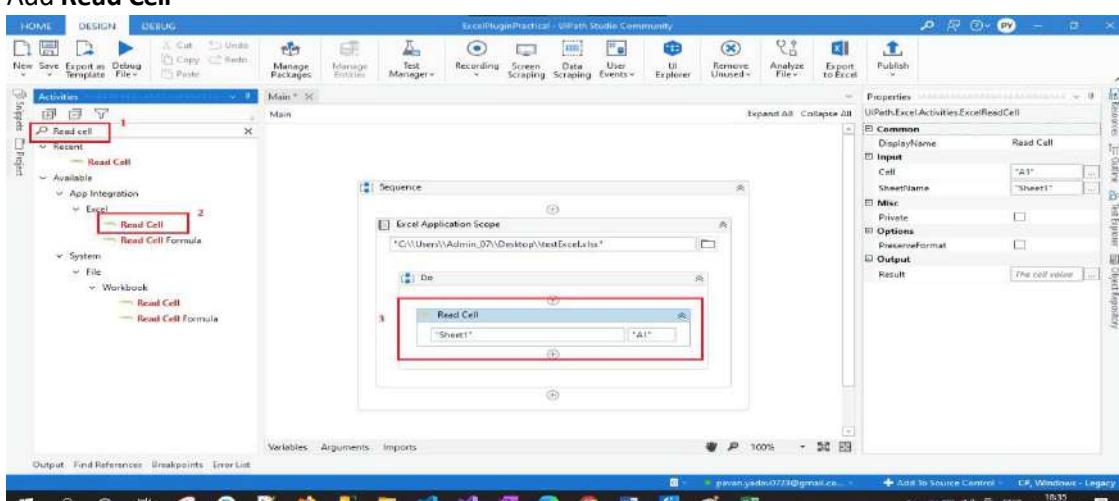
### 6. Create an Excel file



### 7. Give the path of the Excel file



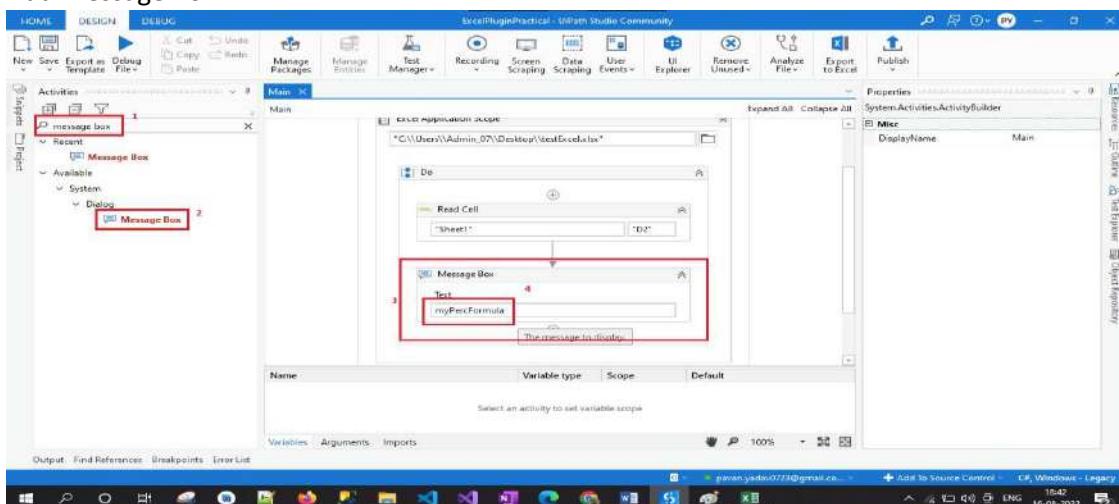
### 8. Add Read Cell



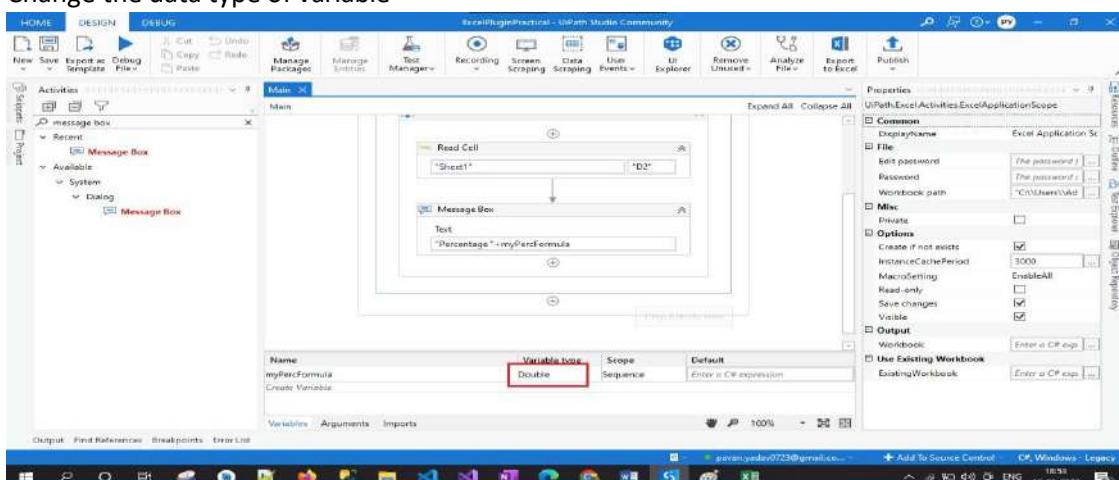
### 9. Add variable and mention the Read Cell output



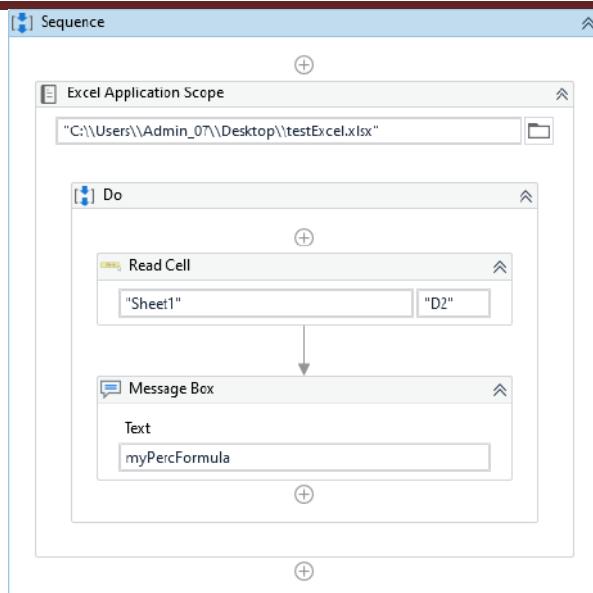
#### 10. Add Message Box



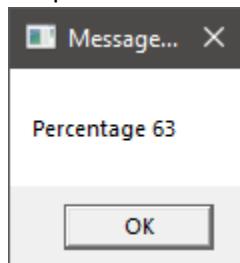
#### 11. Change the data type of variable



#### 12. Overview



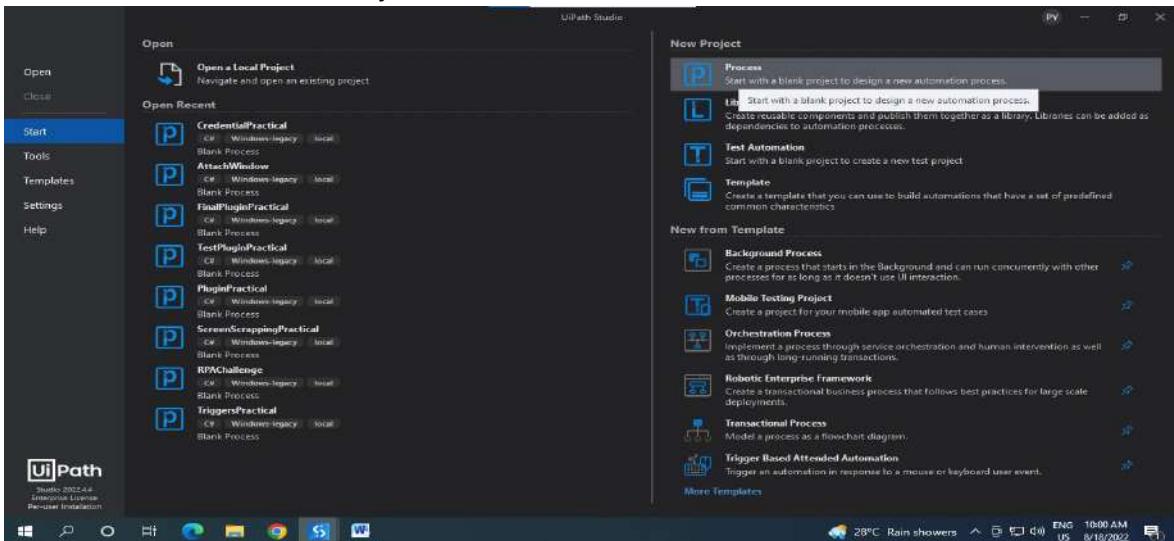
## 13. Output



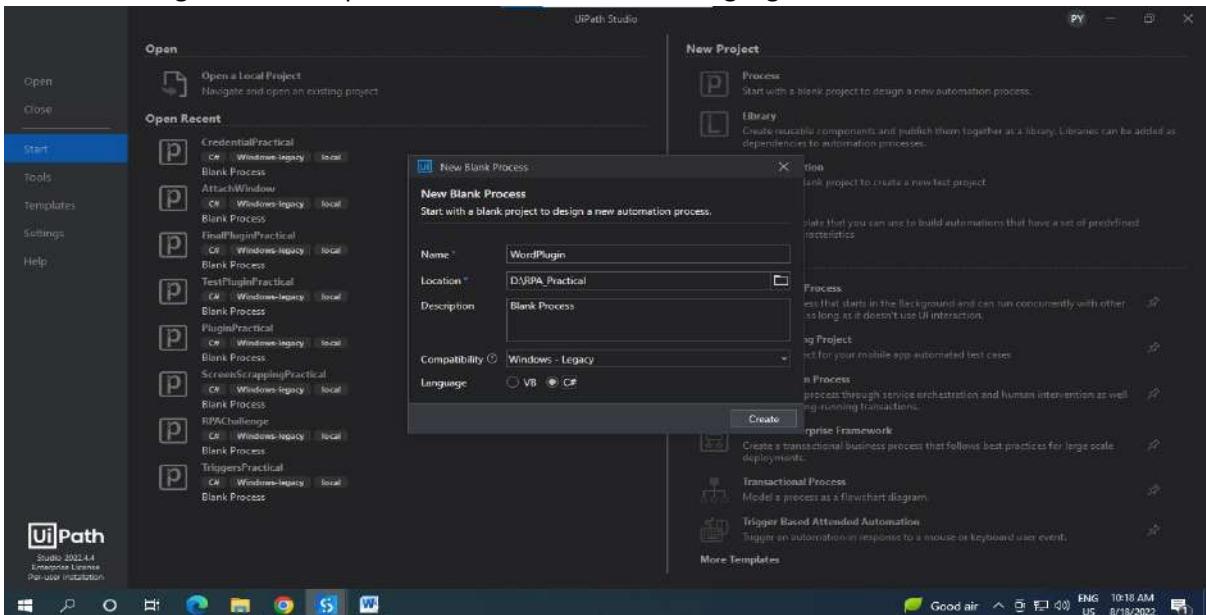
### e) Word Plugin

#### Read File & Replace Text in word file

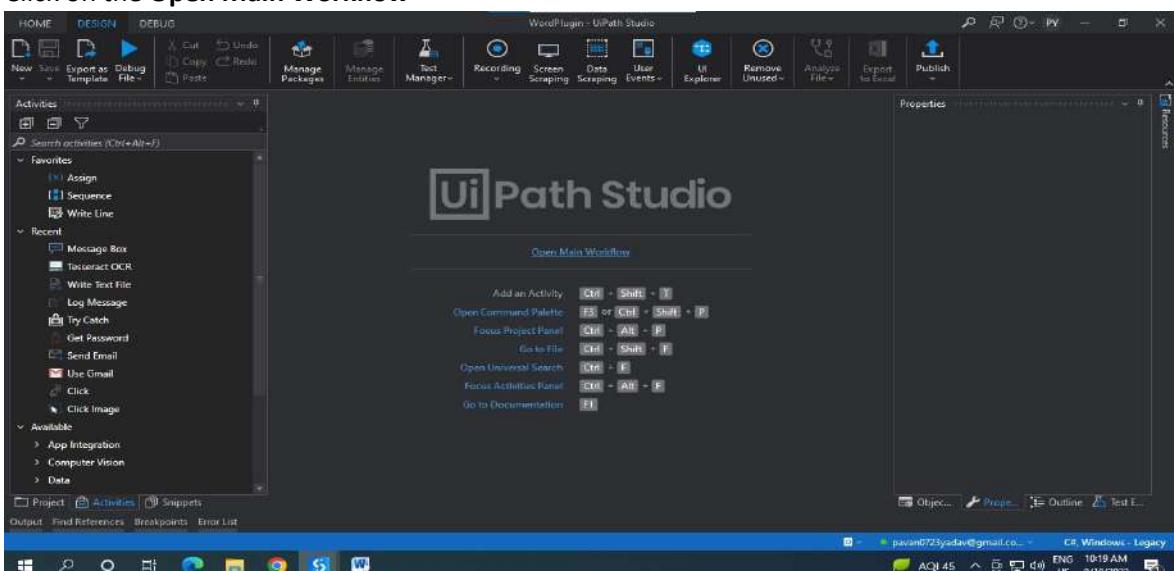
##### 1. Click on the Process to New Project



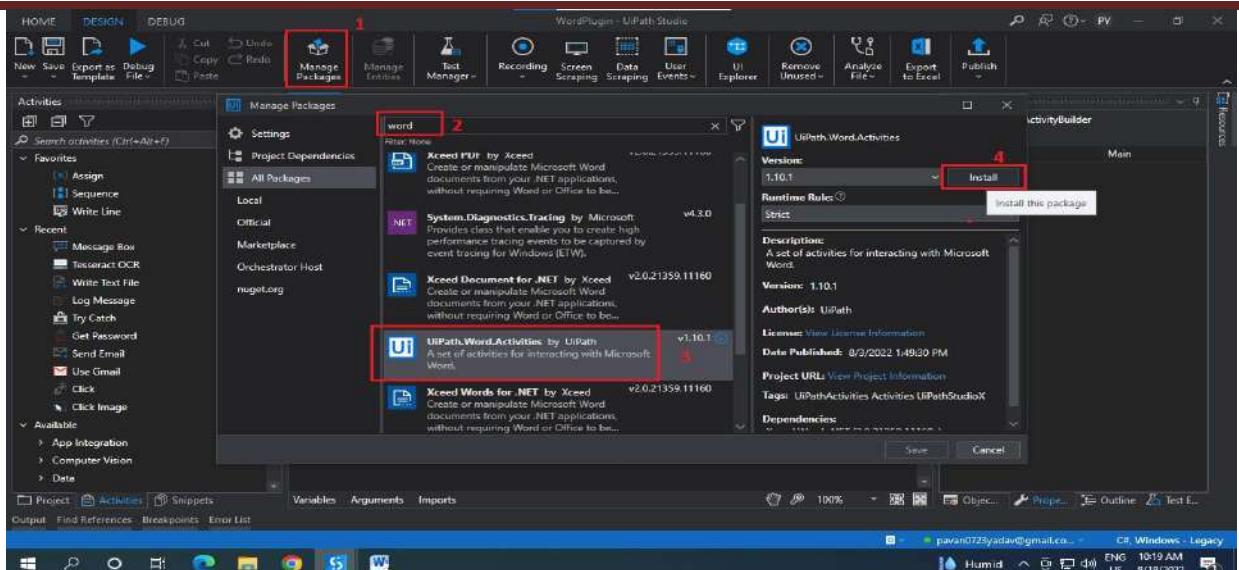
##### 2. Write following detail of the process. Note: Select the C# Language



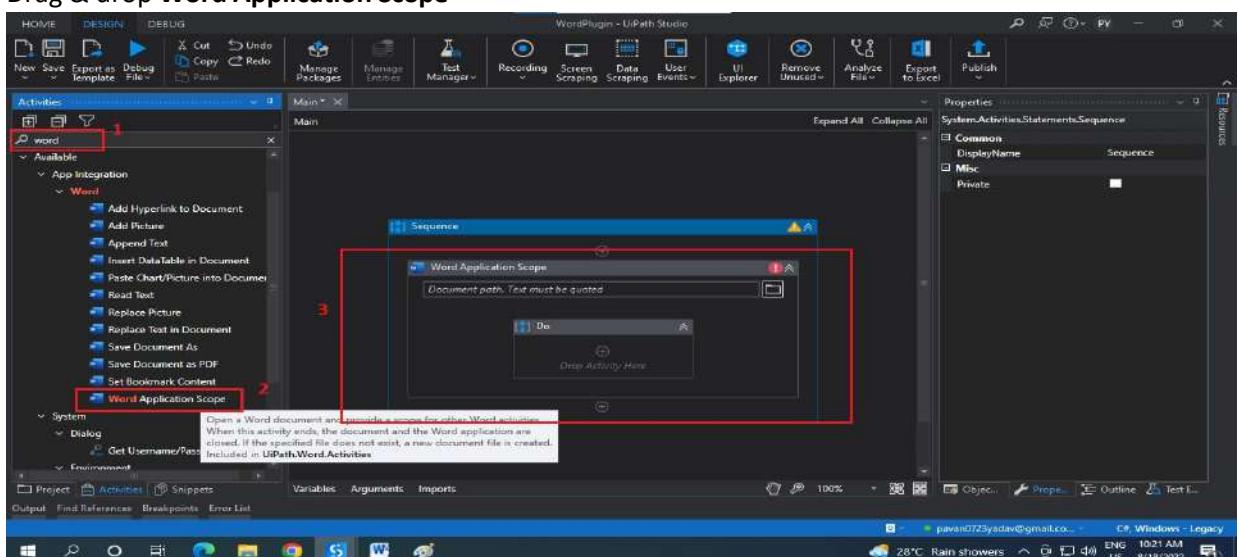
##### 3. Click on the Open Main Workflow



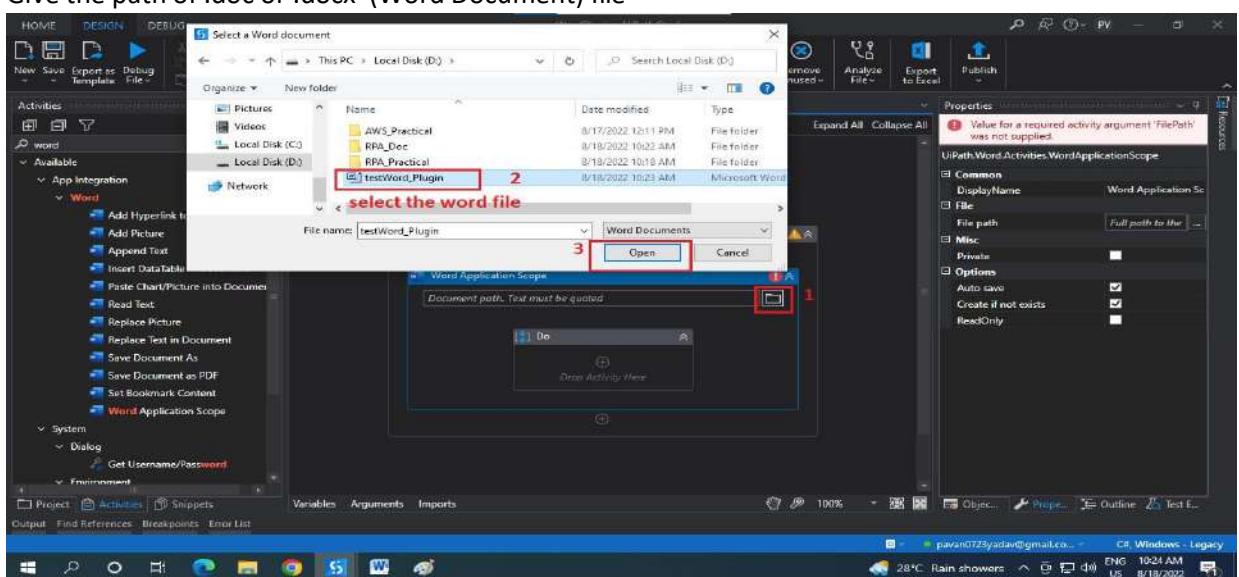
##### 4. Install Word plugin if not installed



### 5. Drag & drop Word Application Scope

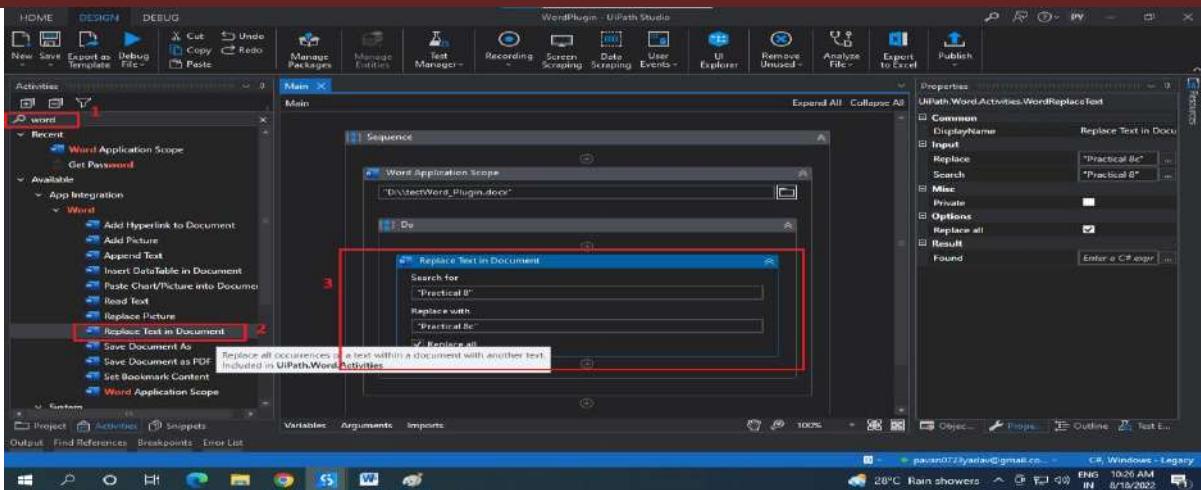


### 6. Give the path of .doc or .docx (Word Document) file

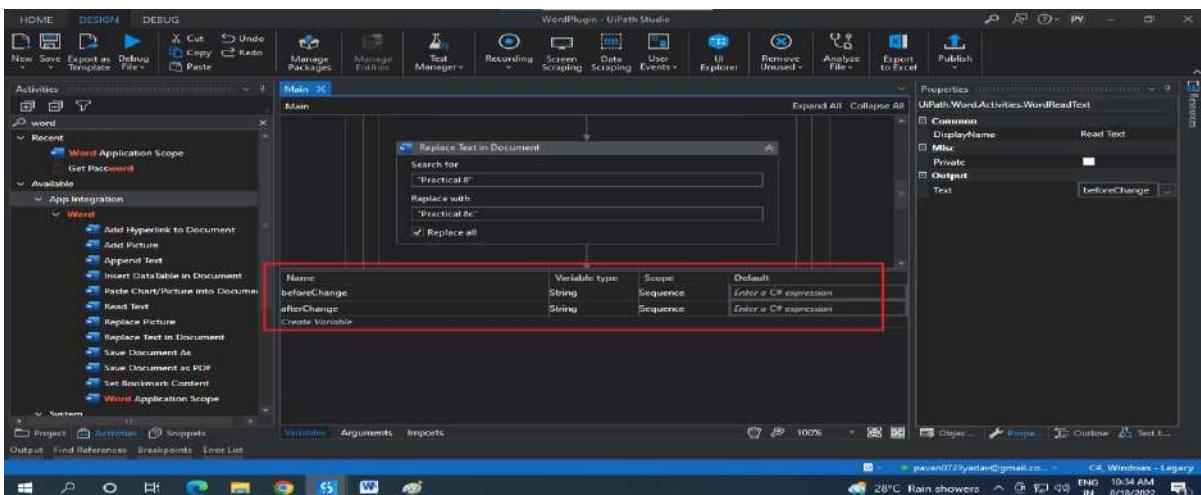


#### Replace Text in Word Document

### 7. Drag & drop Replace Text in Document

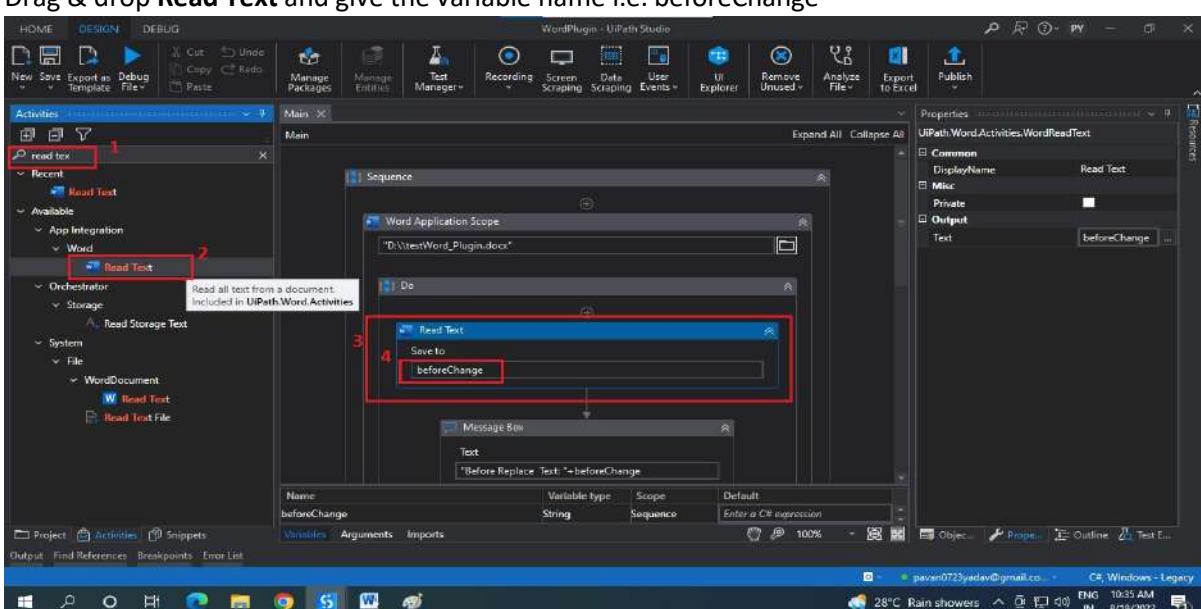


## 8. Create Variables

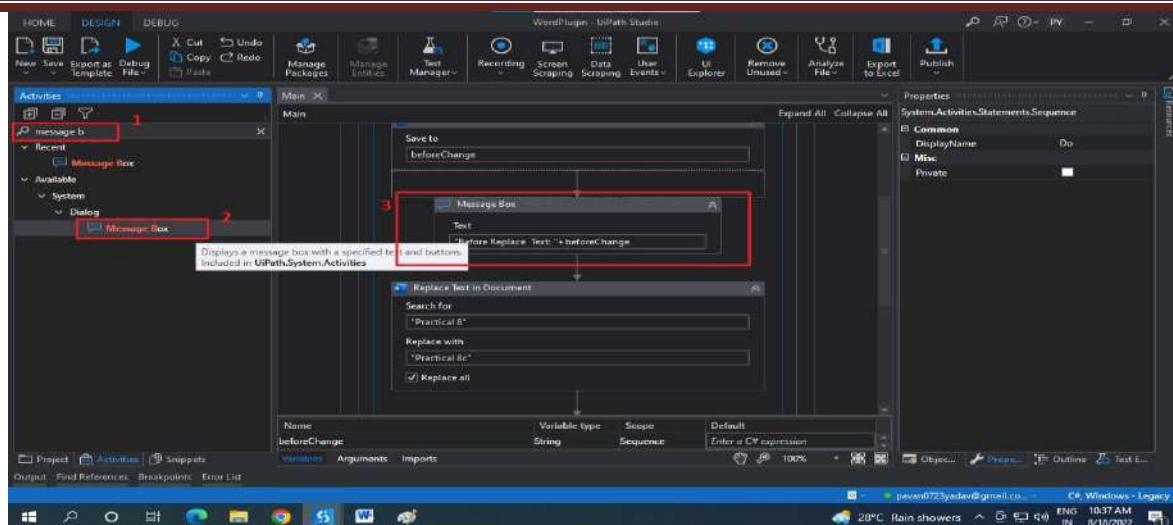


## Read Text from Word File

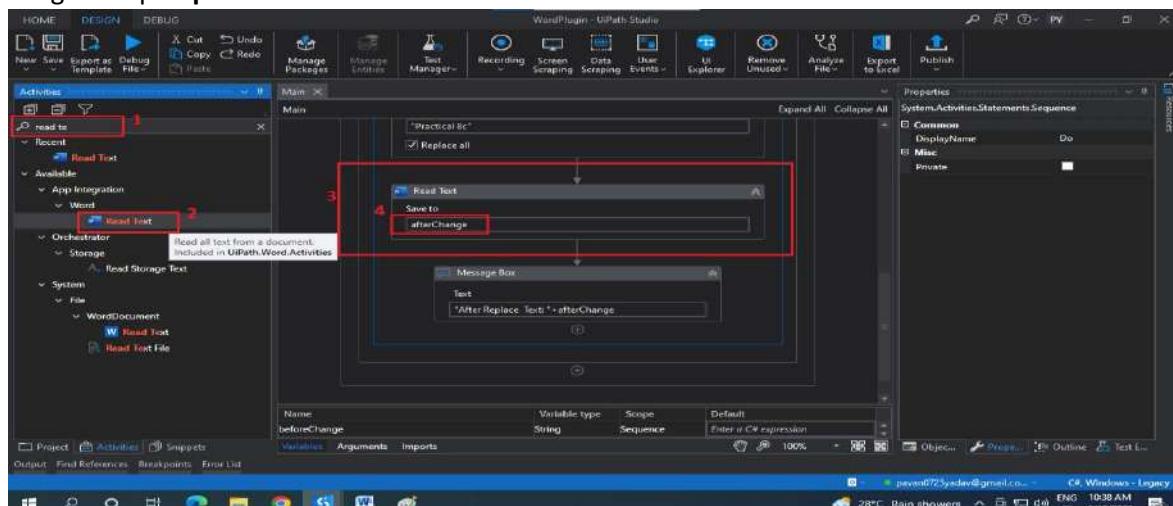
### 9. Drag & drop Read Text and give the variable name i.e. beforeChange



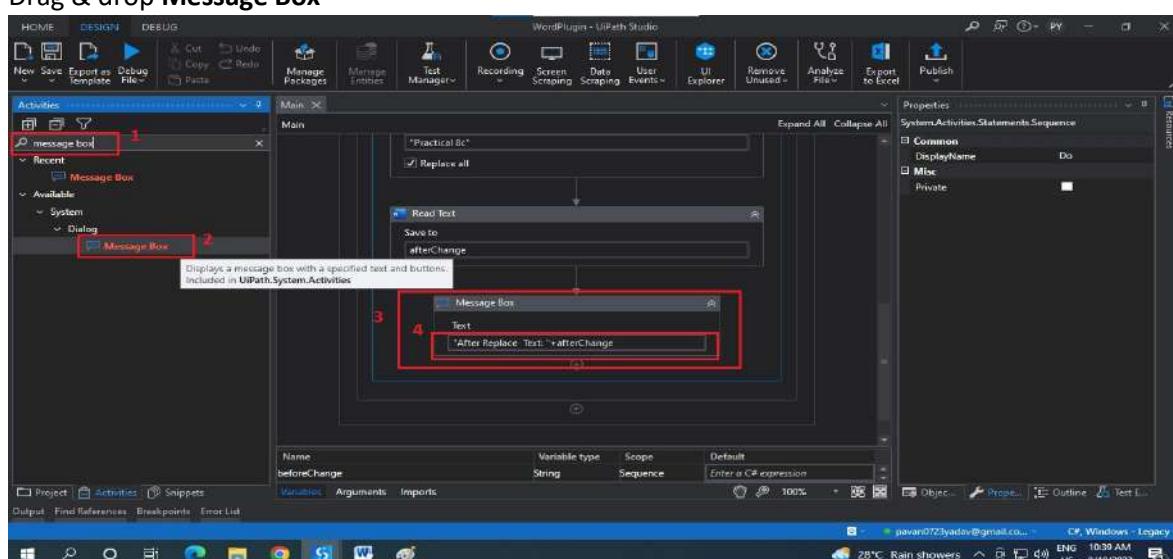
### 10. Drag & drop Message Box



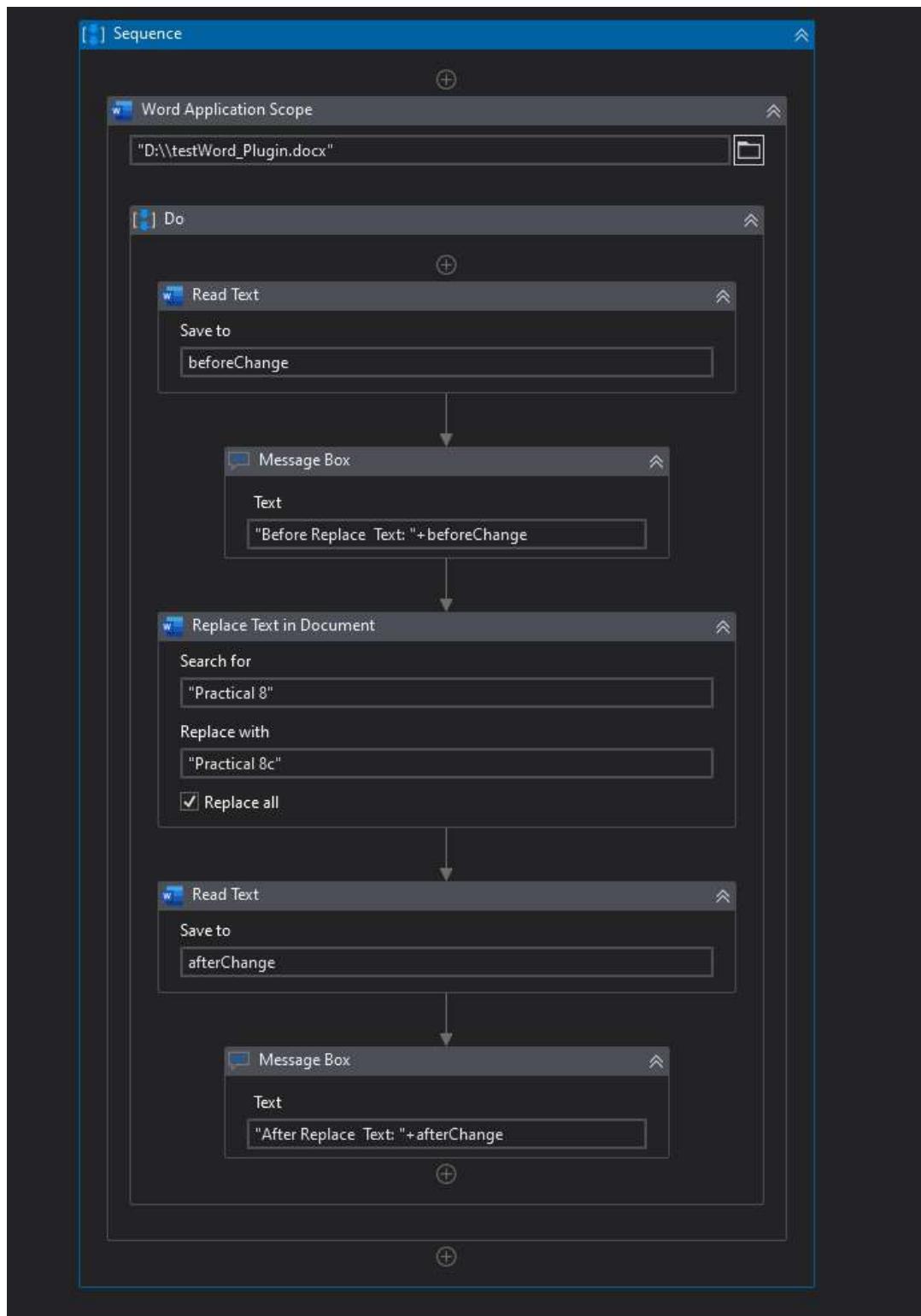
### 11. Drag & drop Replace Text



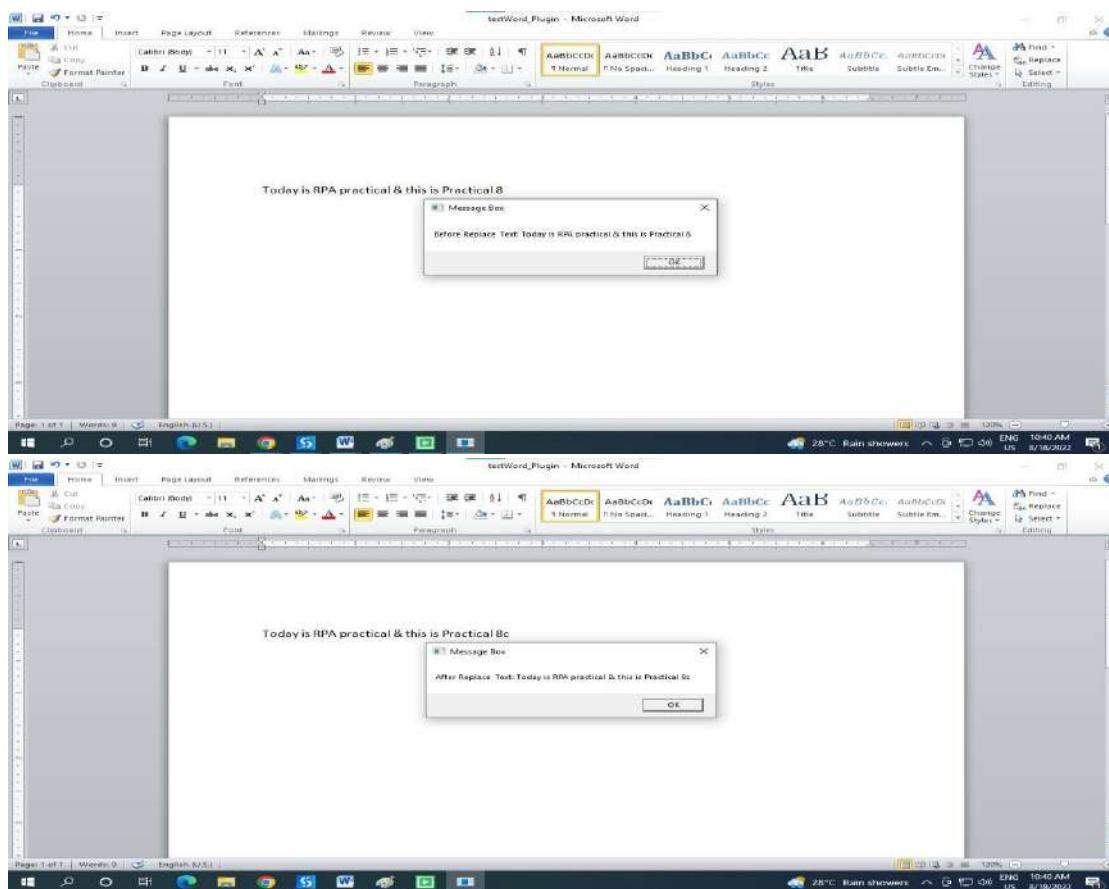
### 12. Drag & drop Message Box



## 13. Overview

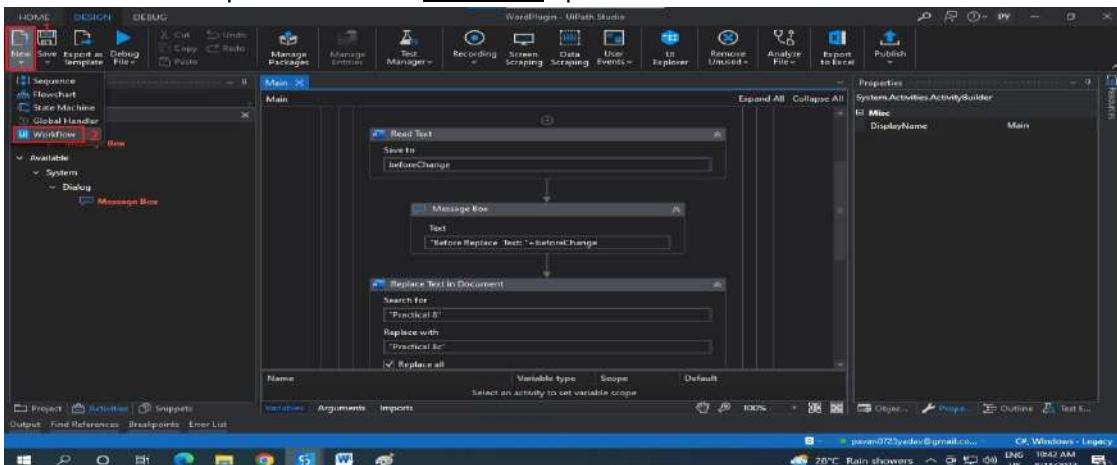


## 14. Output

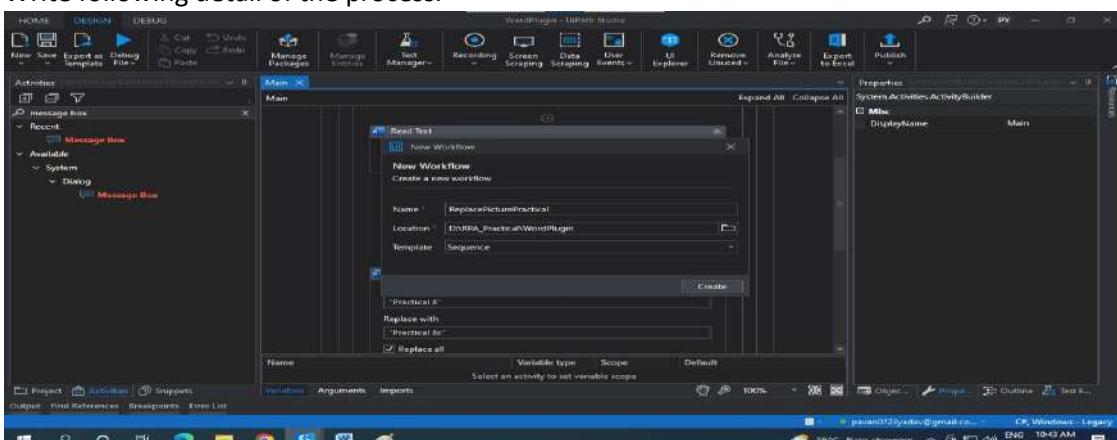


### Add Image & Replace Image in word file

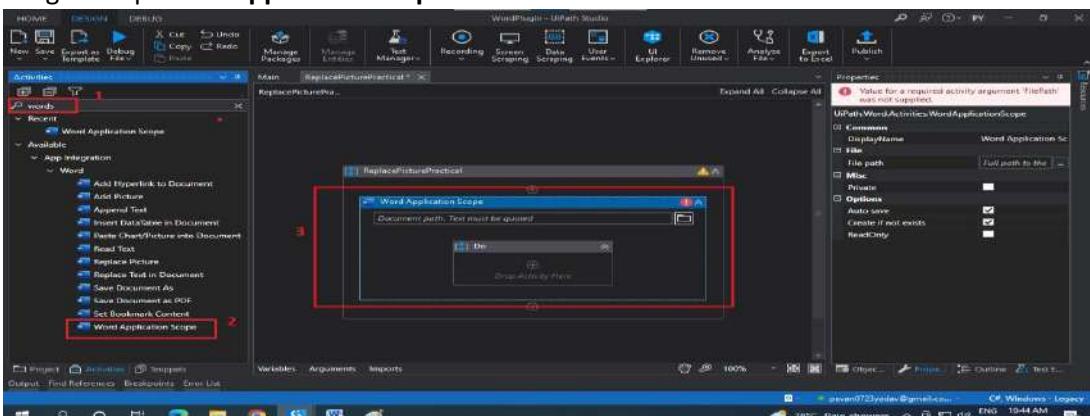
15. Click on the **New** option and select **Workflow** option



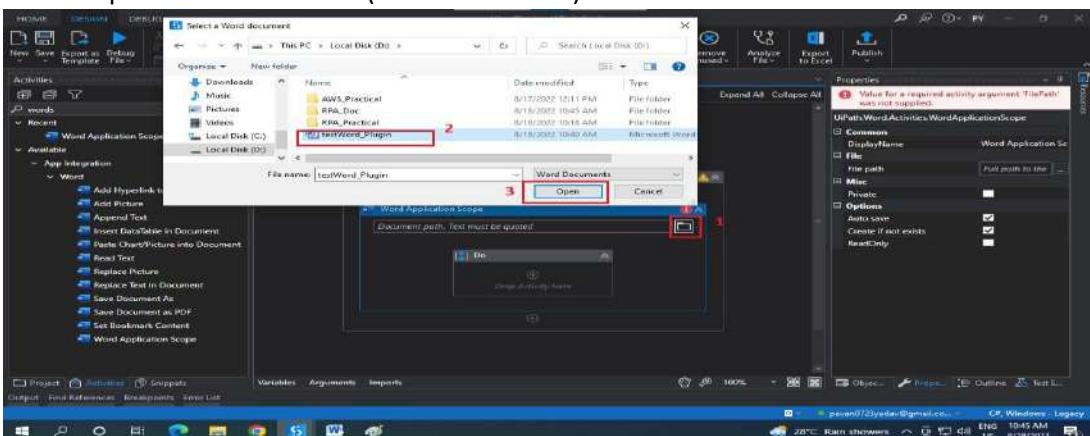
16. Write following detail of the process.



## 17. Drag &amp; drop Word Application Scope

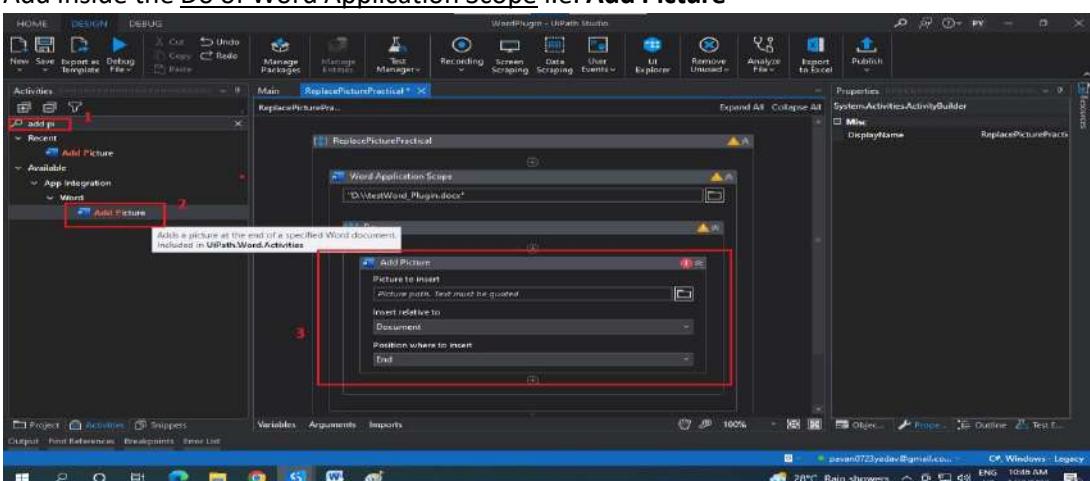


## 18. Give the path of .doc or .docx (Word Document) file

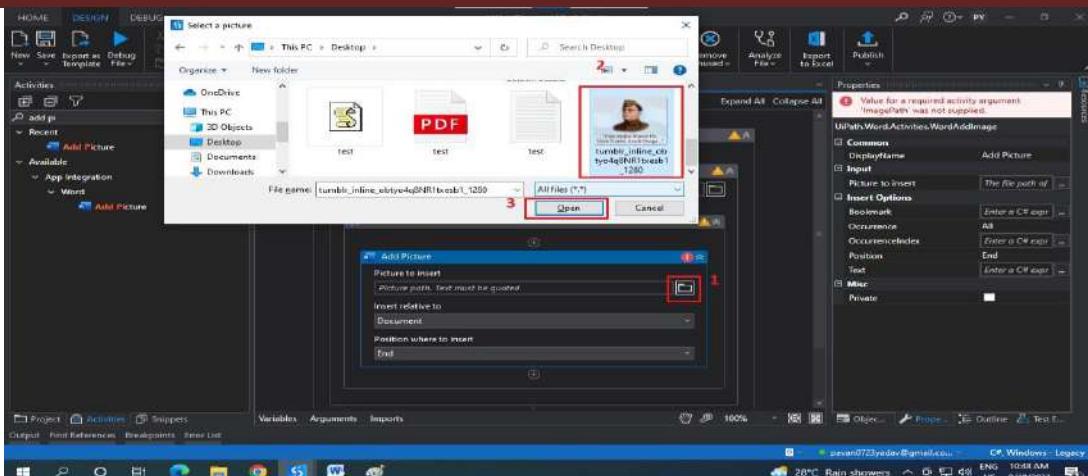


Add Picture in Word File

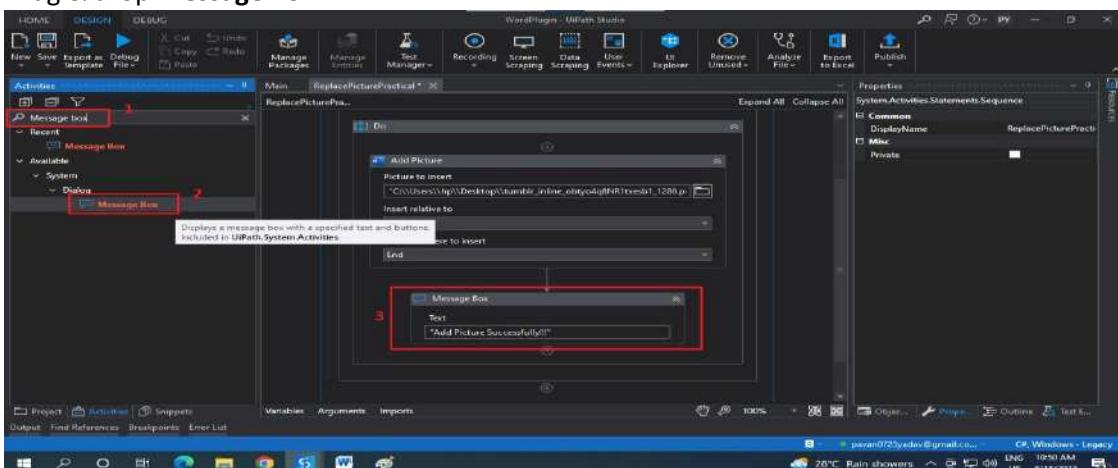
## 19. Add inside the Do of Word Application Scope i.e. Add Picture



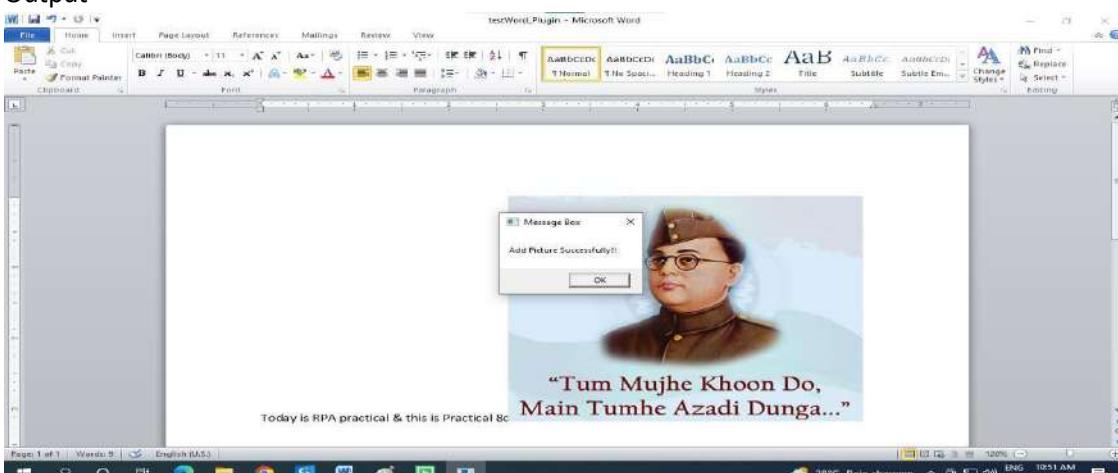
## 20. Give the path of image to add inside the word document



## 21. Drag & drop Message Box

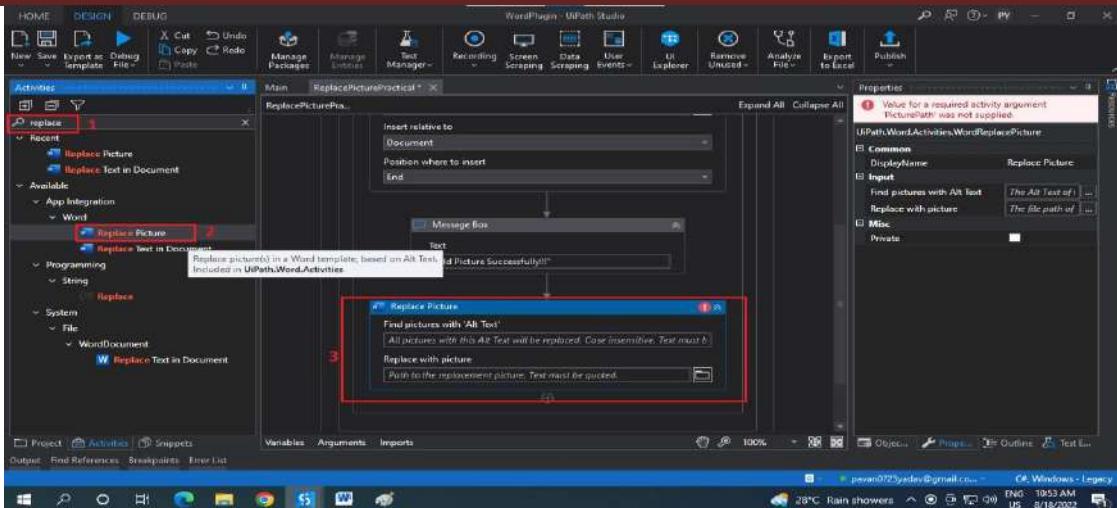


## 22. Output

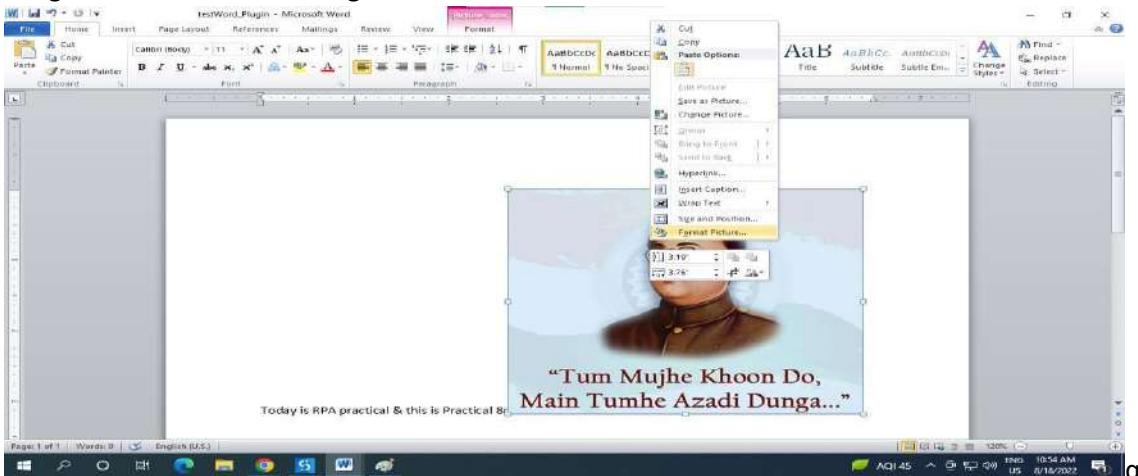


## Replace Picture inside the Word file

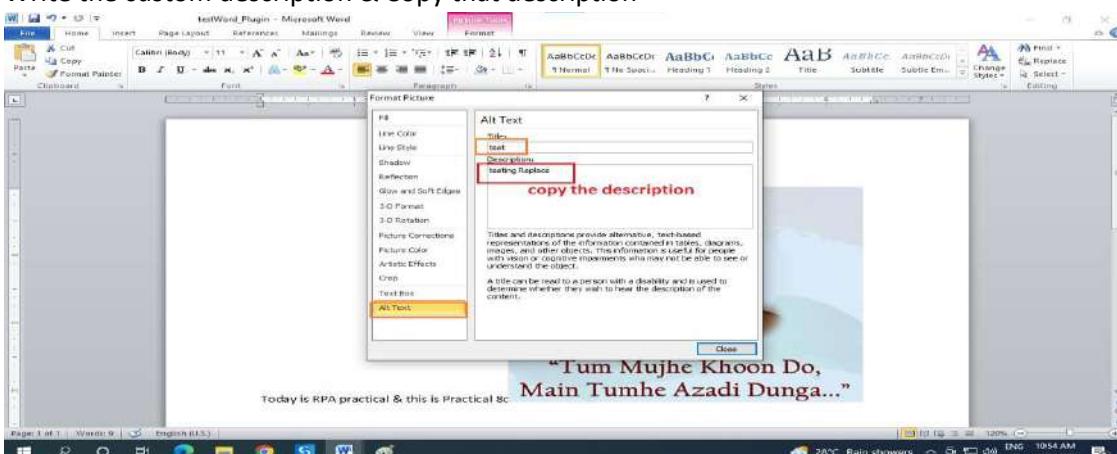
## 23. Drag & drop Replace Picture



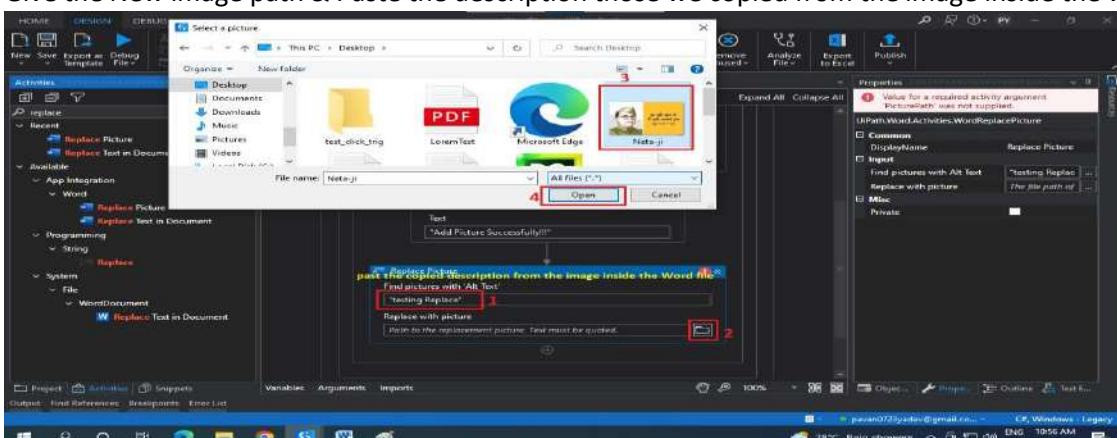
24. Go to that word file those mention on the Word Application Scope and select the image those replace by other image. Follow the below image



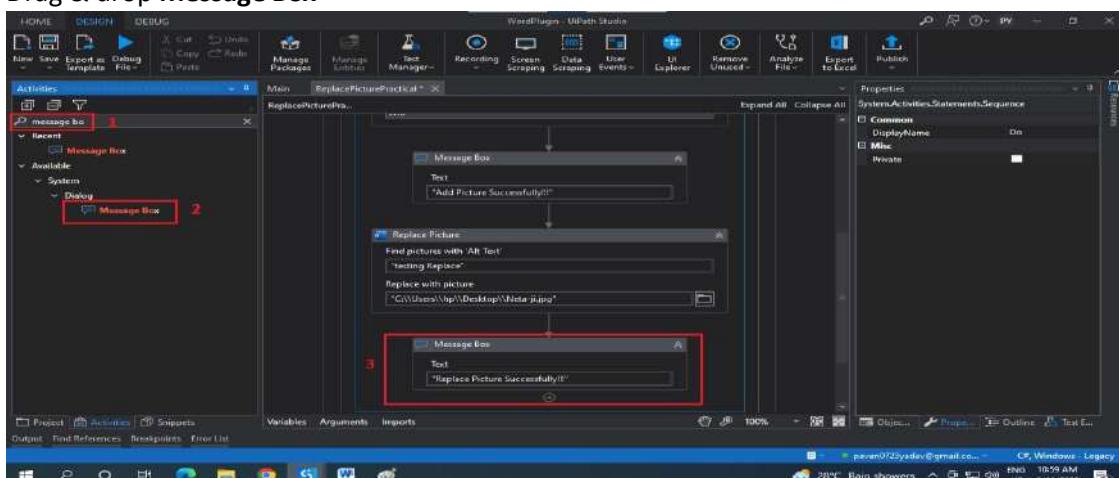
25. Write the custom description & Copy that description



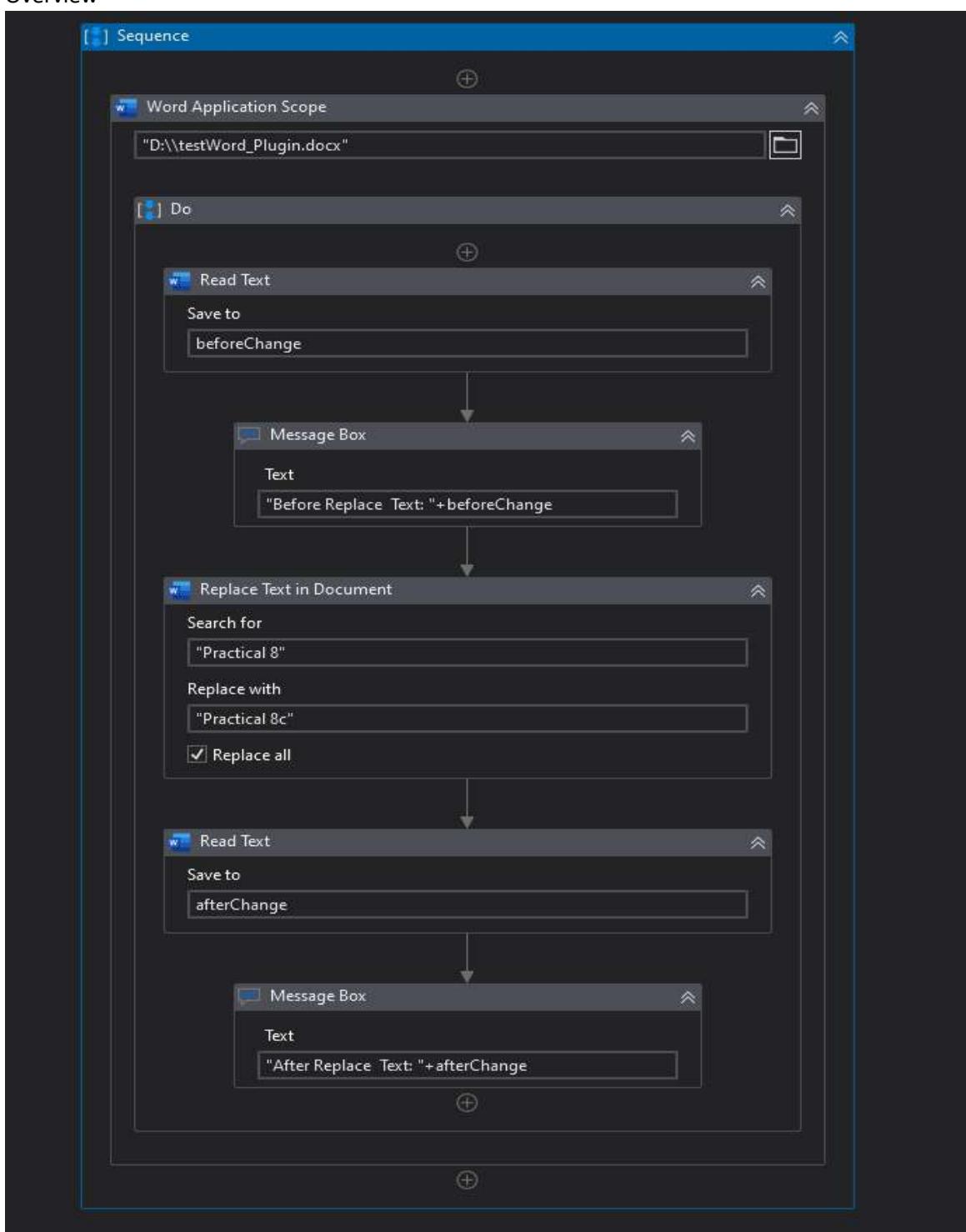
26. Give the New image path & Paste the description those we copied from the image inside the word file



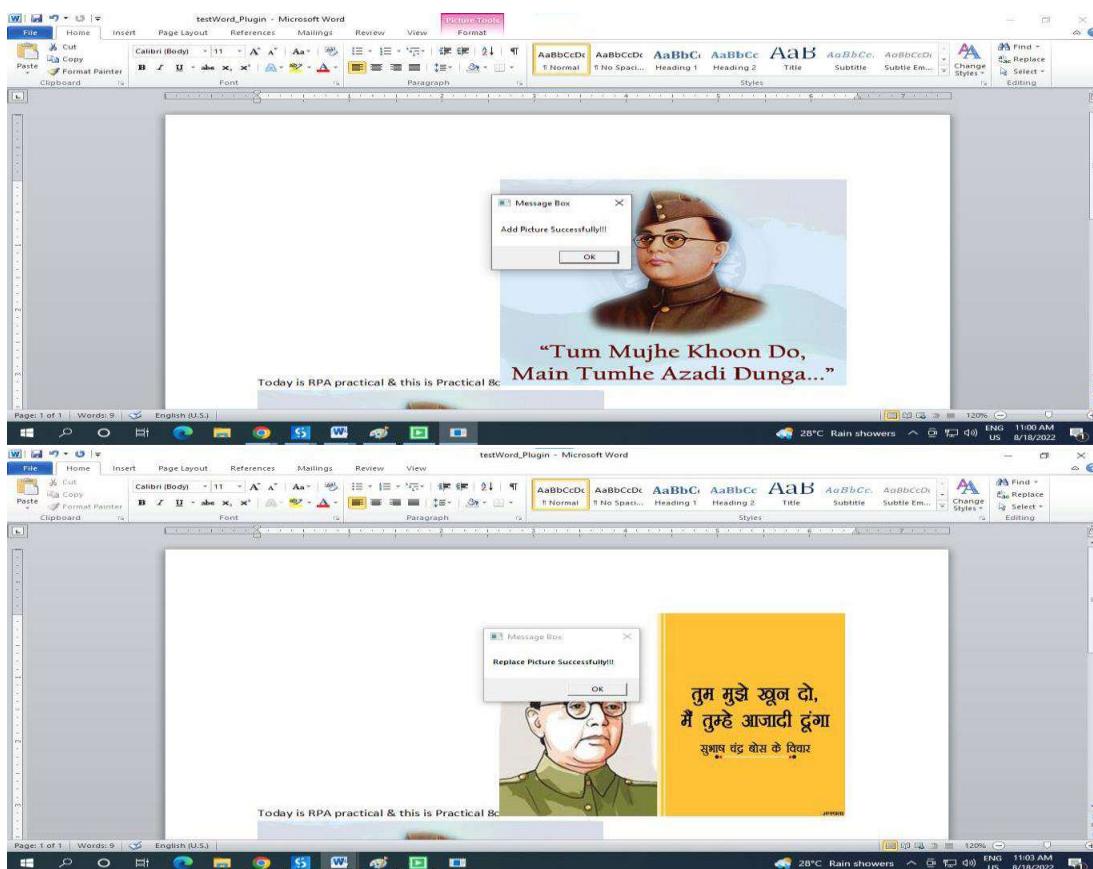
## 27. Drag &amp; drop Message Box



## 28. Overview

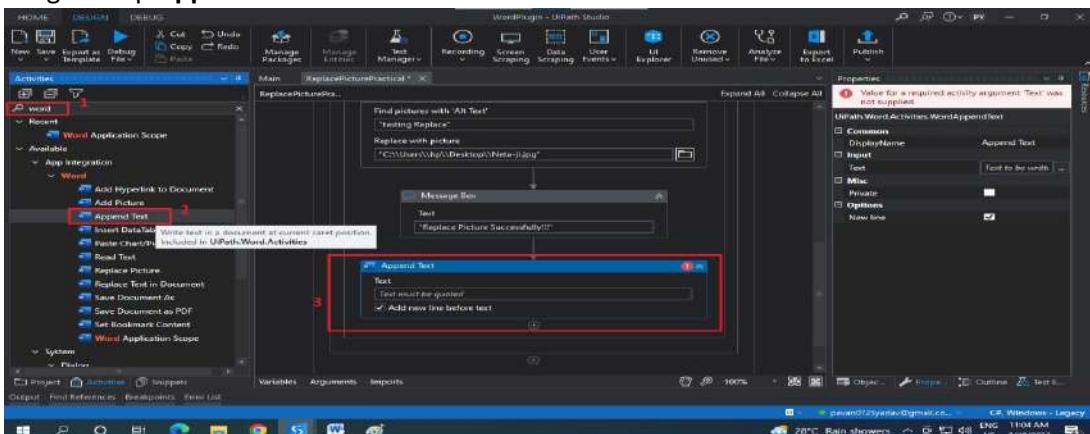


## 29. Output

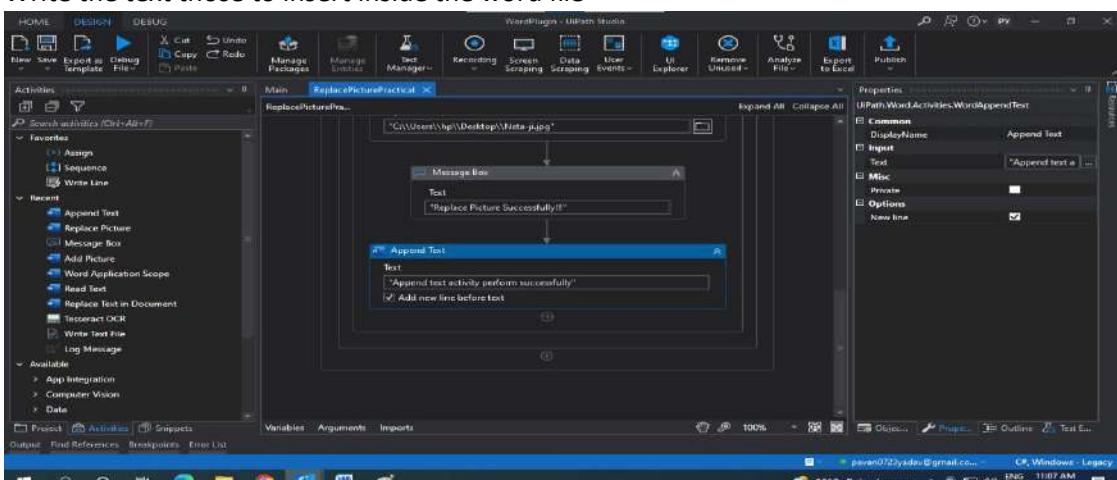


## Append Text

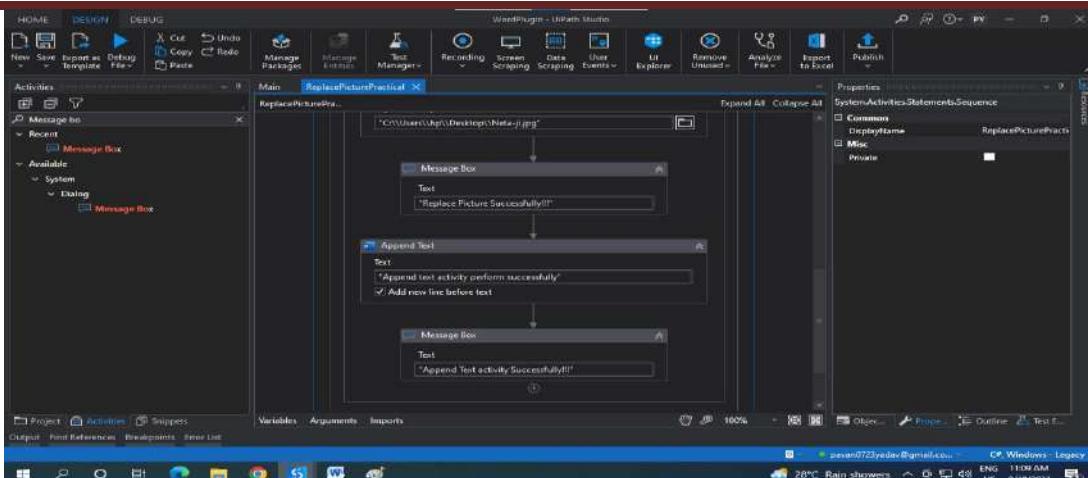
## 30. Drag &amp; drop Append Text



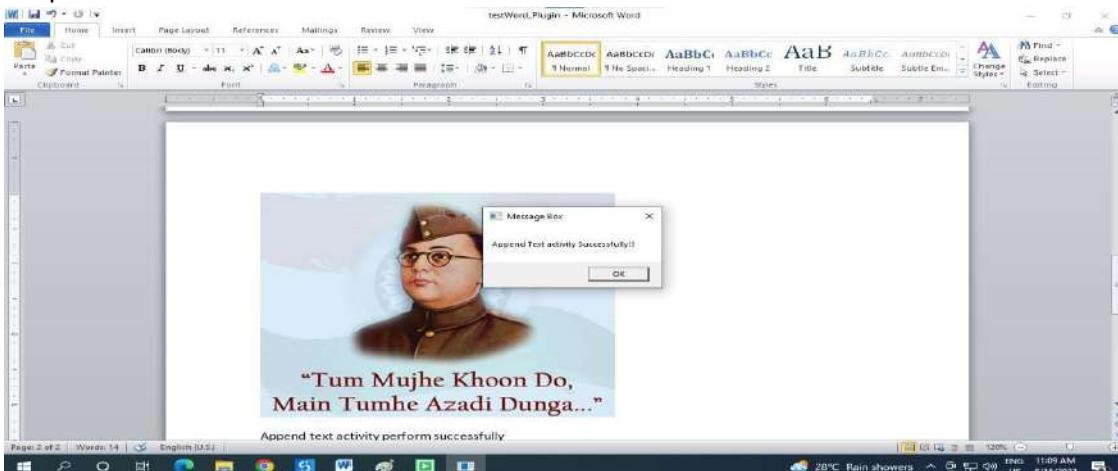
## 31. Write the text those to insert inside the word file



## 32. Drag &amp; drop Message Box

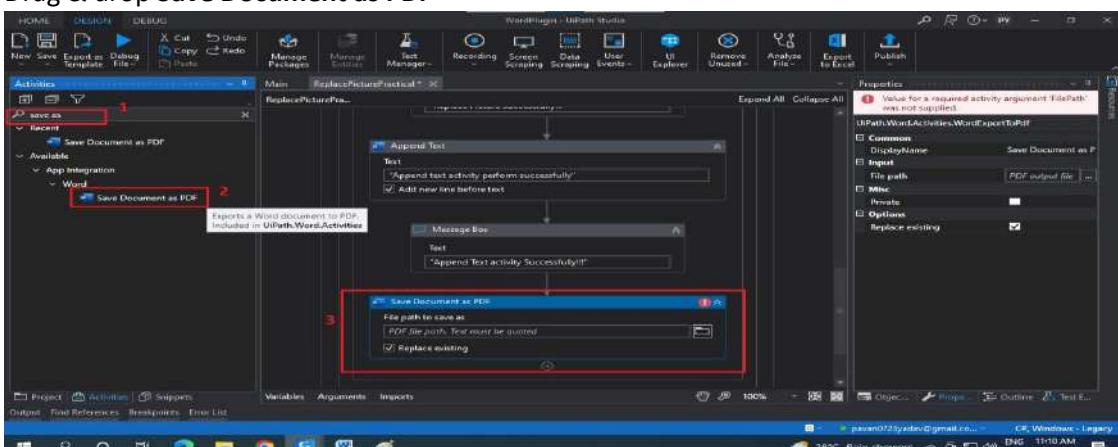


### 33. Output

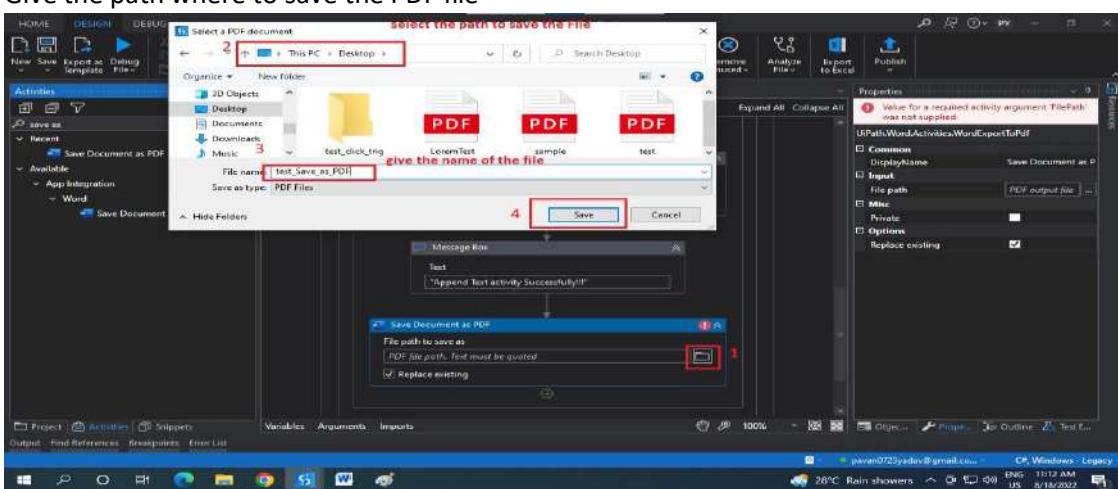


### Save Document as PDF

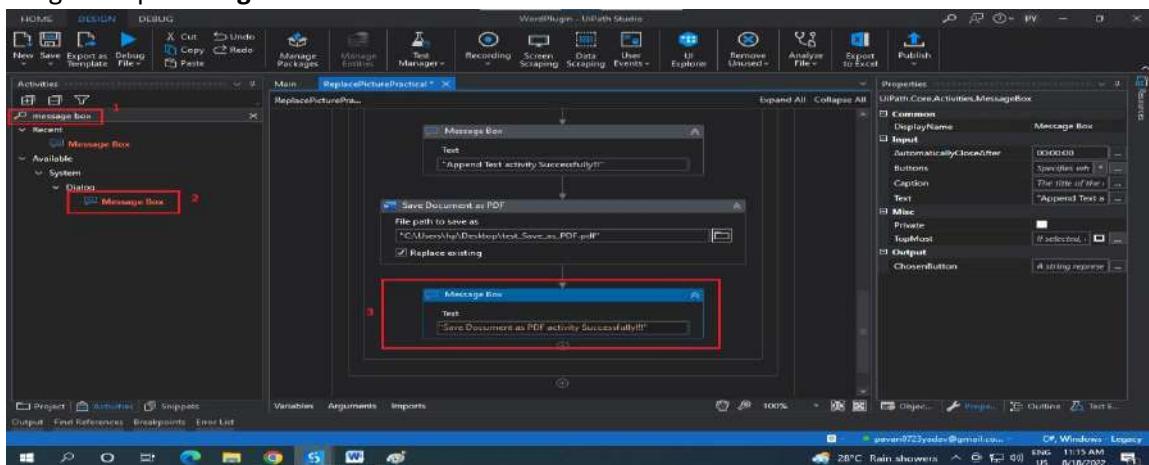
#### 34. Drag & drop Save Document as PDF



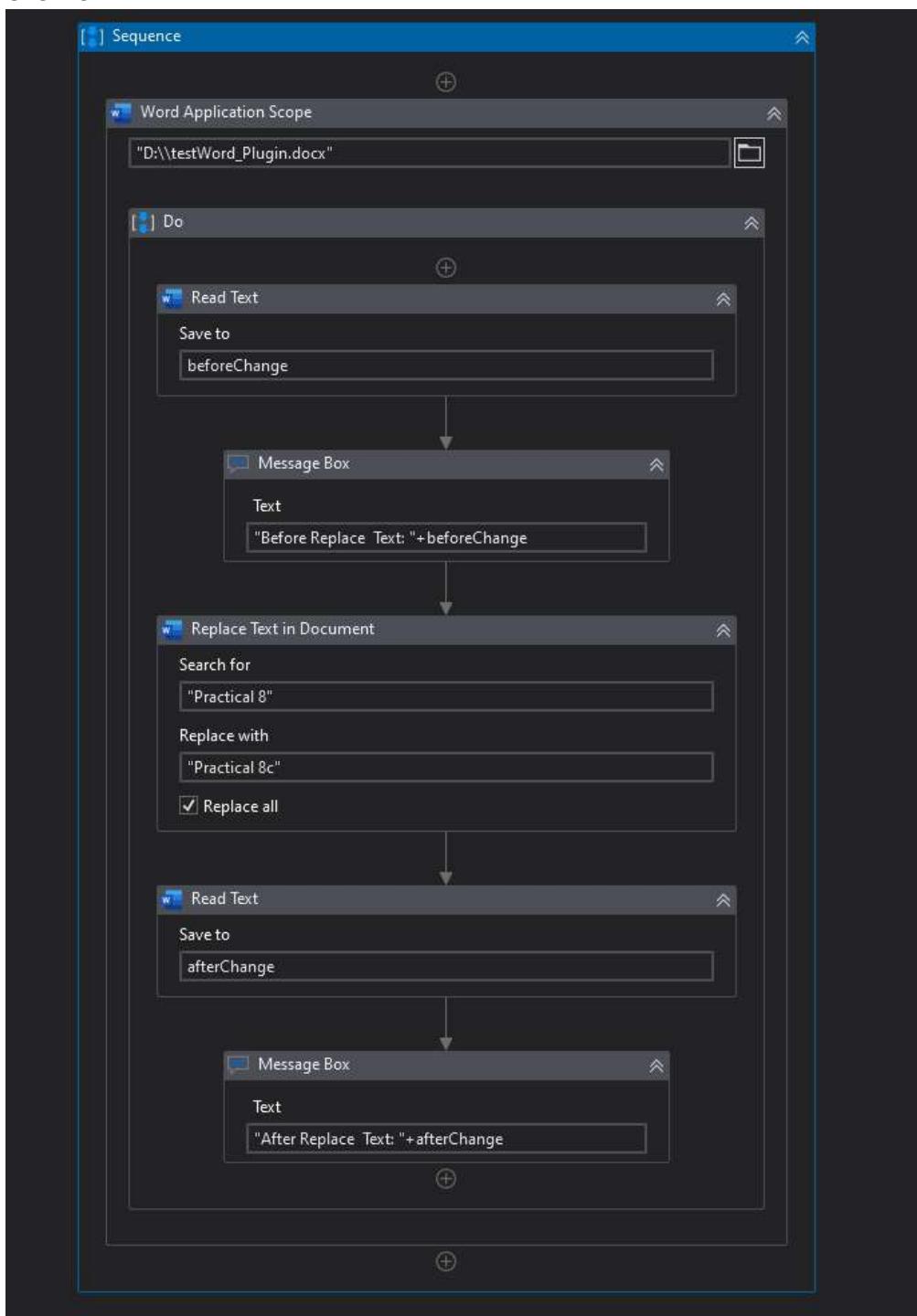
#### 35. Give the path where to save the PDF file



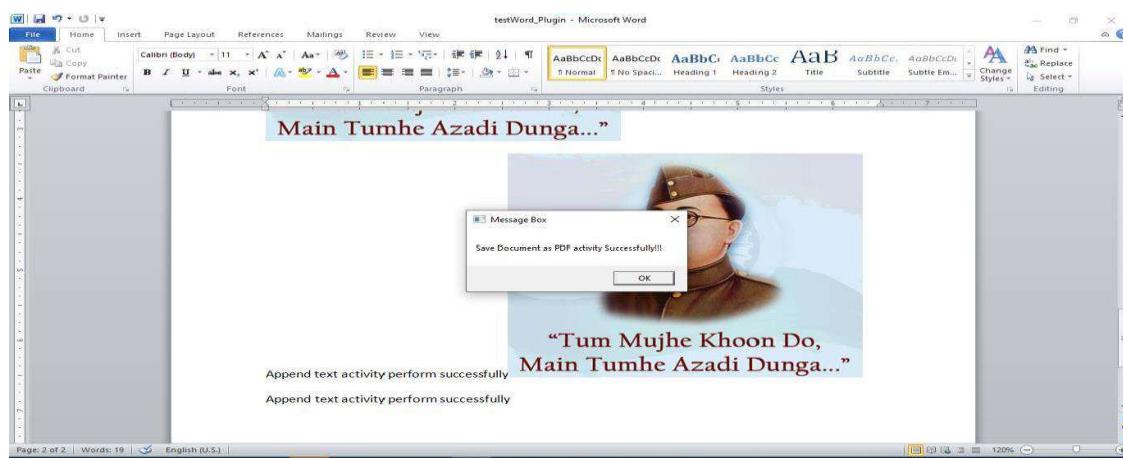
## 36. Drag &amp; drop Message Box



## 37. Overview



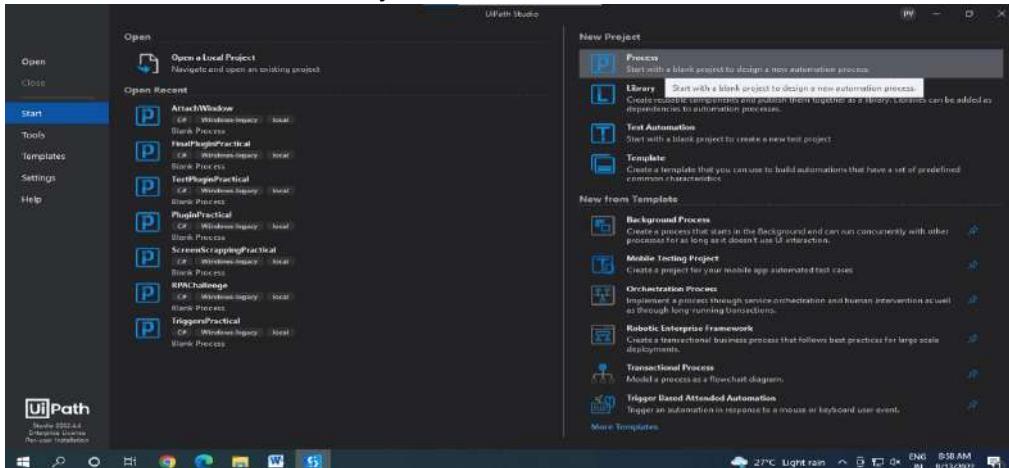
## 38. Output



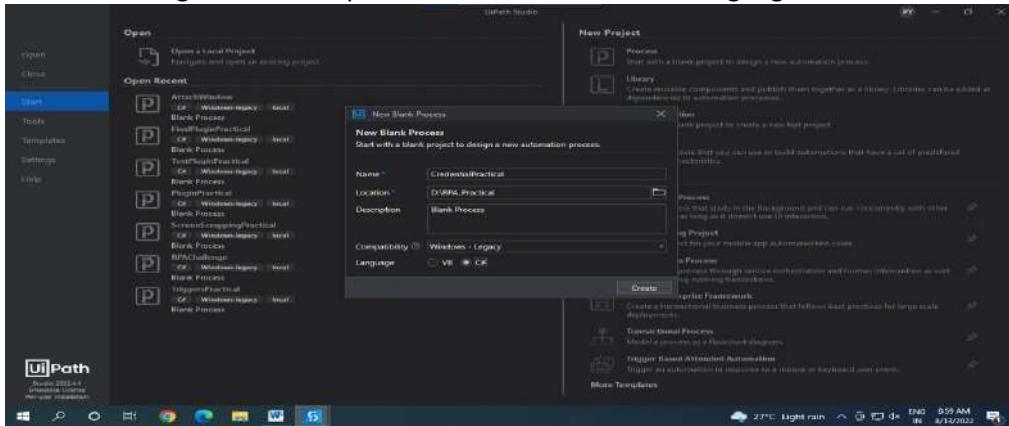
## f) Credential Management

### Basic Credential

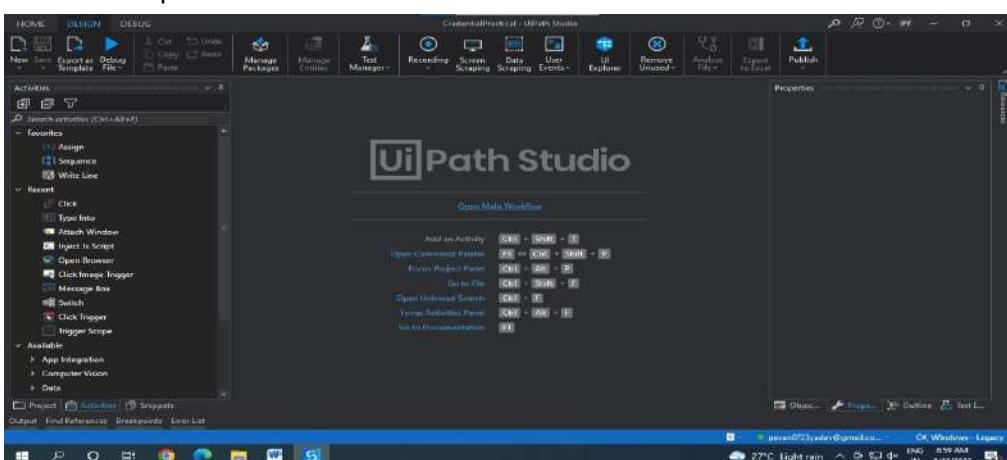
- Click on the Process to New Project



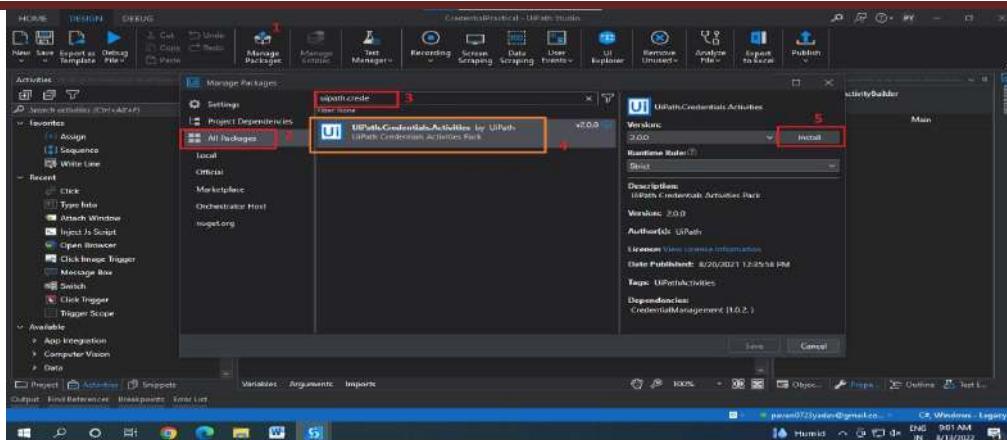
- Write following detail of the process. Note: Select the C# Language



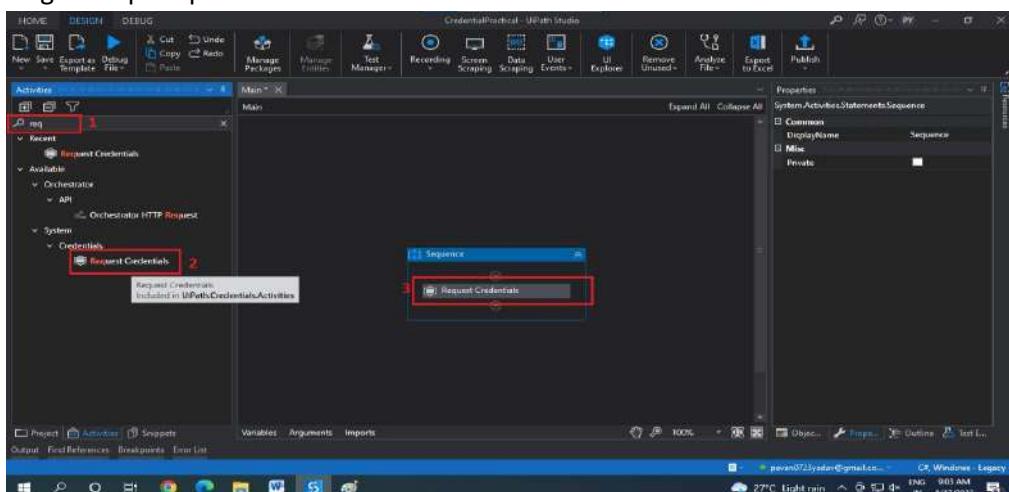
- Click on the Open Main Workflow



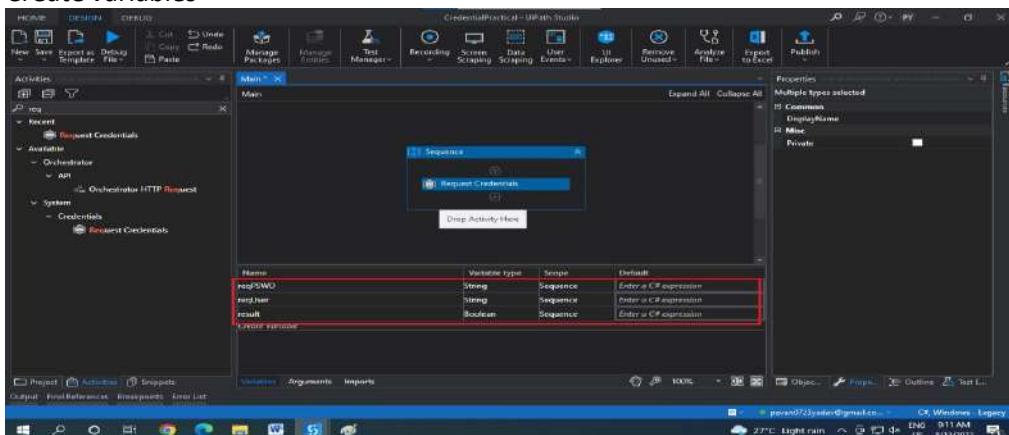
- Install the Credential plugin if not installed



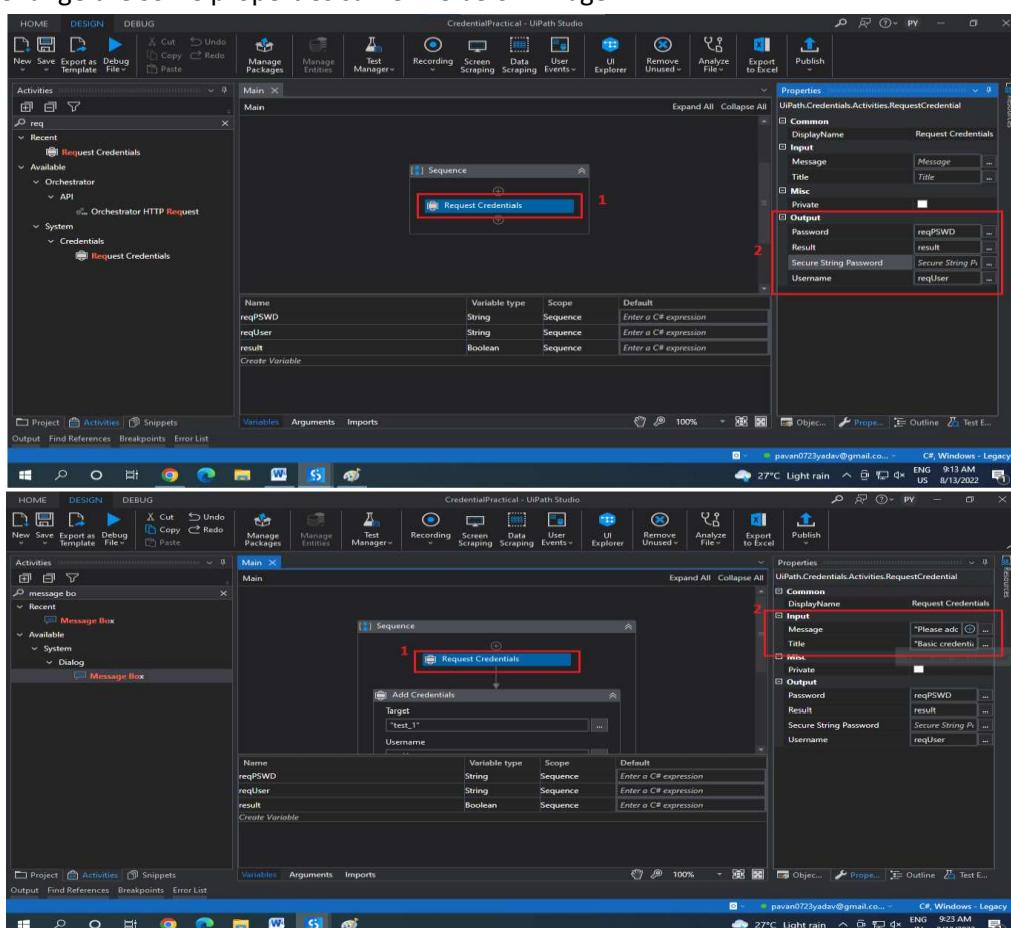
## 5. Drag & drop Request Credential



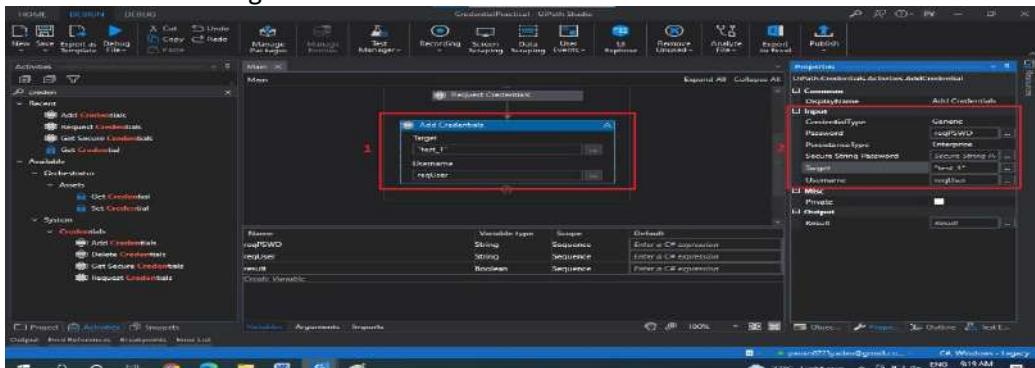
## 6. Create variables



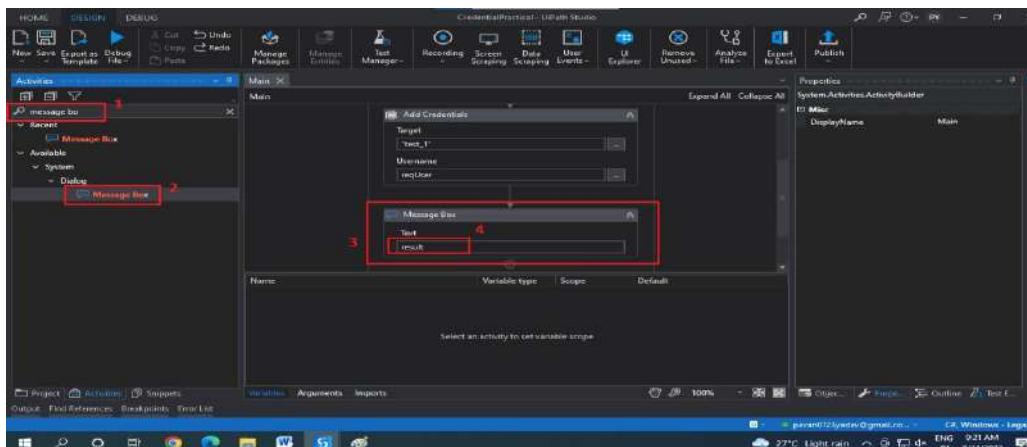
## 7. Change the some properties same like below image



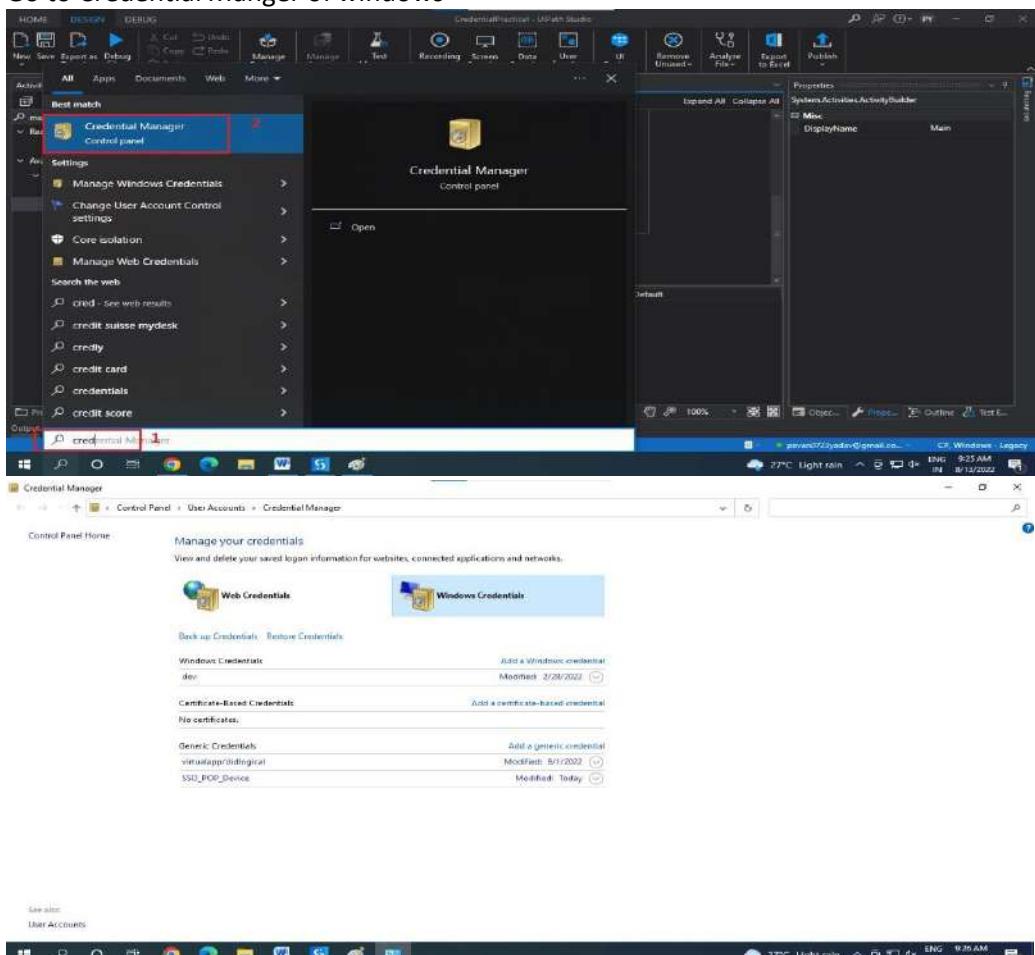
8. Drag & Drop Add Credential and insert required detail inside the Add Credential and change some properties same like below image



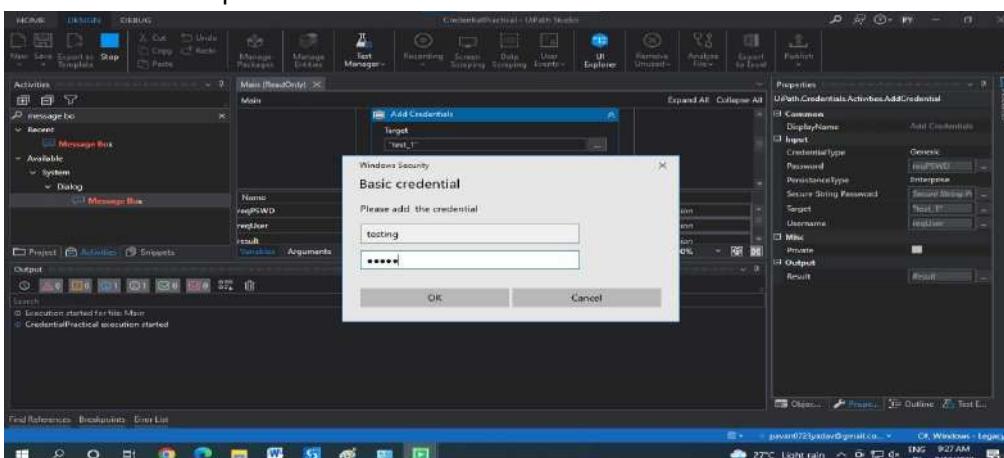
9. Drag & Drop Message Box



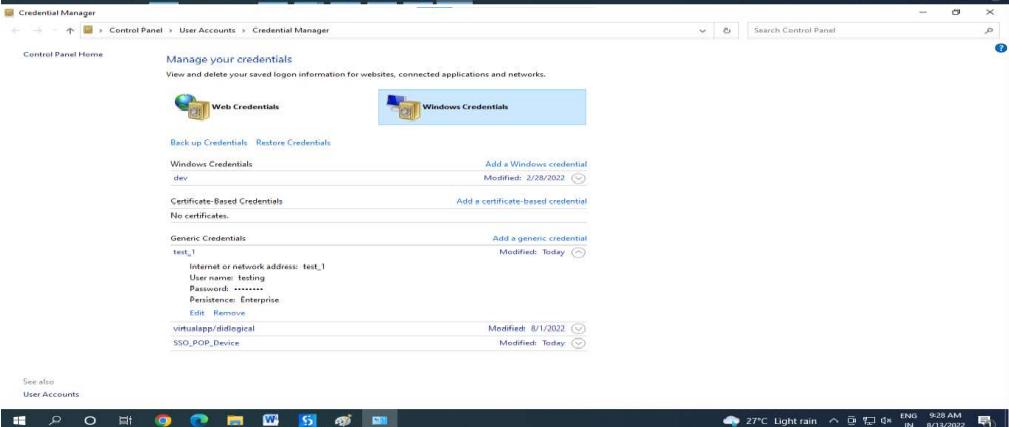
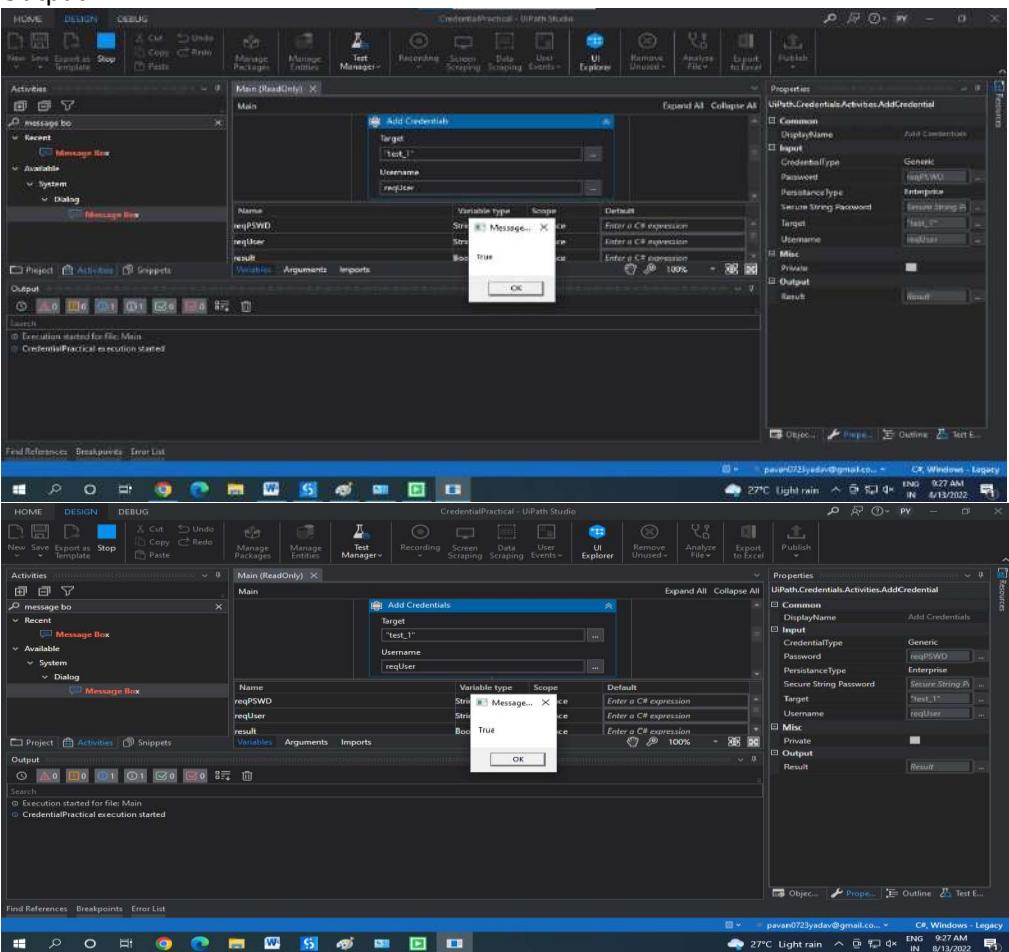
10. Go to Credential Manager of windows



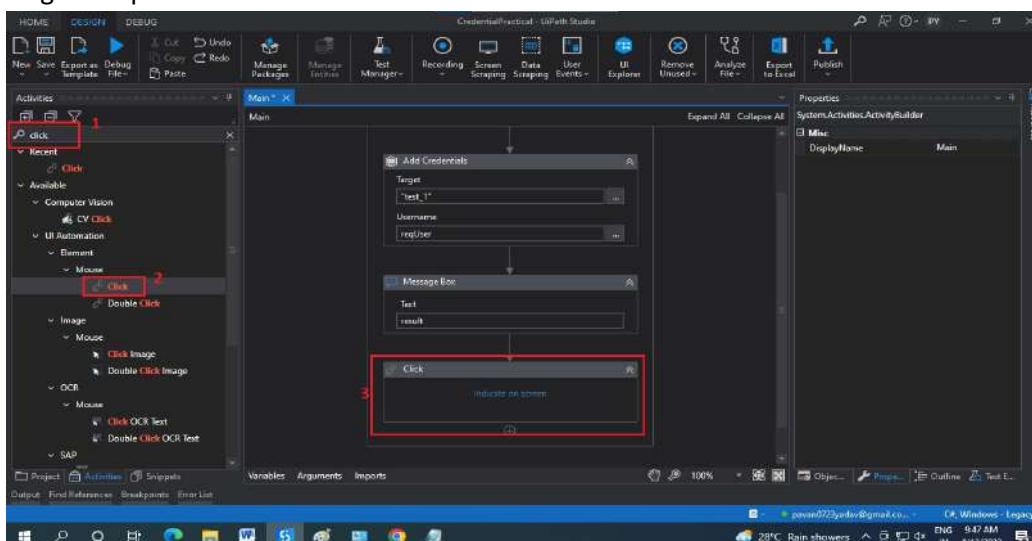
## 11. Run the credential process



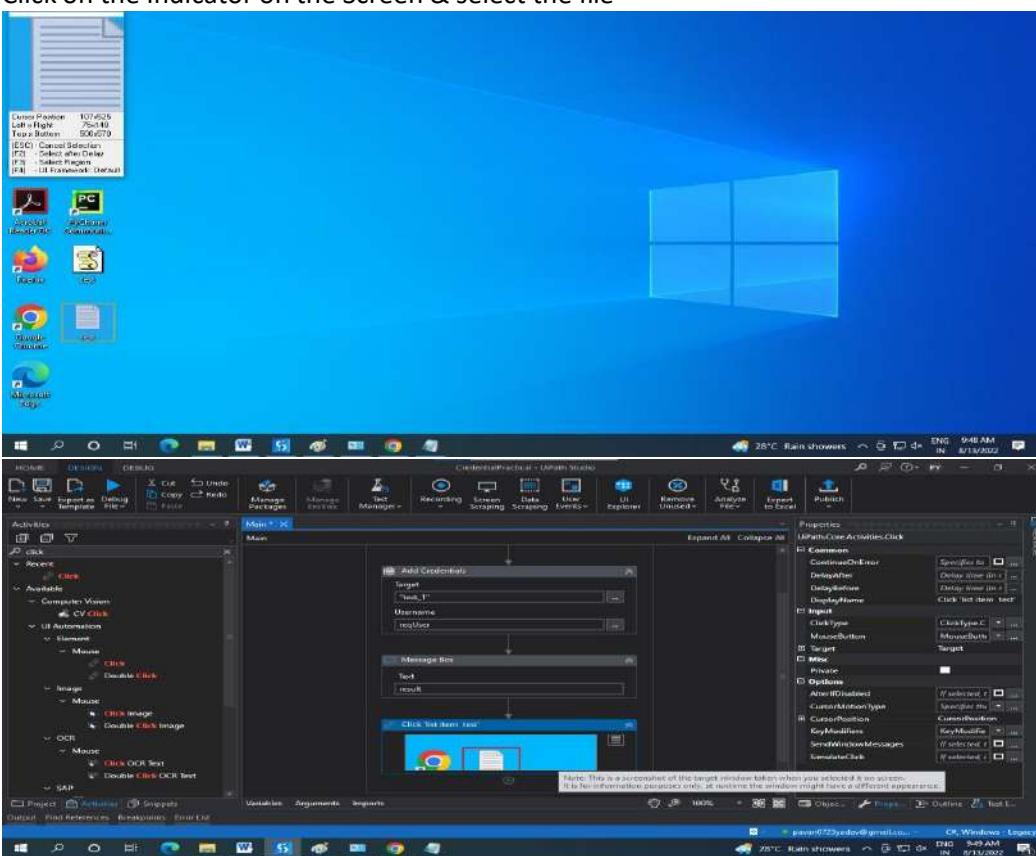
## 12. Output



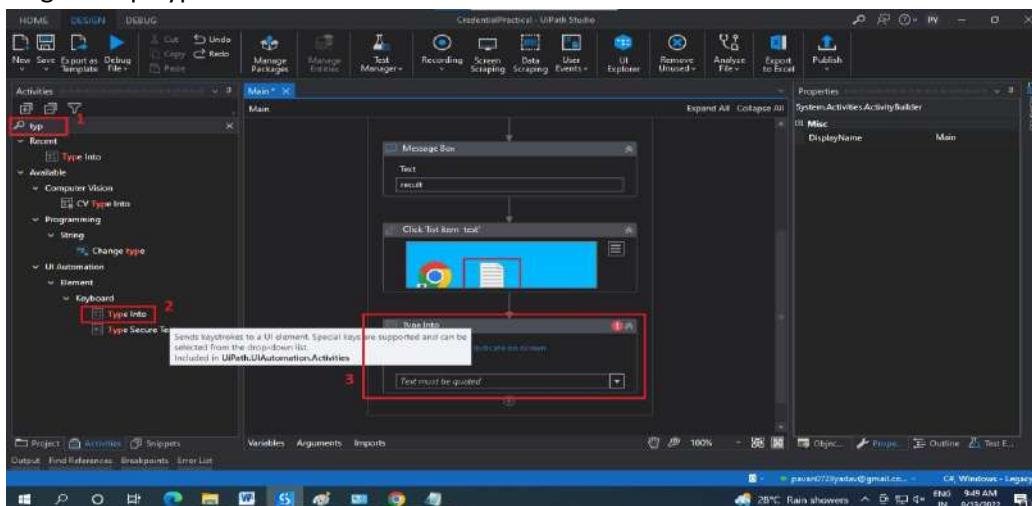
## 13. Drag &amp; Drop Click &lt;Mouse&gt;Element



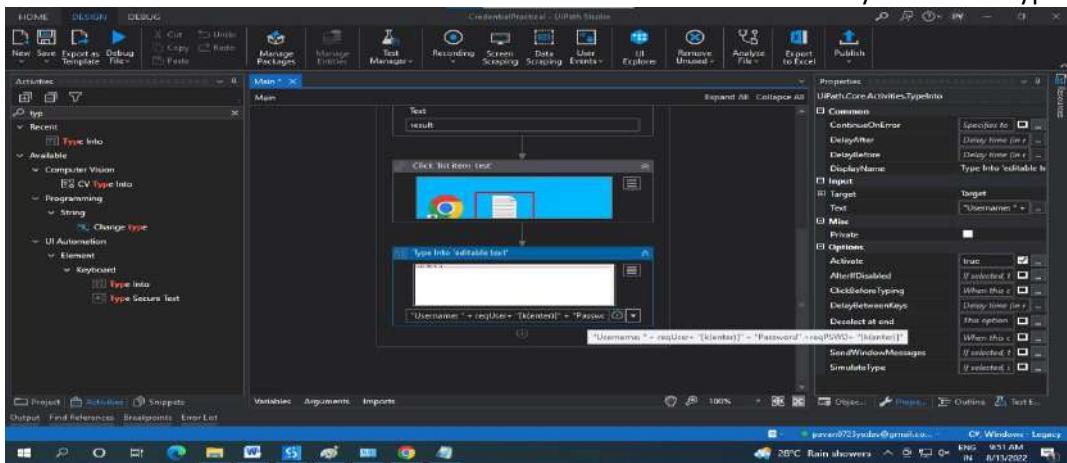
## 14. Click on the Indicator on the Screen &amp; select the file



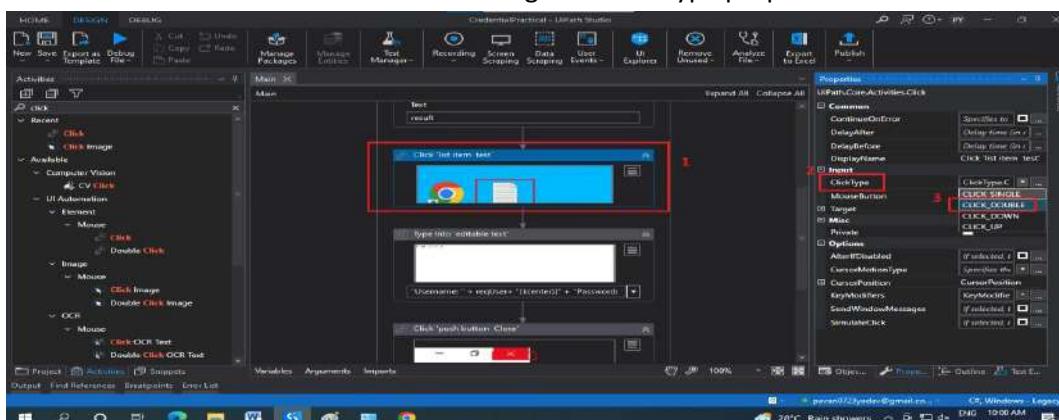
## 15. Drag &amp; Drop Type Into



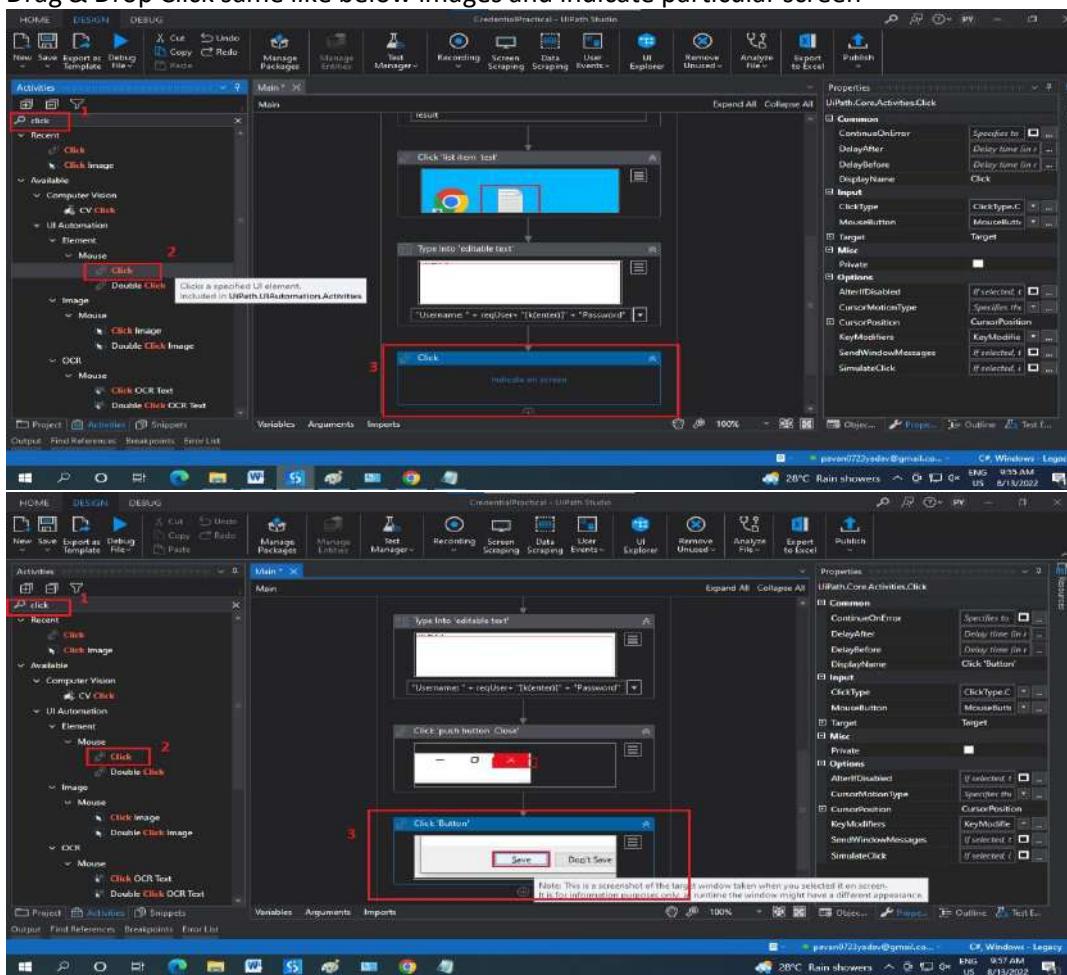
16. Click on the Indicator on the Screen & select the file and insert the data you want to type just like below image



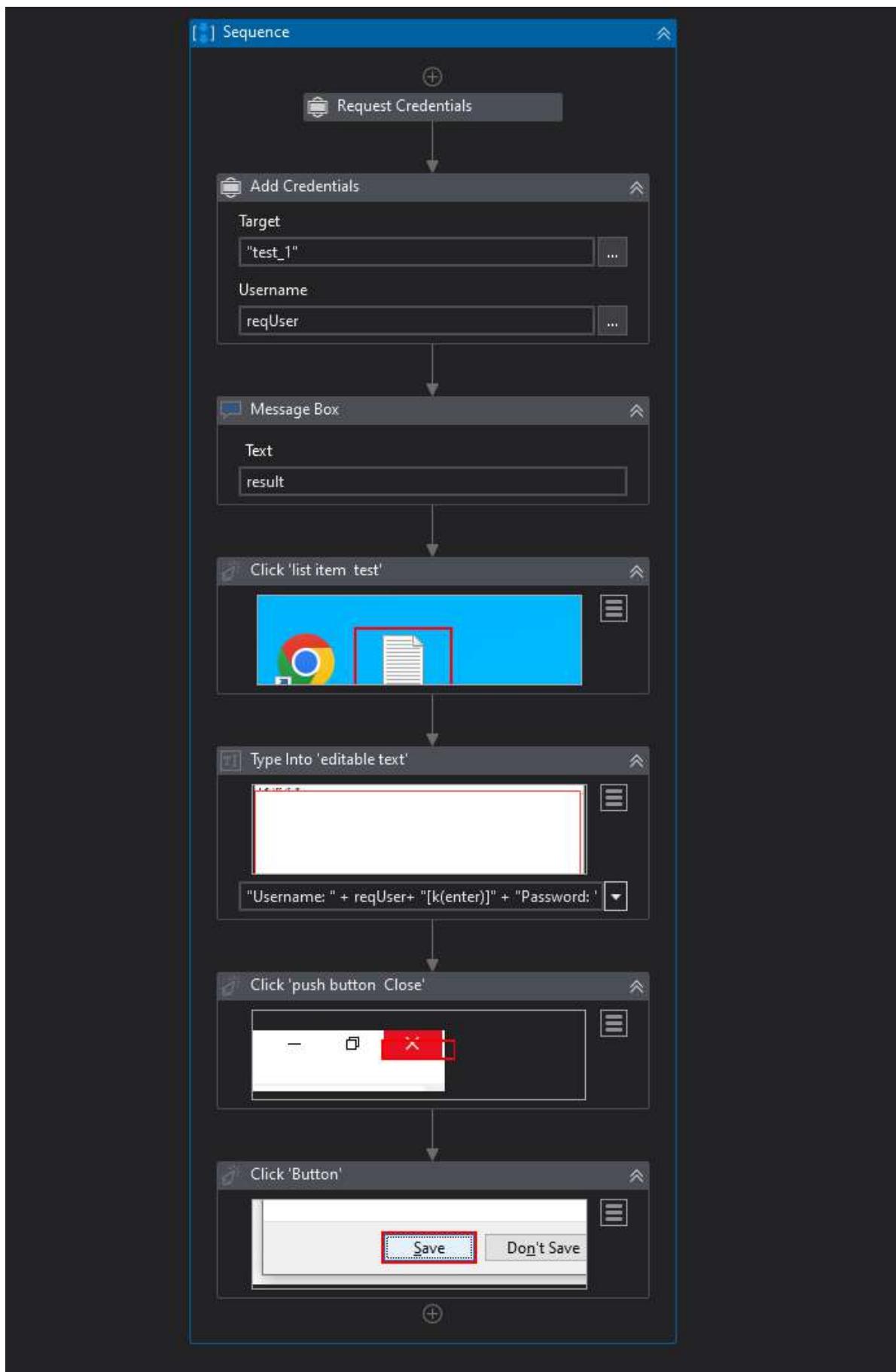
17. Select the Click Element of Mouse then change the ClickType properties



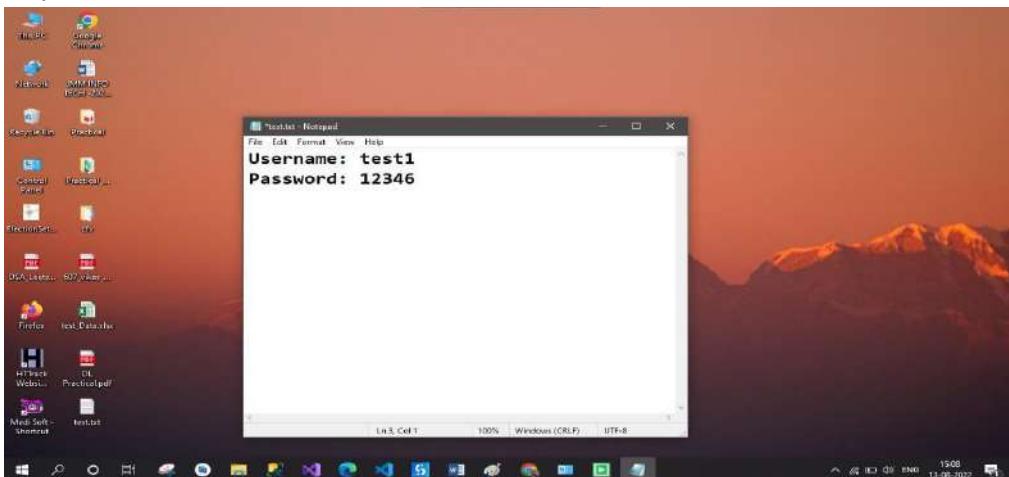
18. Drag & Drop Click same like below images and indicate particular screen



## 19. Overview

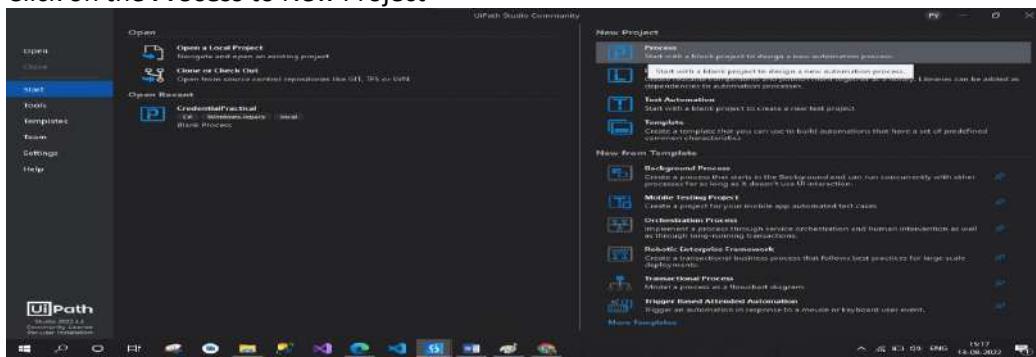


## 20.Output

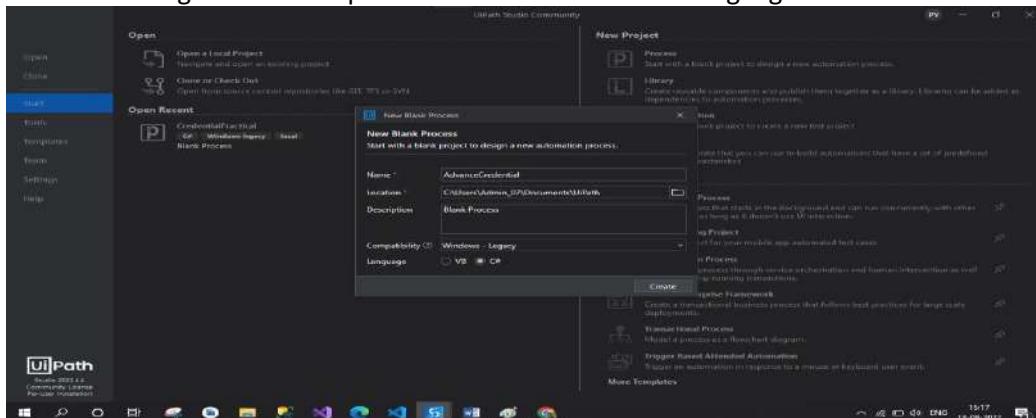


## Advance Credential

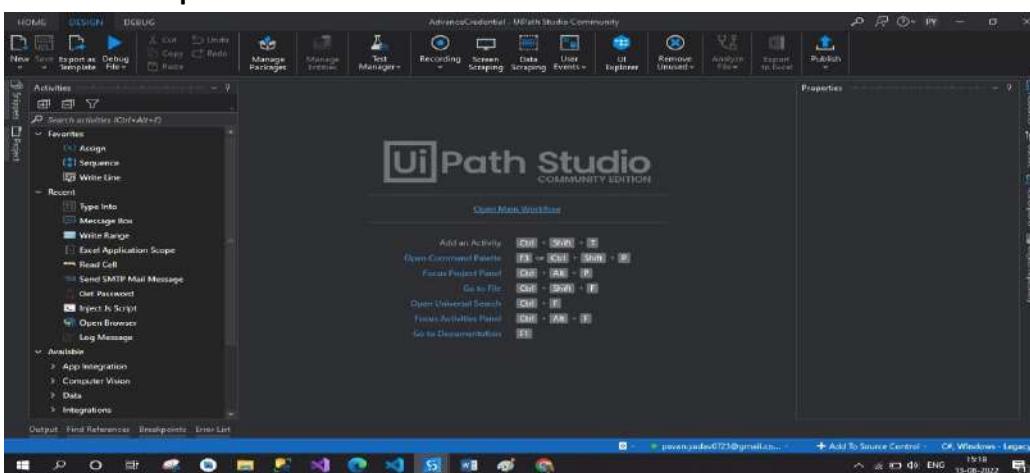
- Click on the Process to New Project



- Write following detail of the process. Note: Select the C# Language

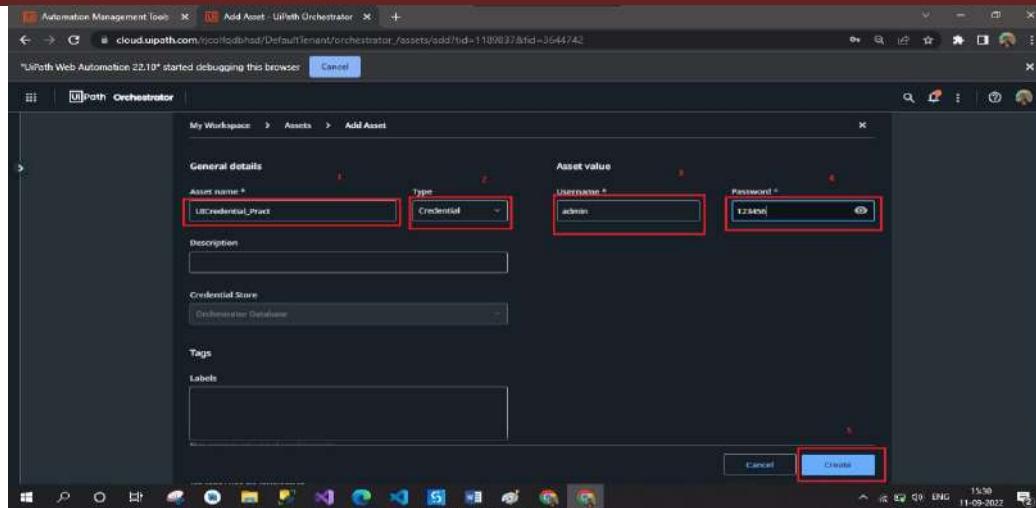


- Click on the Open Main Workflow



- Go to Orchestrator

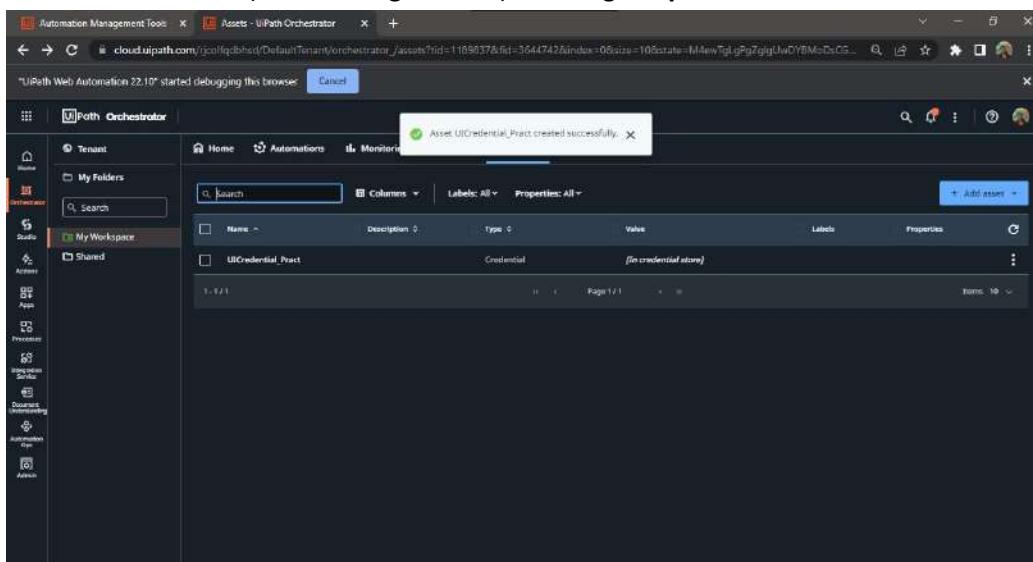
The screenshot shows the 'Assets' page in the UiPath Orchestrator web interface. The left sidebar has a tree view with 'My Workspace' selected. The top navigation bar includes 'Home', 'Automations', 'Monitoring', 'Queues', 'Assets' (which is highlighted with a red box), and 'Storage Buckets'. The main content area displays a table with columns: Name, Description, Type, Value, and Labels. A message at the top says 'No data to display yet.' There are buttons for 'Create a new asset' and 'Link from other folders'. The bottom right corner shows a progress bar at 15/28.



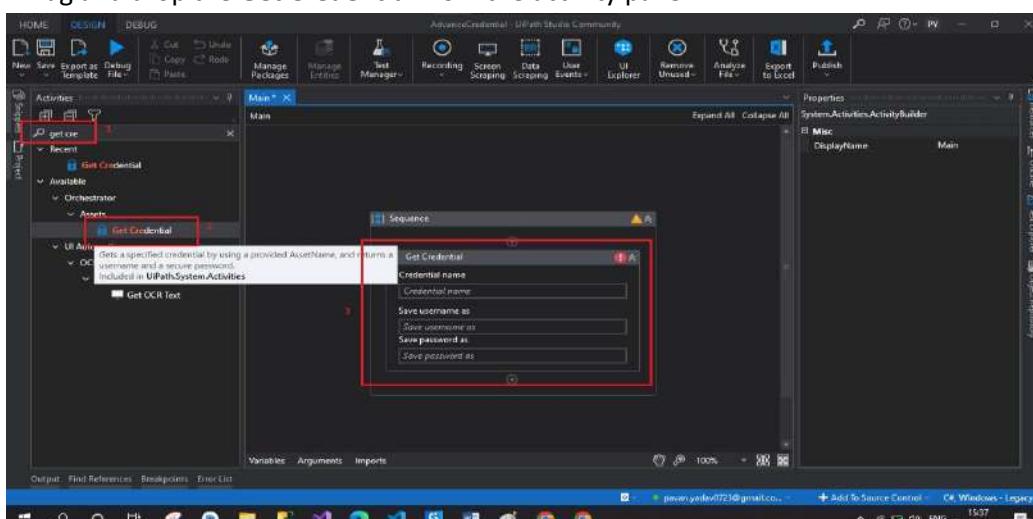
Asset Name = UICredential\_Pract Type = Credential

Username : admin

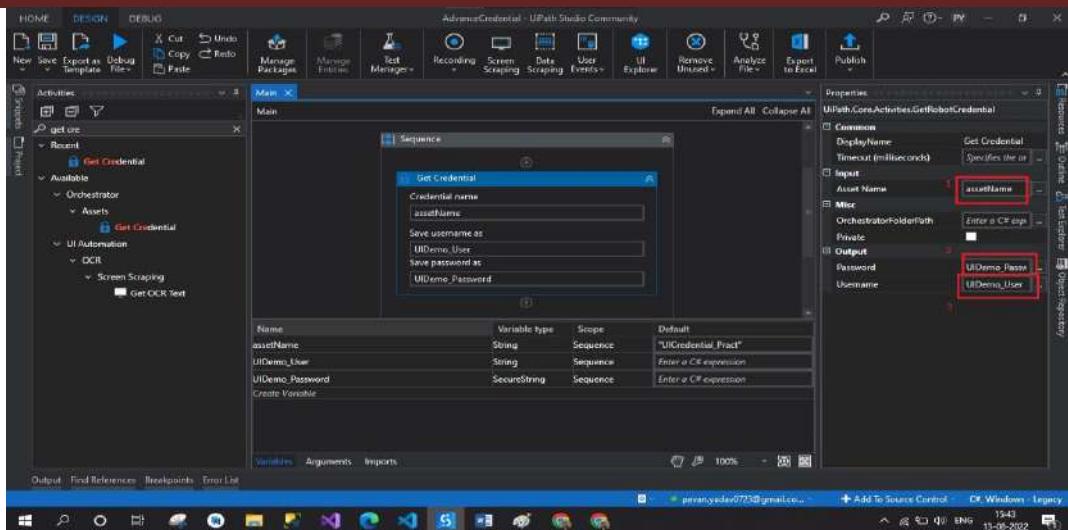
Password = 123456(not showing console) -> change to password



5. Now move on to UiPath
6. Drag and drop the **Get Credential** from the activity panel

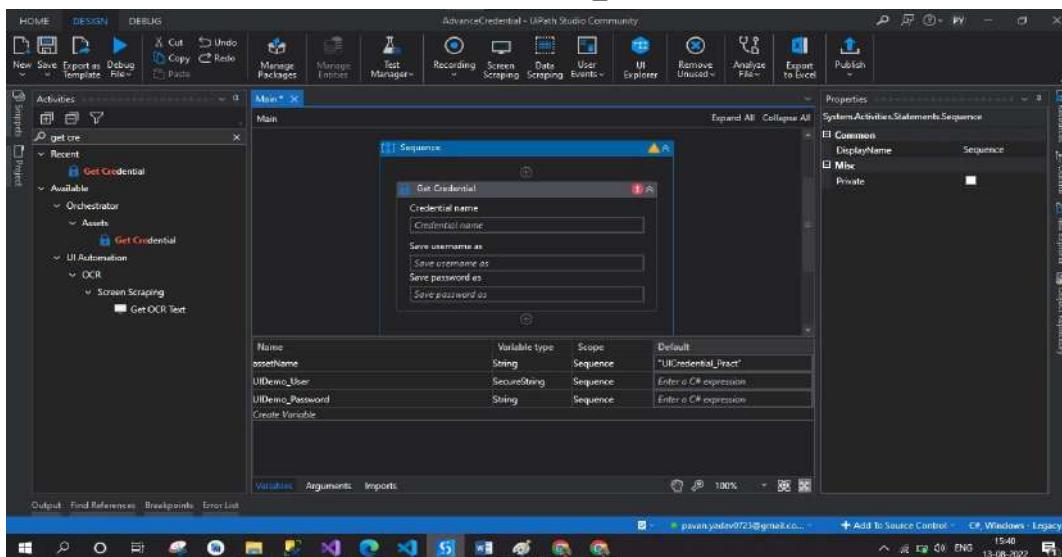


7. Select the Get Credential and Set variables using Keyboard Press Key Ctrl + k to create a new variable

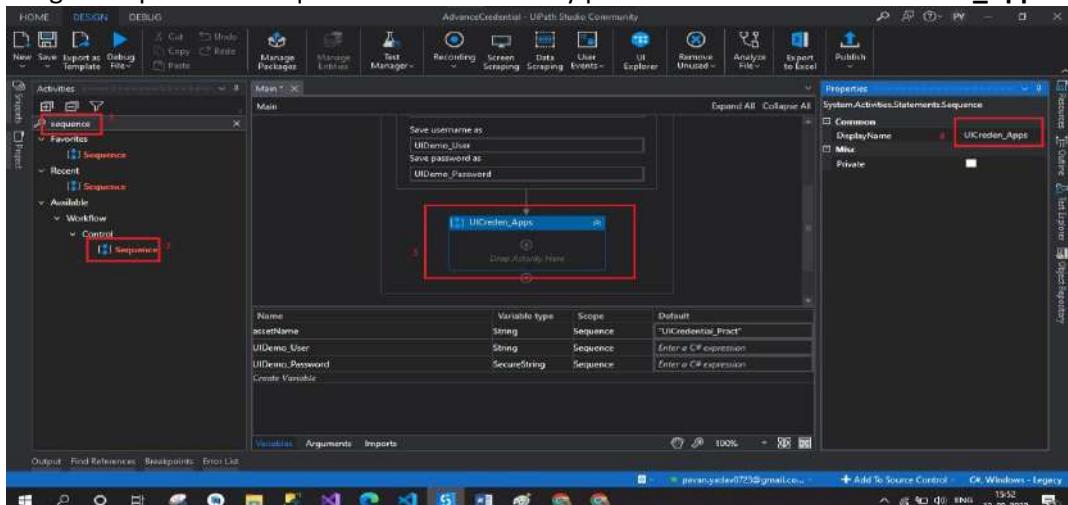


## 8. Created variables

Variable used in Get Credential i.e. "UICredential\_Pract"

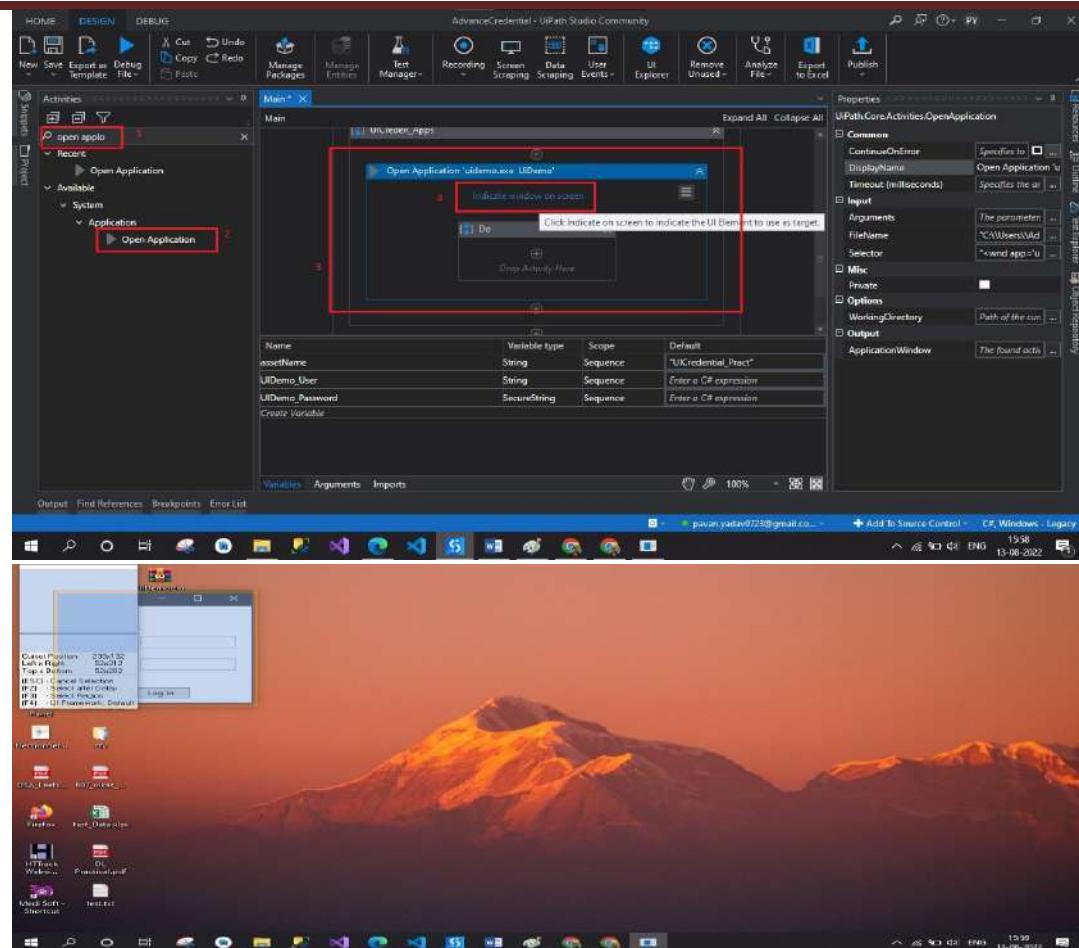


## 9. Drag & Drop another sequence from the activity panel and rename it to UICreden\_Apps

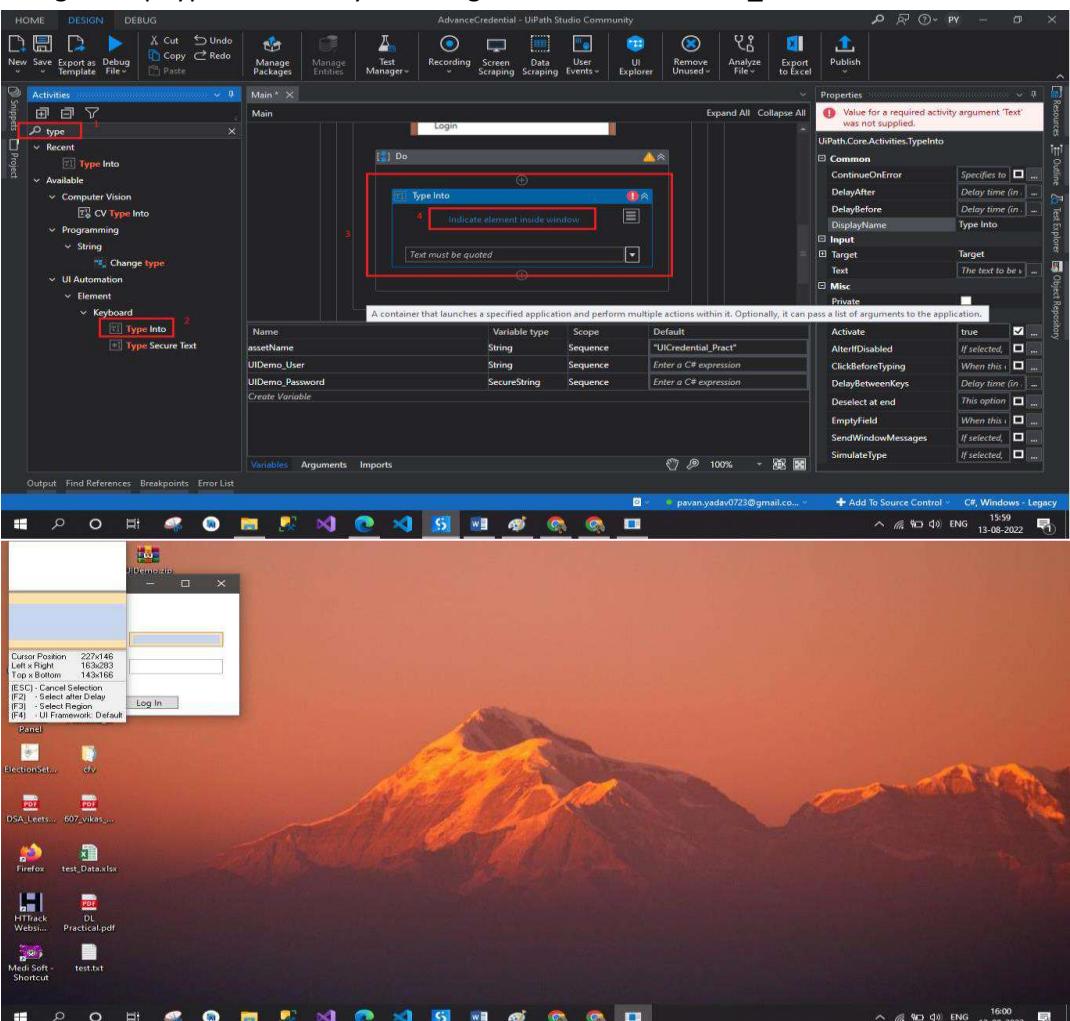


10. Before Processing to the next step download the uidemo.exe from  
<https://forum.uipath.com/t/can-any-one-please-share-uidemo-exe/22039/3>

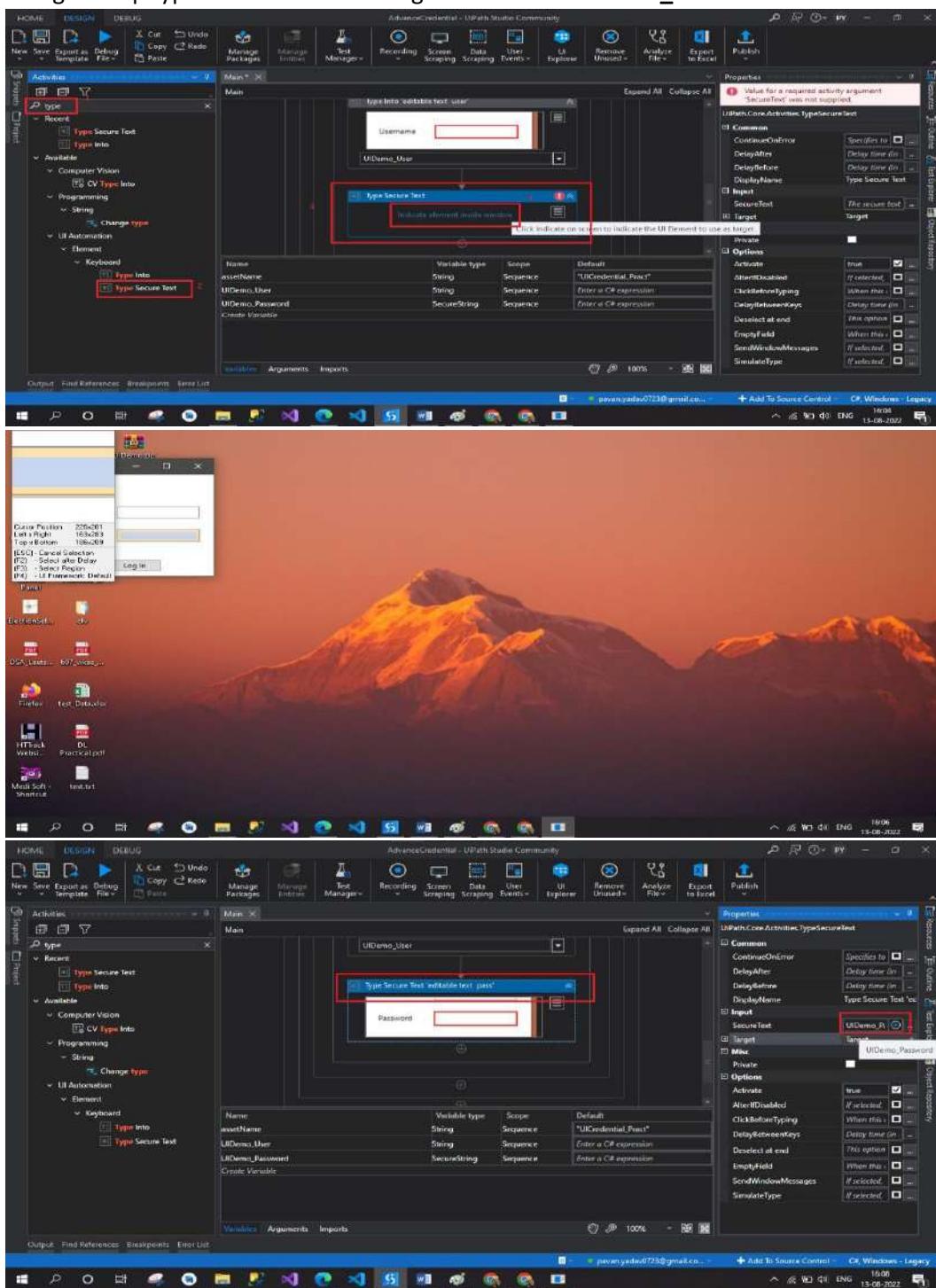
11. Drag & Drop the open application from the activity panel



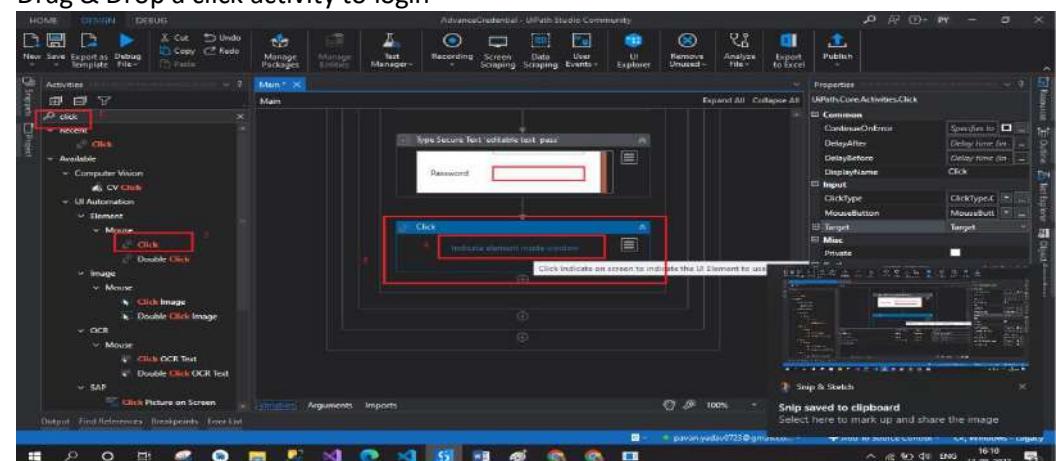
**12. Drag & Drop type into activity and assign the variable `UIDemo_User`**



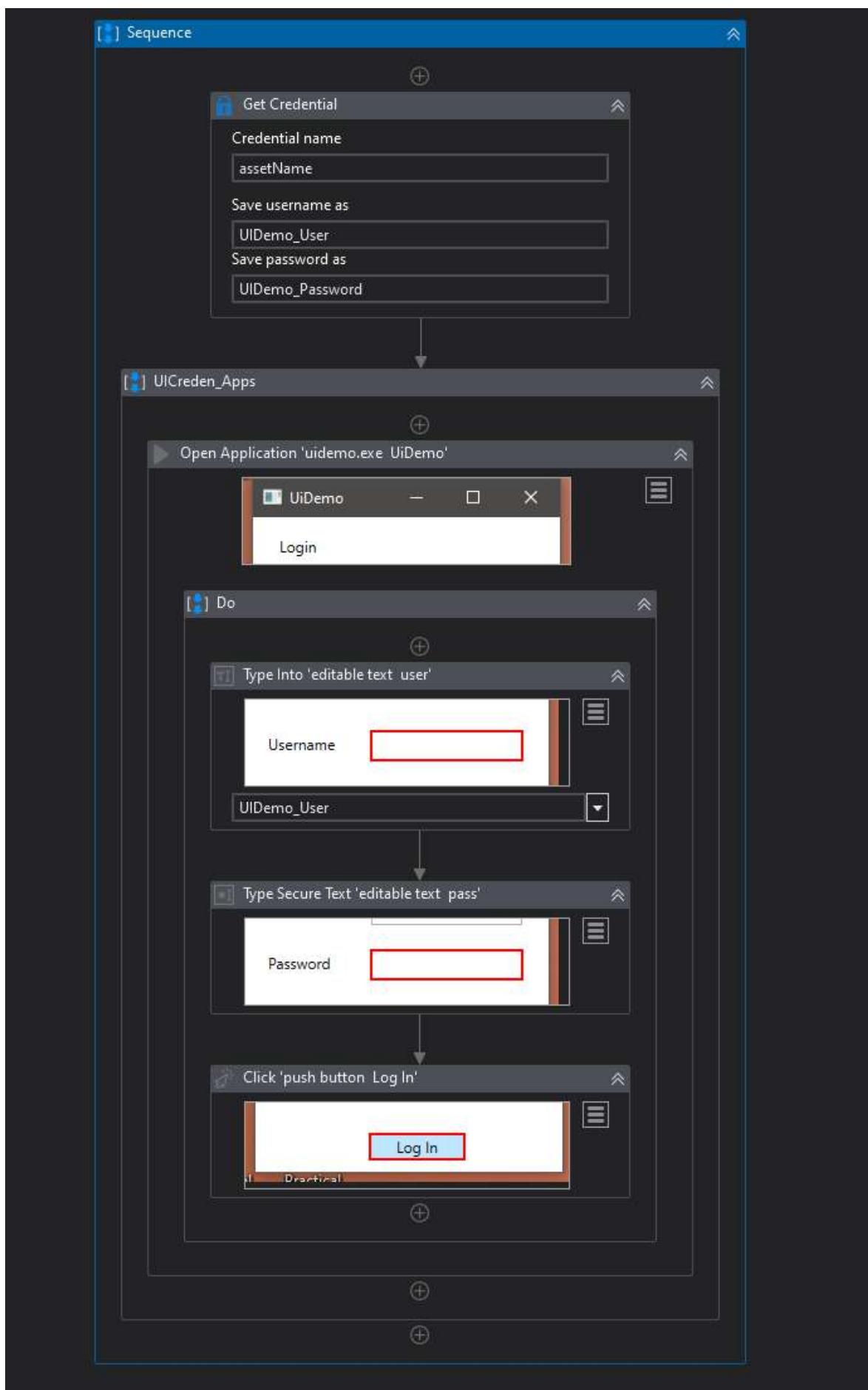
**13. Drag & Drop type secure text and assign the variable `UIDemo_Password`**



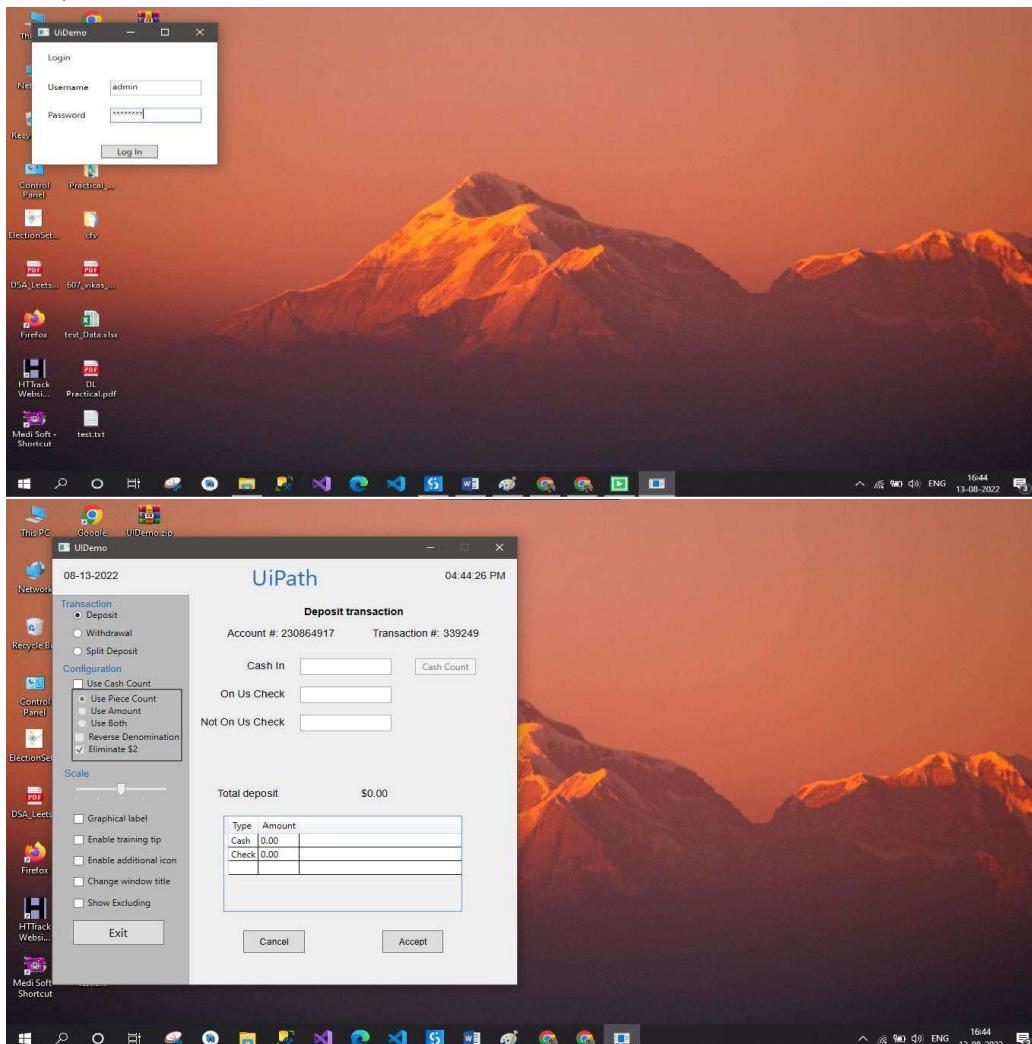
**14. Drag & Drop a click activity to login**



## 15. Overview



## 16. Output

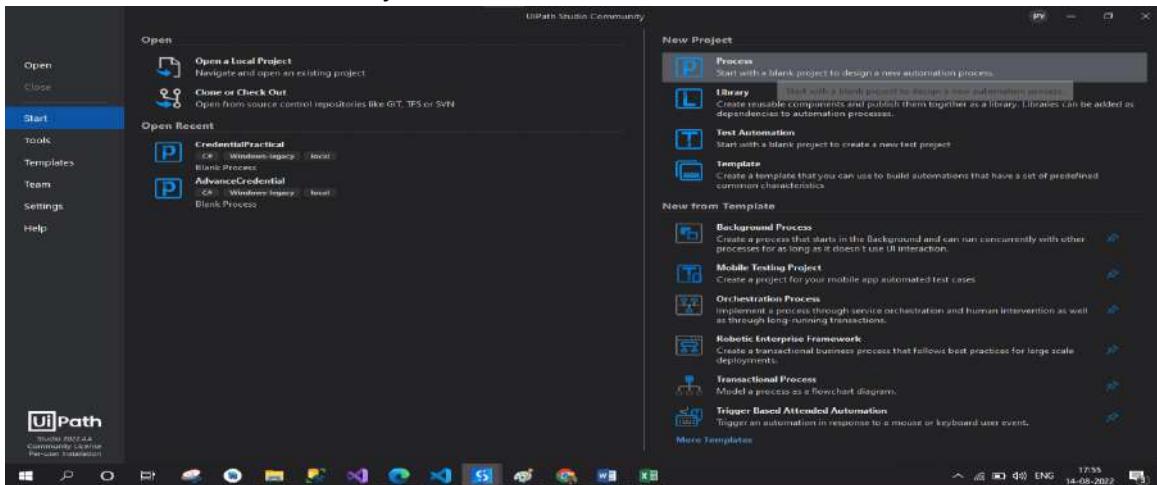


## Practical 9:

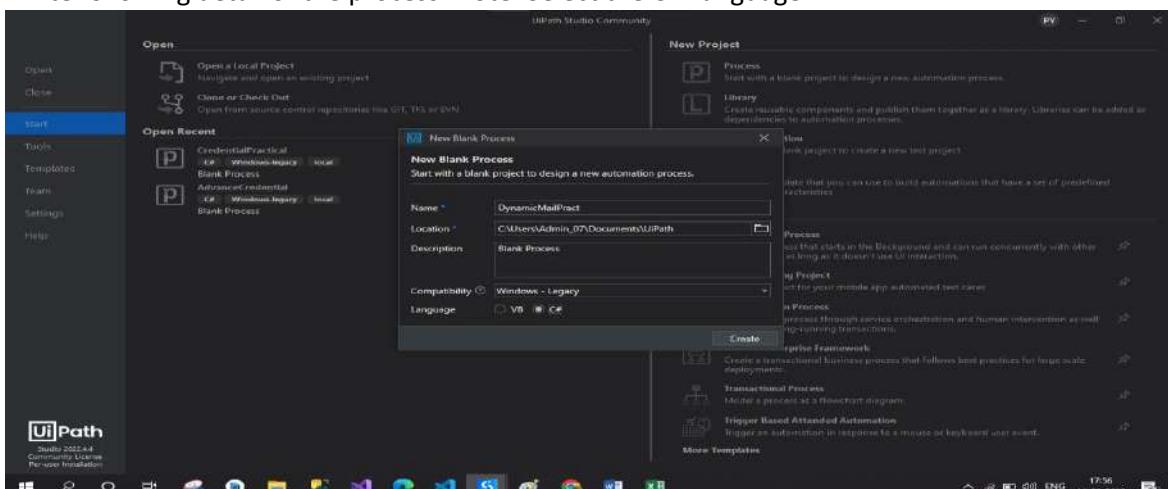
### A] Automate the process of sending mail events (on any email).

#### Dynamic Mail

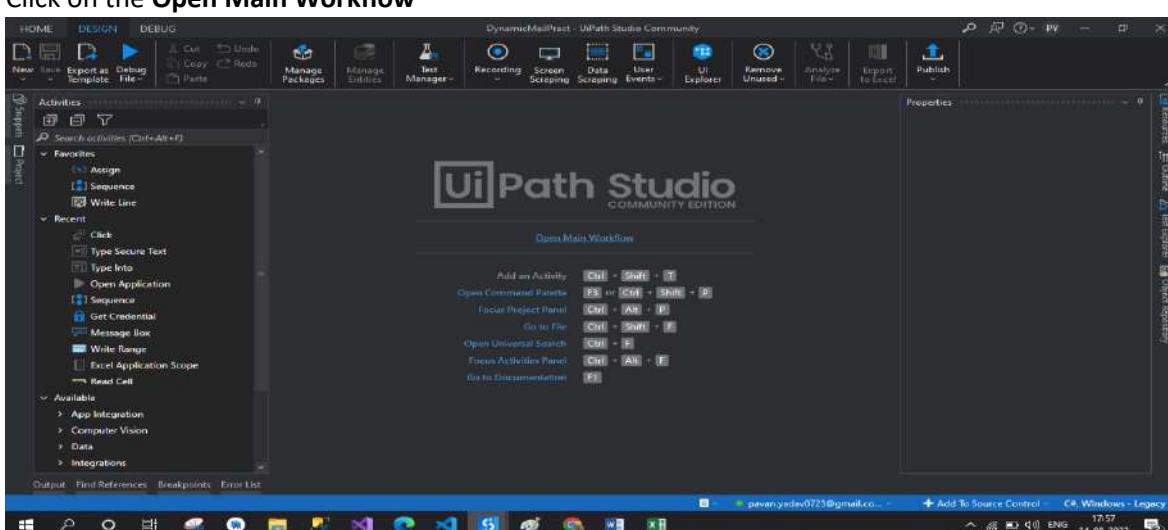
18. Click on the Process to New Project



19. Write following detail of the process. Note: Select the C# Language

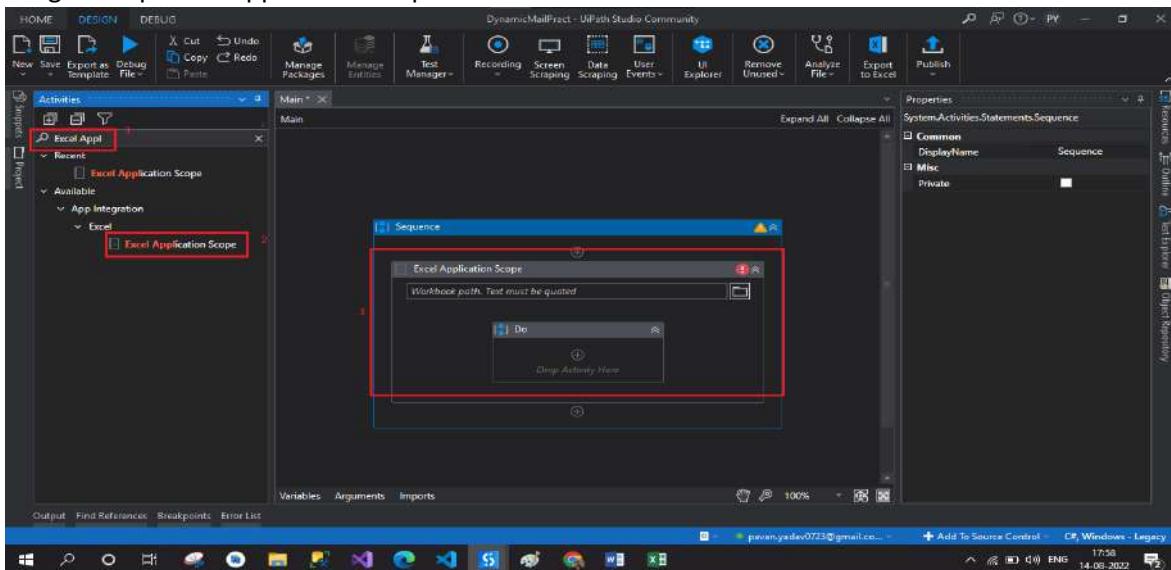


20. Click on the Open Main Workflow

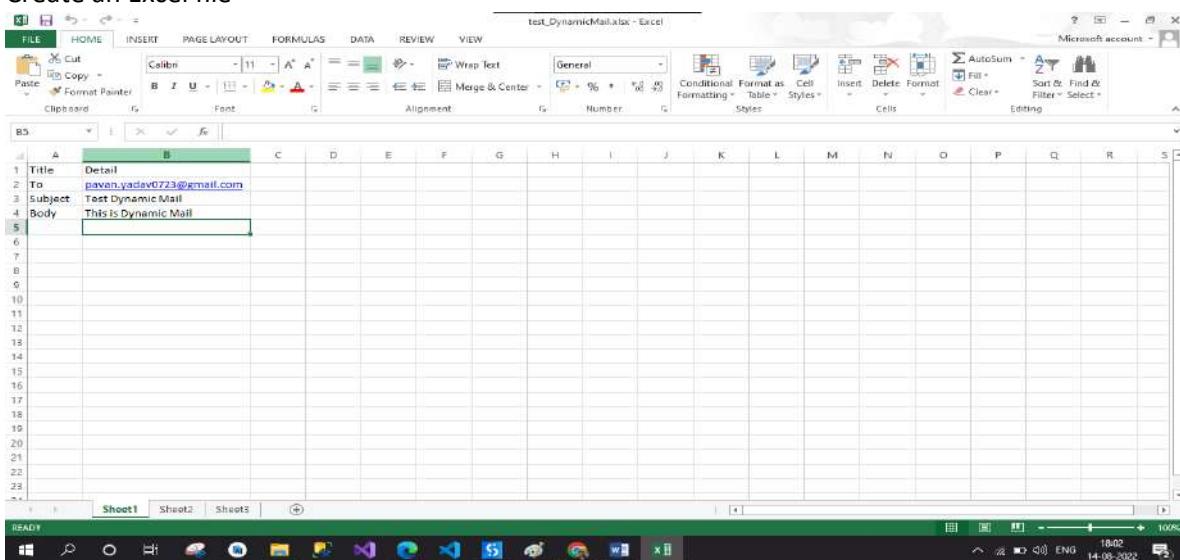


**Note:** Install Mail Plugin if not installed

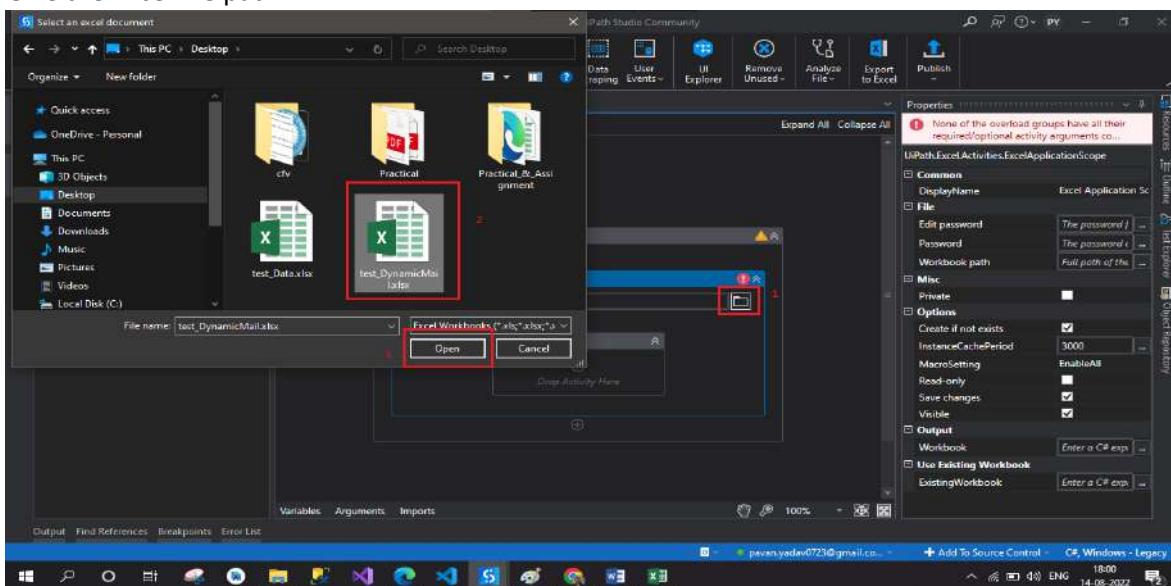
## 21. Drag & Drop Excel Application Scope



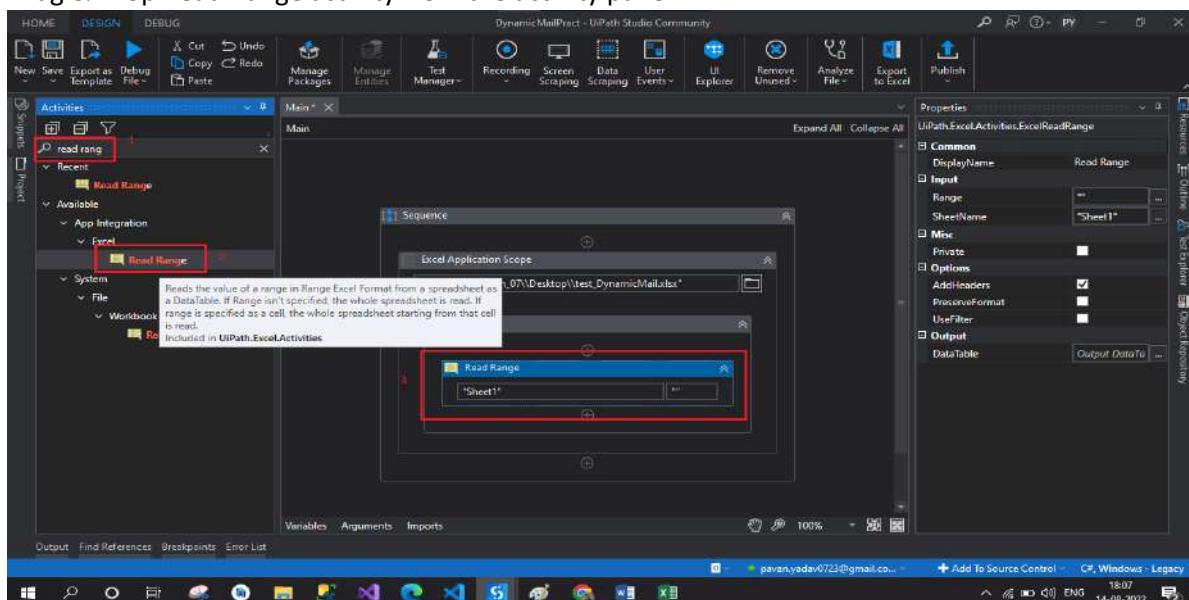
## 22. Create an Excel file



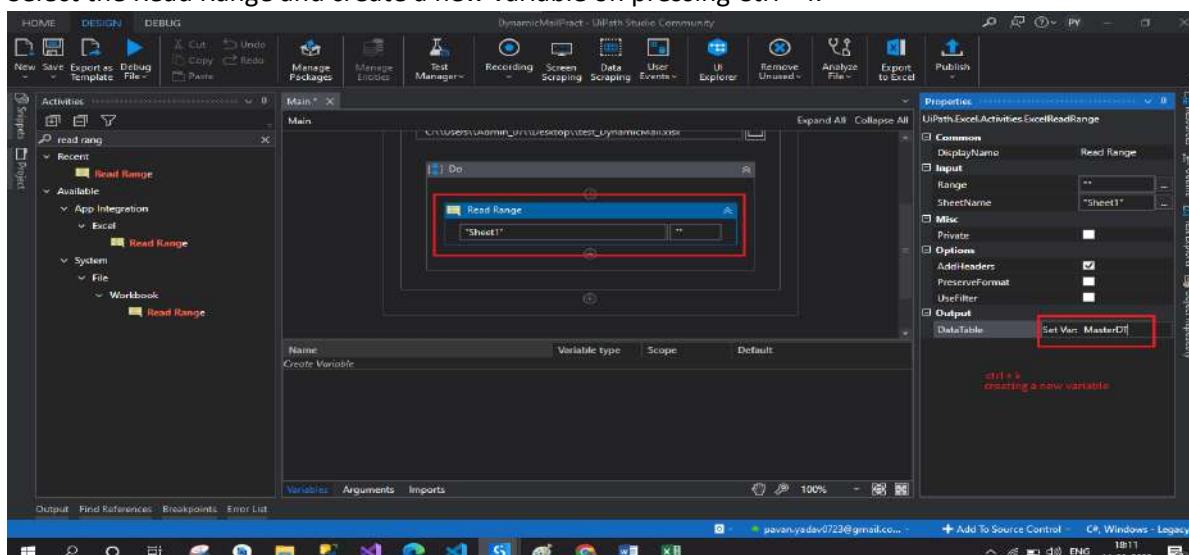
## 23. Give the Excel file path



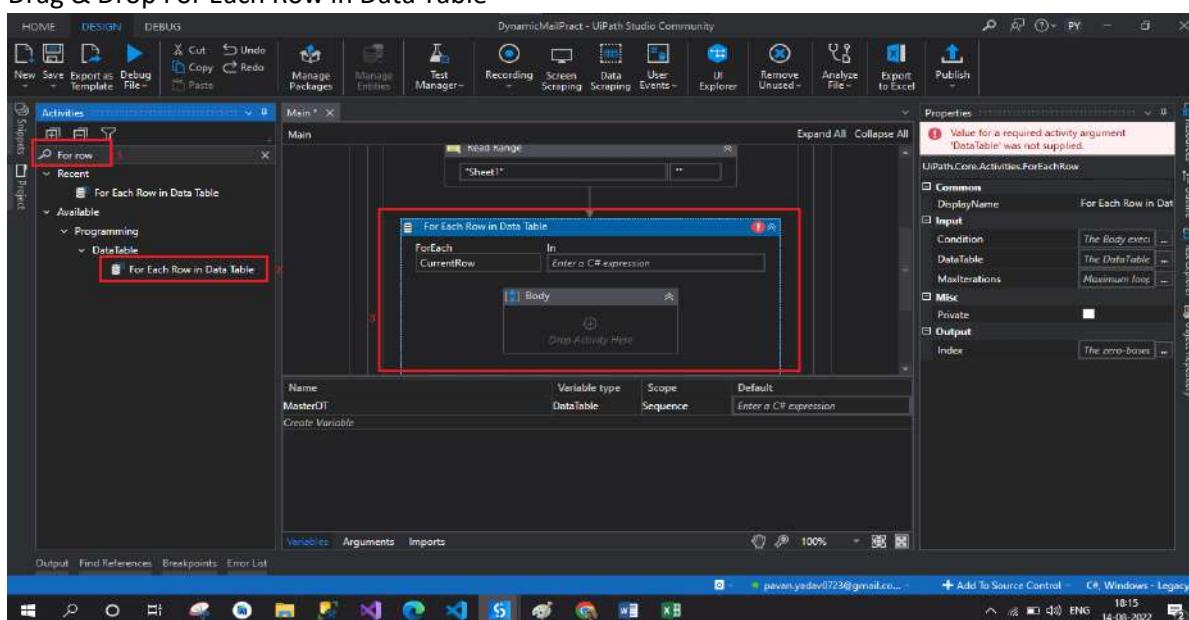
**24. Drag & Drop Read Range activity from the activity panel**



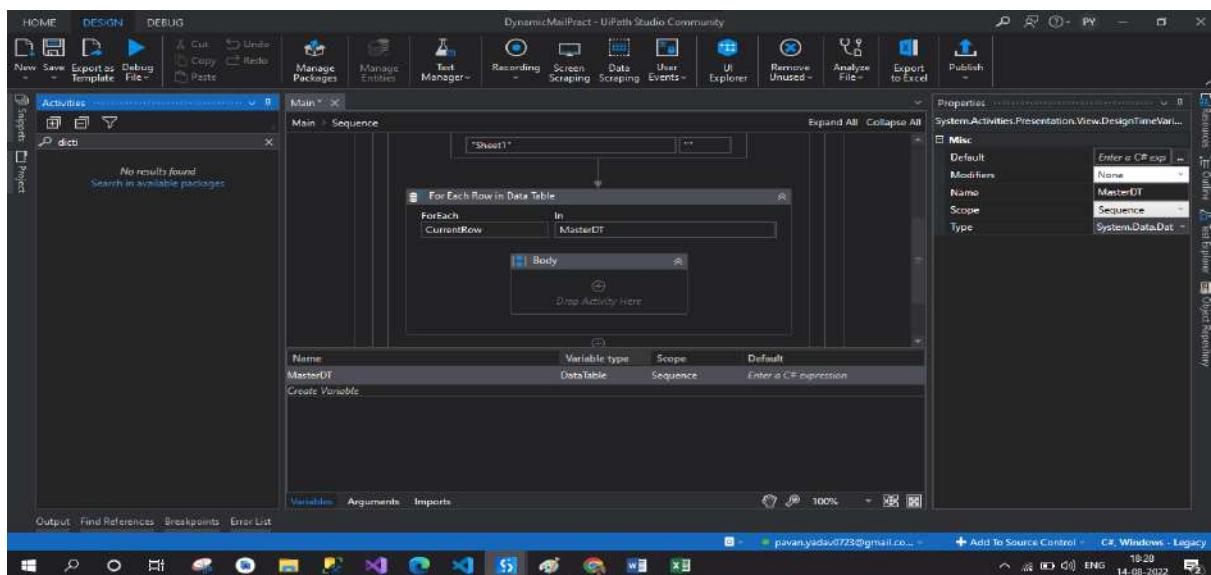
**25. Select the Read Range and create a new variable on pressing Ctrl + k**



**26. Drag & Drop For Each Row in Data Table**

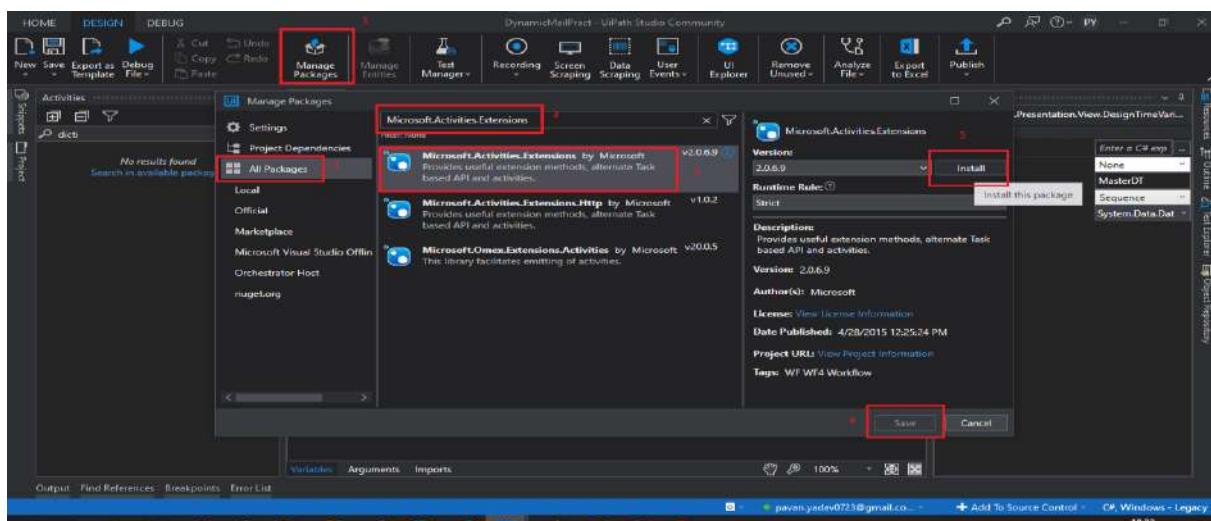


**27. Not showing Add to Dictionary activities**

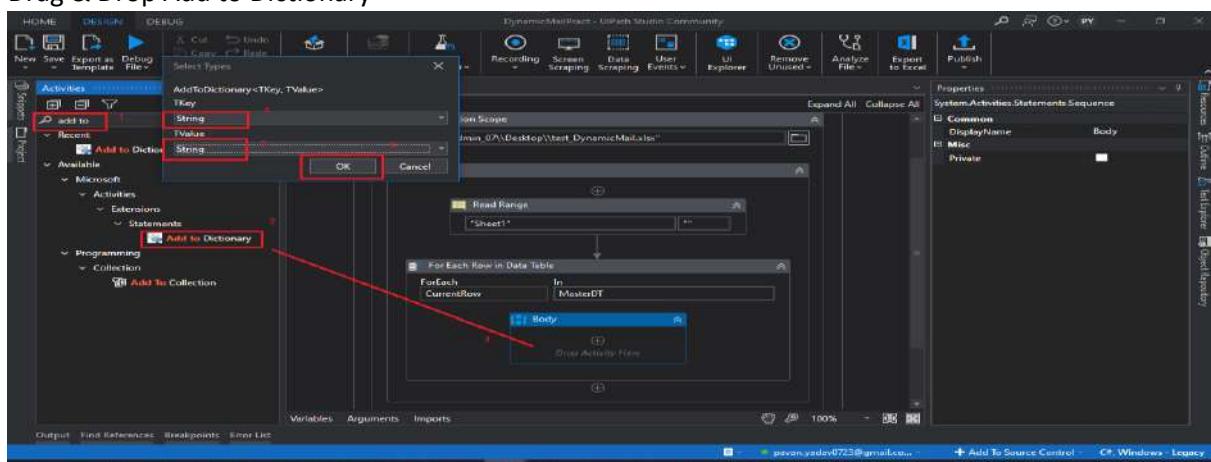


## Solution

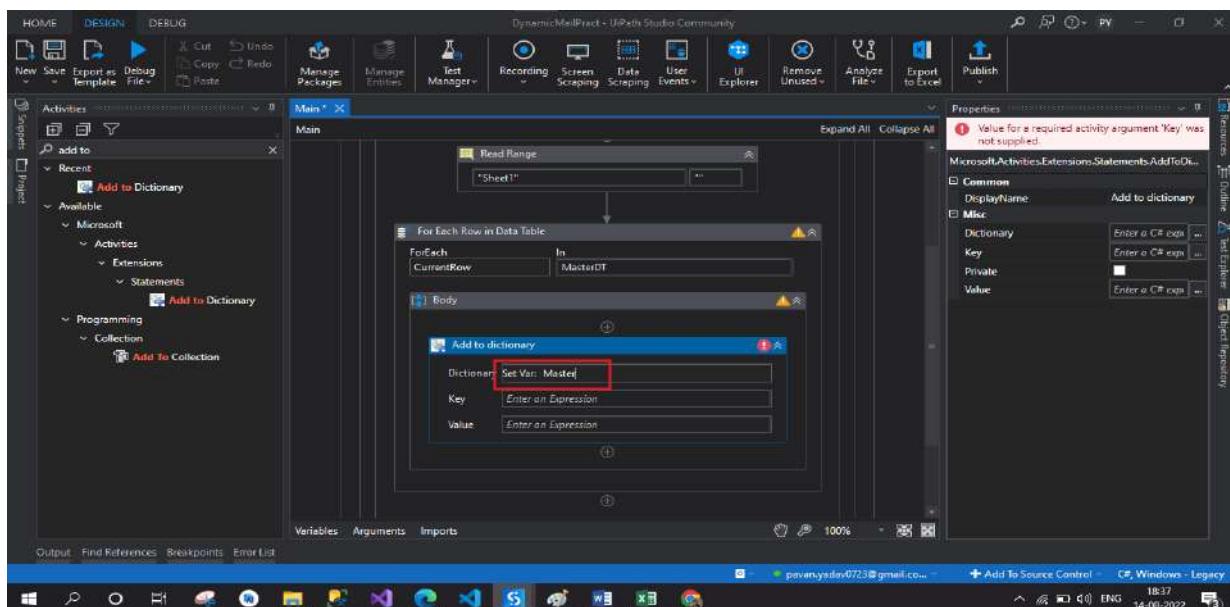
Microsoft.Activities.Extensions



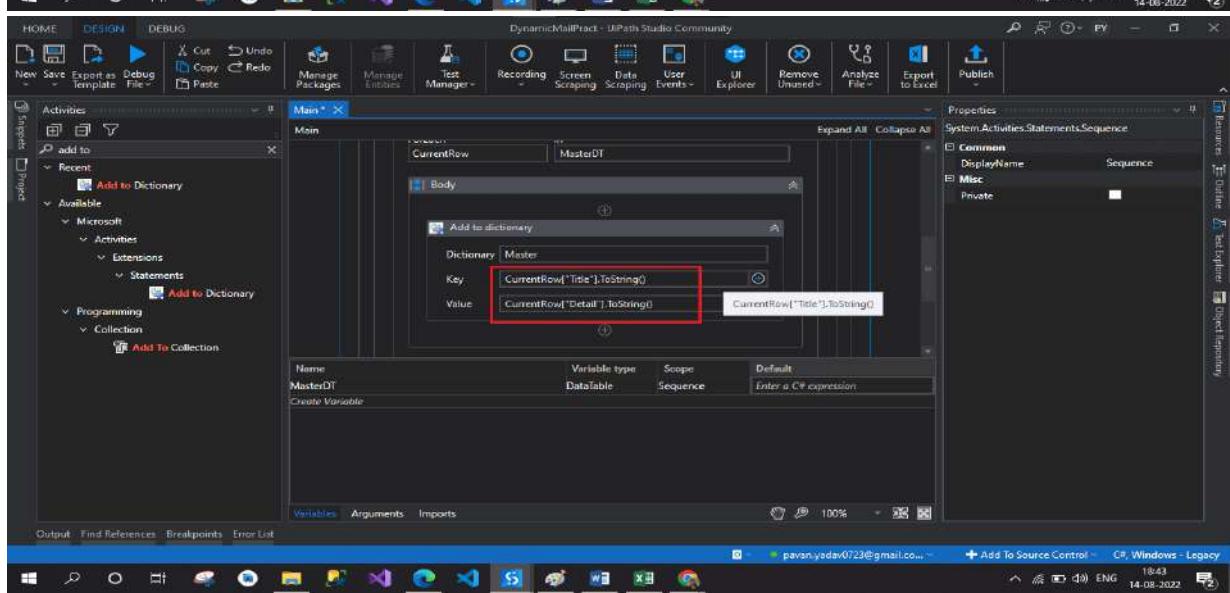
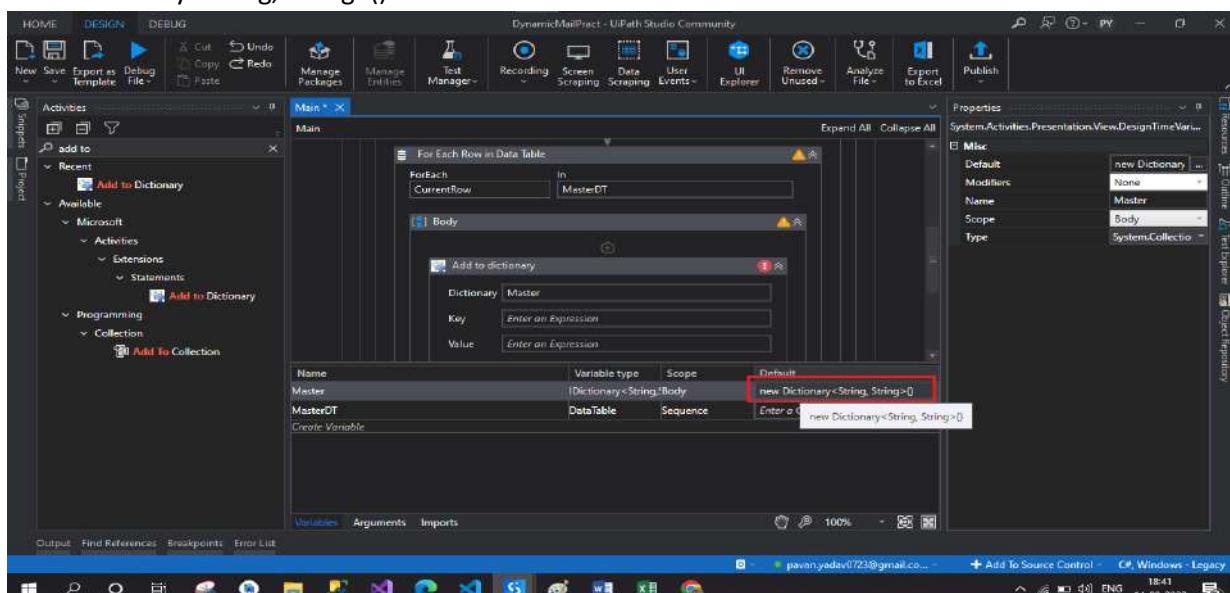
### 28. Drag & Drop Add to Dictionary



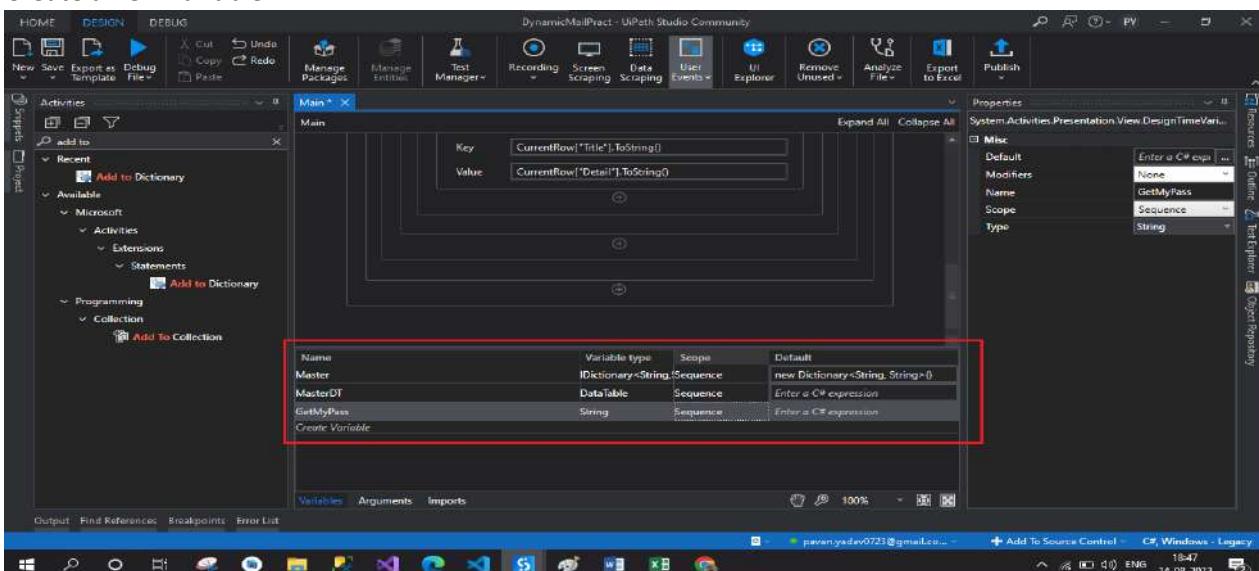
### 29. Inside the Add to Dictionary create a new variable same like below image using ctrl + k -> create a new variable



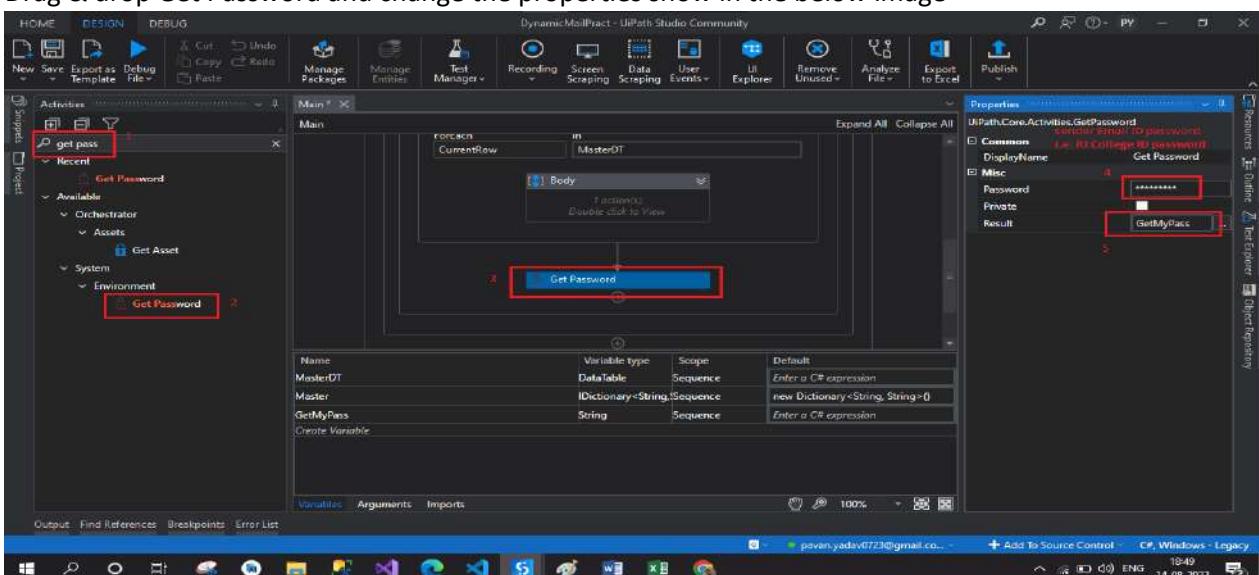
new Dictionary<String, String>()



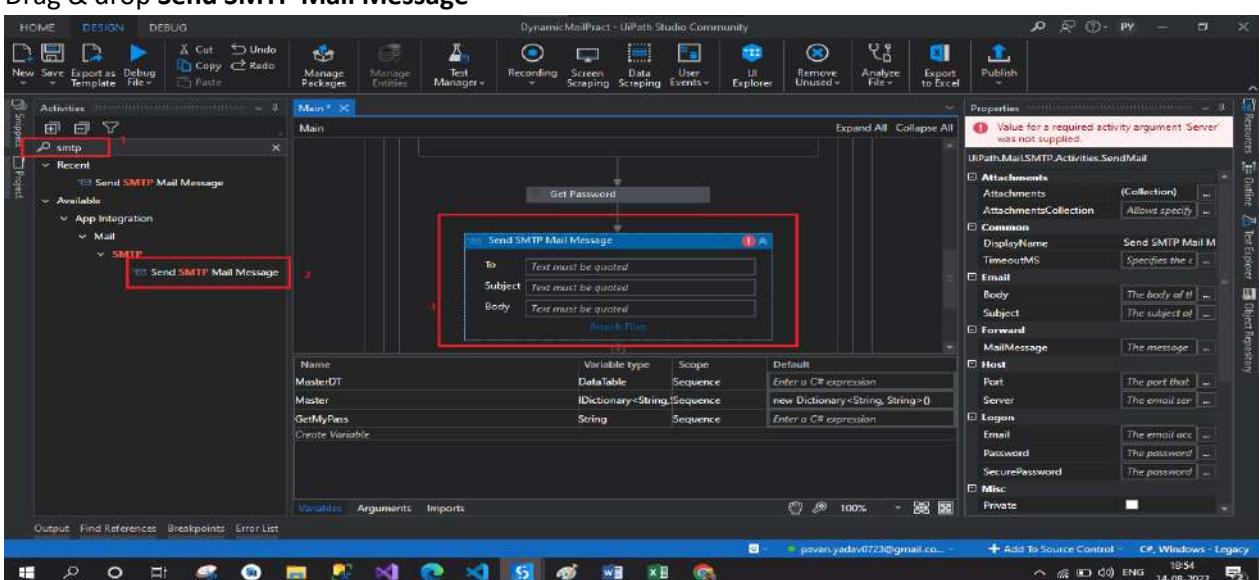
## 30. Create a new variable



## 31. Drag &amp; drop Get Password and change the properties show in the below image



## 32. Drag &amp; drop Send SMTP Mail Message



33. Insert some important value same like below image

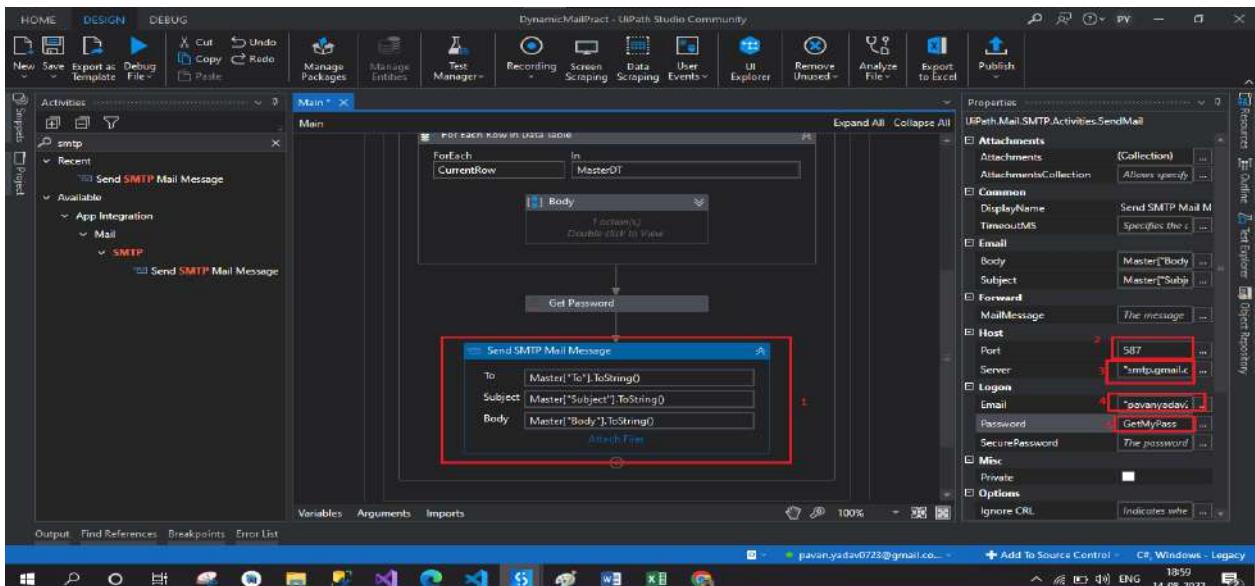
**Note:** Only used organization or institute Email ID

**Port:** 587

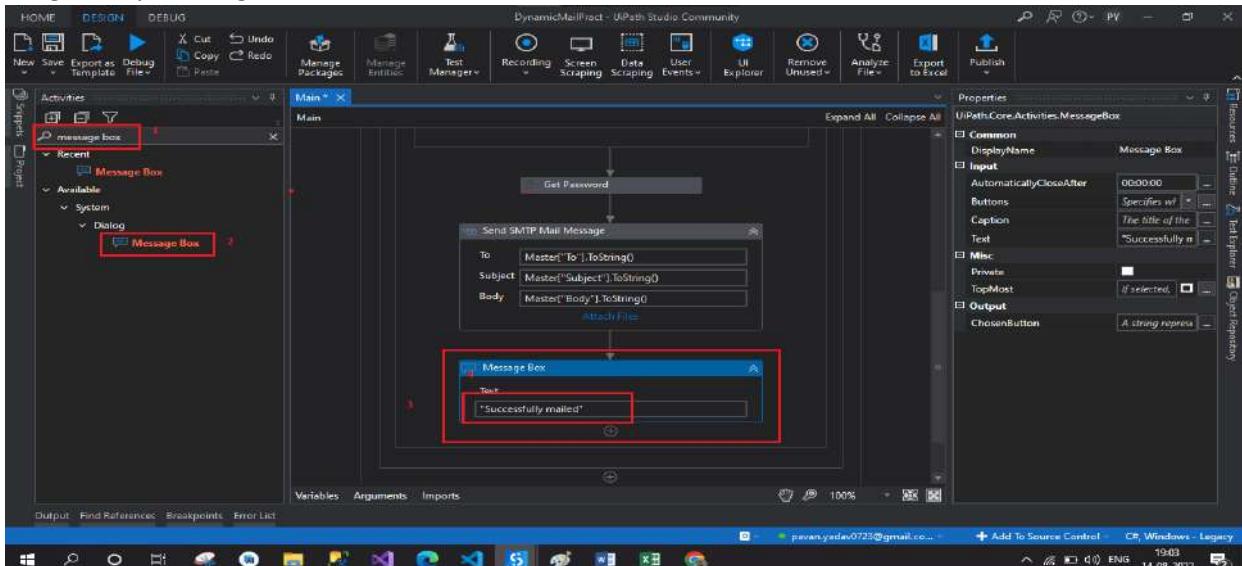
**Server:** "smtp.gmail.com"

**Email (Sender ID):** [pavanyadav23071999@rjcollege.edu.in](mailto:pavanyadav23071999@rjcollege.edu.in)

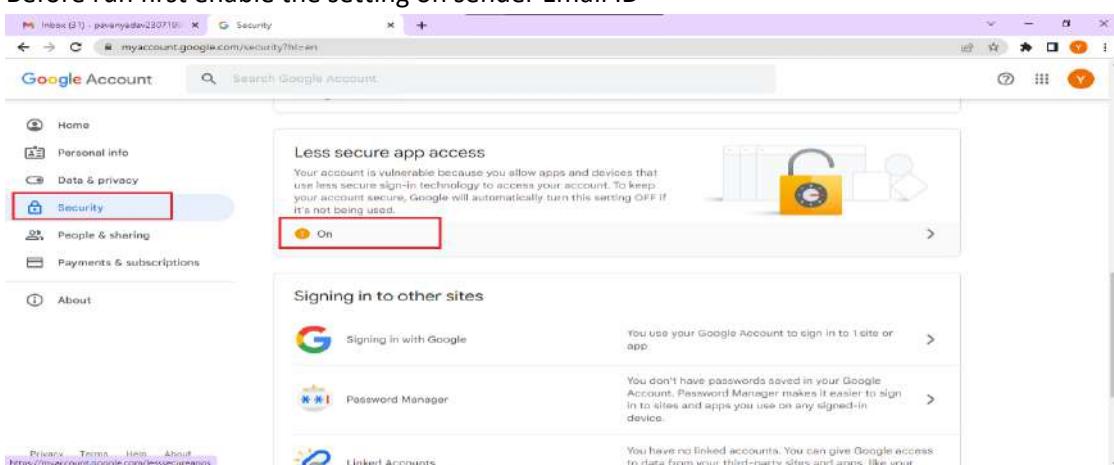
**Password:** variable

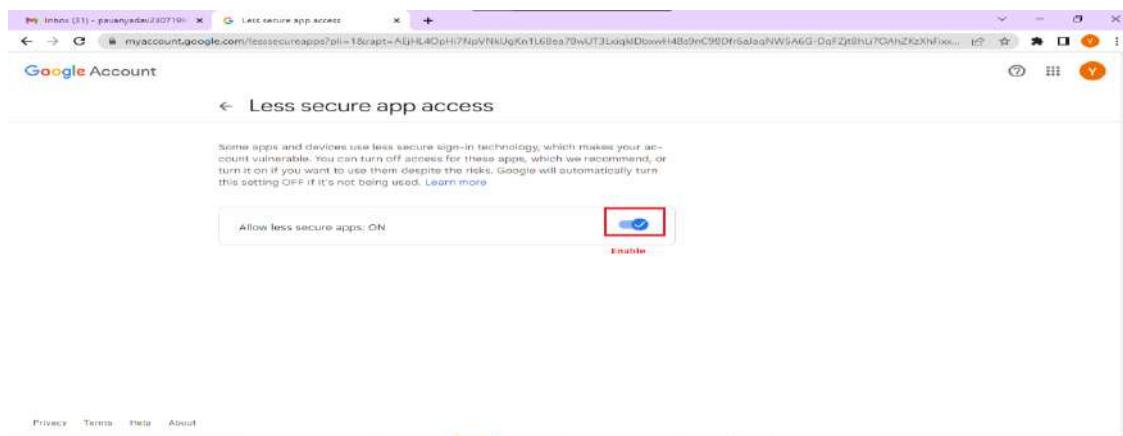


34. Drag & drop Message Box

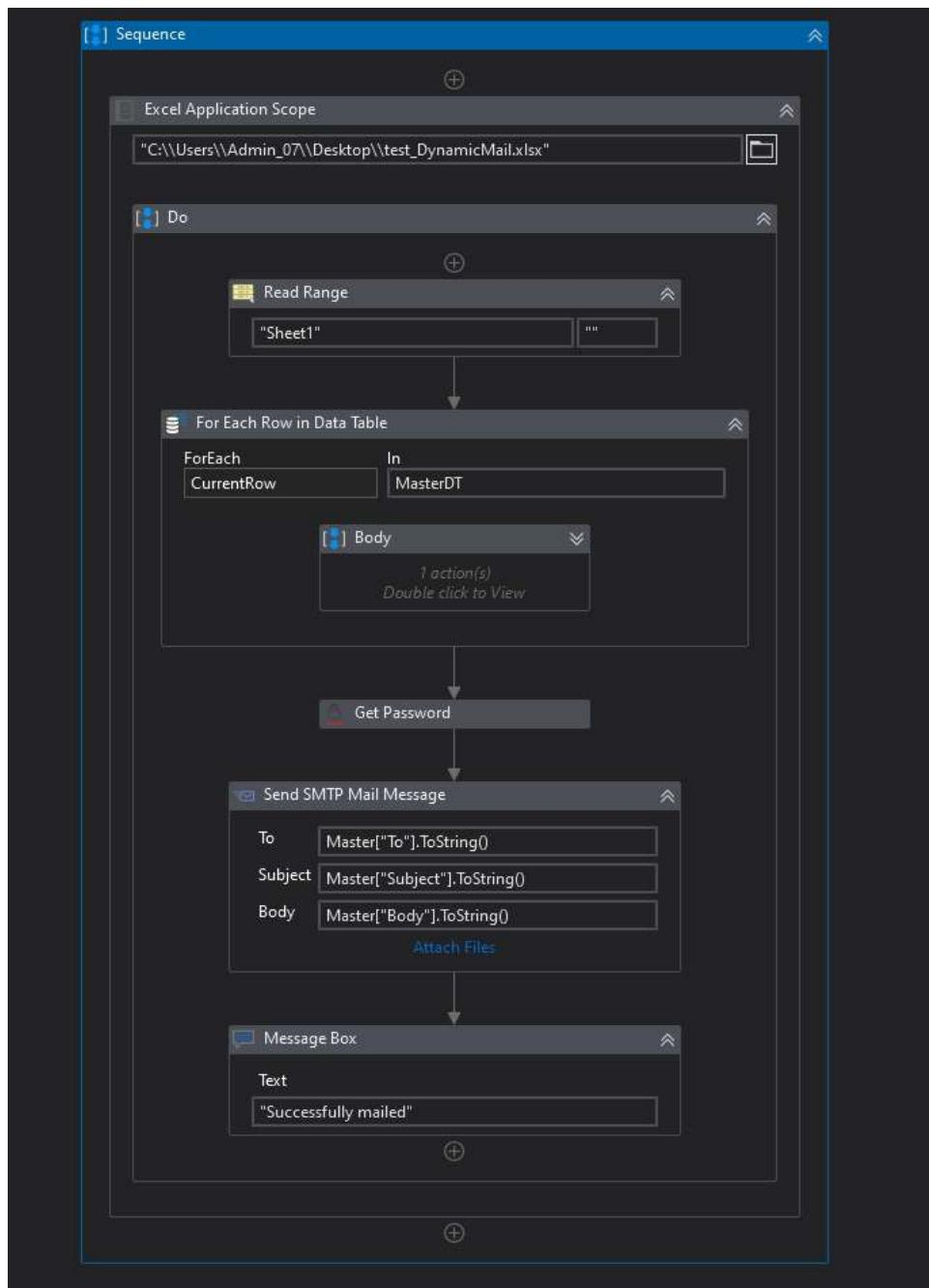


Before run first enable the setting on sender Email ID





### 35. Overview



### 36. Output

The screenshot displays a RPA workflow in UNPath Studio Community. The workflow consists of a sequence of steps:

- Main (ReadOnly)**: Contains a **Send SMTP Mail Message** step with the following properties:
  - To: Master| To".ToString()
  - Subject: Master| Subject".ToString()
  - Body: Master| Body".ToString()
- A **Message Box** step follows, displaying the message "Successfully mailed".

Below the workflow, an Excel spreadsheet titled "test\_DynamicMail.xlsx" is open, showing the following data in Sheet1:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Title	Detail																	
2	To	pavan.yadav023@gmail.com																	
3	Subject	Test Dynamic Mail																	
4	Body	This is Dynamic Mail																	
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

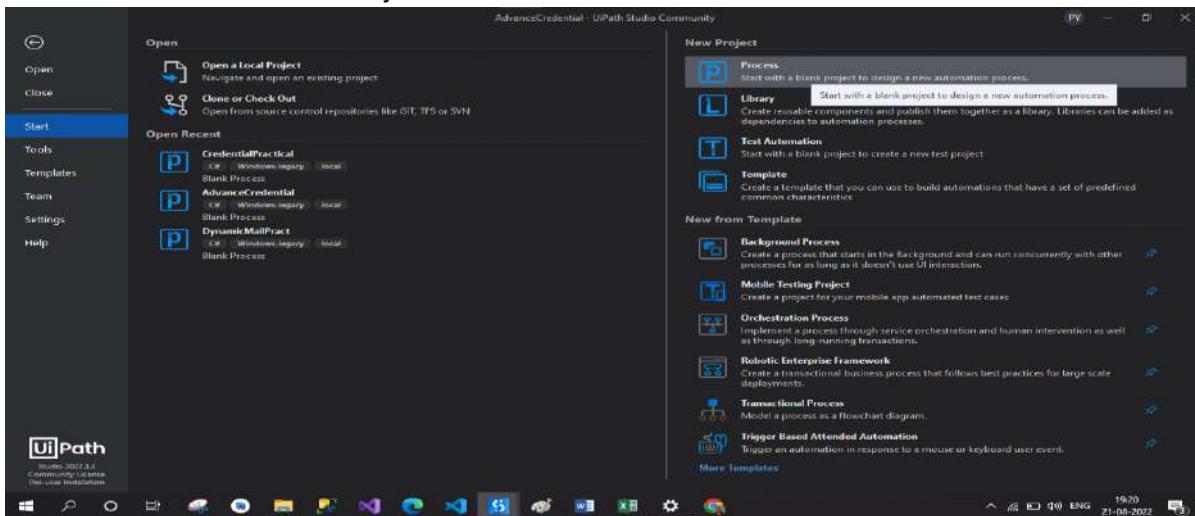
At the bottom, a screenshot of a Gmail inbox shows an email from "pavan.yadav023@gmail.com" with the subject "Test Dynamic Mail". The email body contains the text "This is Dynamic Mail". A disclaimer at the bottom of the email reads:

\*DISCLAIMER: This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you are not the intended recipient, you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited. Please notify the sender immediately by email if you have received this email by mistake and delete this email from your system. The views expressed in this email message including the attachment are those of the individual sender.

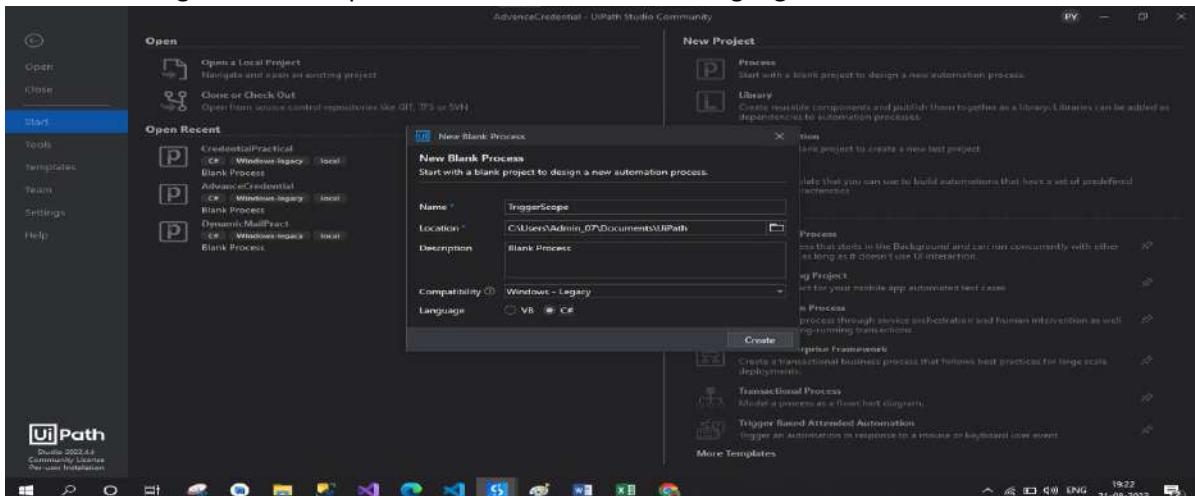
## B] Automate the process of launching an assistant bot on a keyboard event.

### Trigger Scope

13. Click on the **Process** to New Project



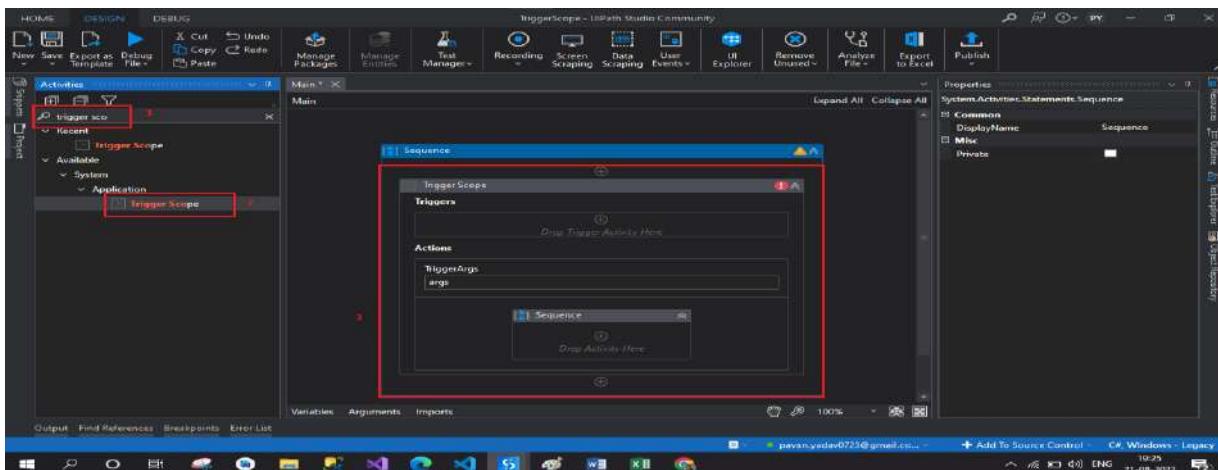
14. Write following detail of the process. Note: Select the C# Language



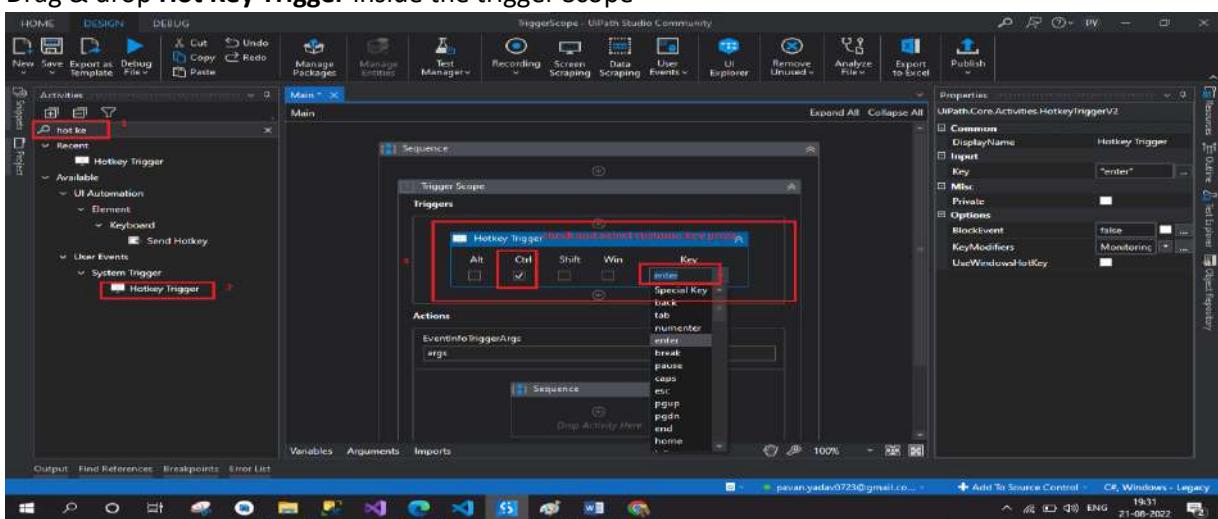
15. Click on the **Open Main Workflow**



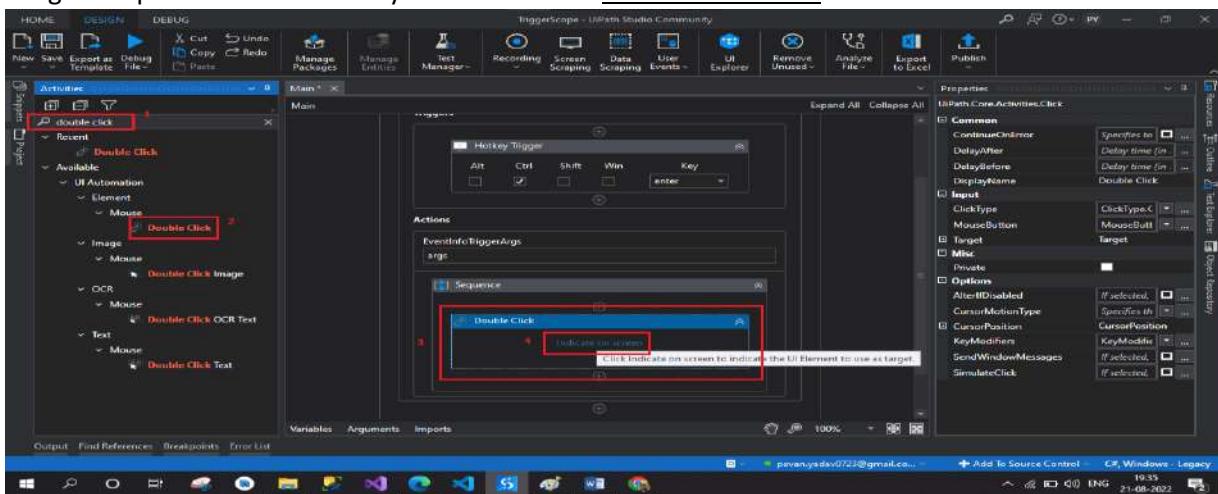
16. Drag and Drop the **Trigger scope**

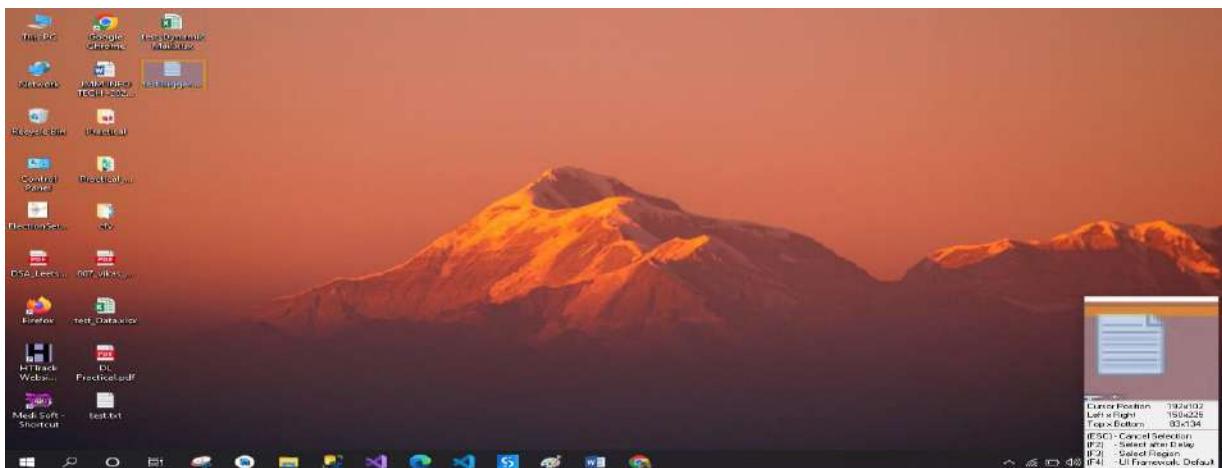


17. Drag & drop Hot Key Trigger inside the trigger Scope

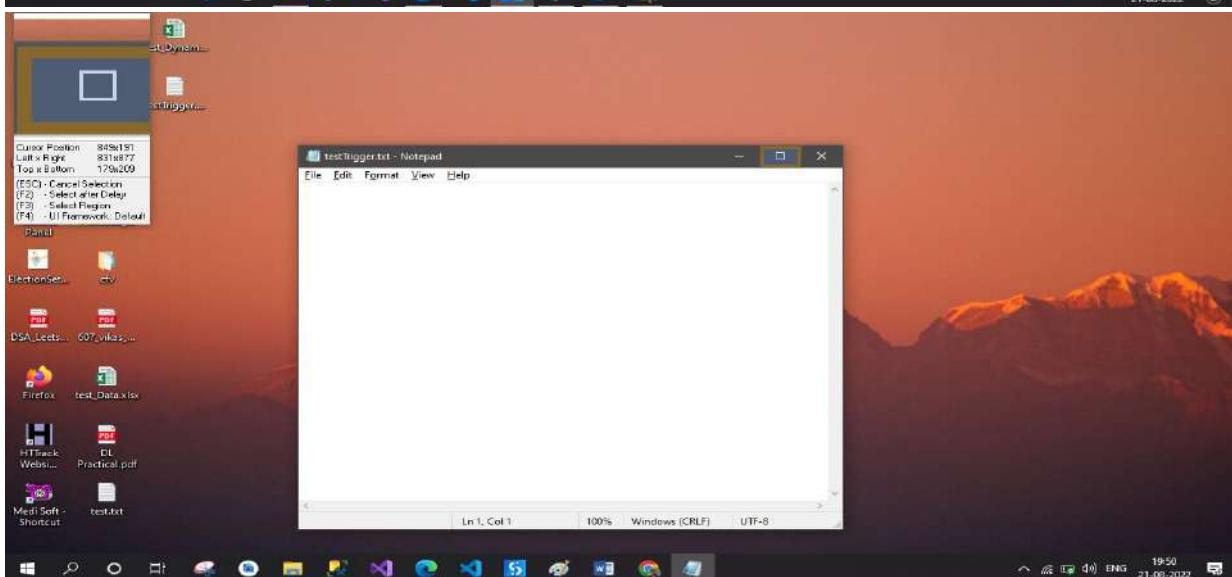
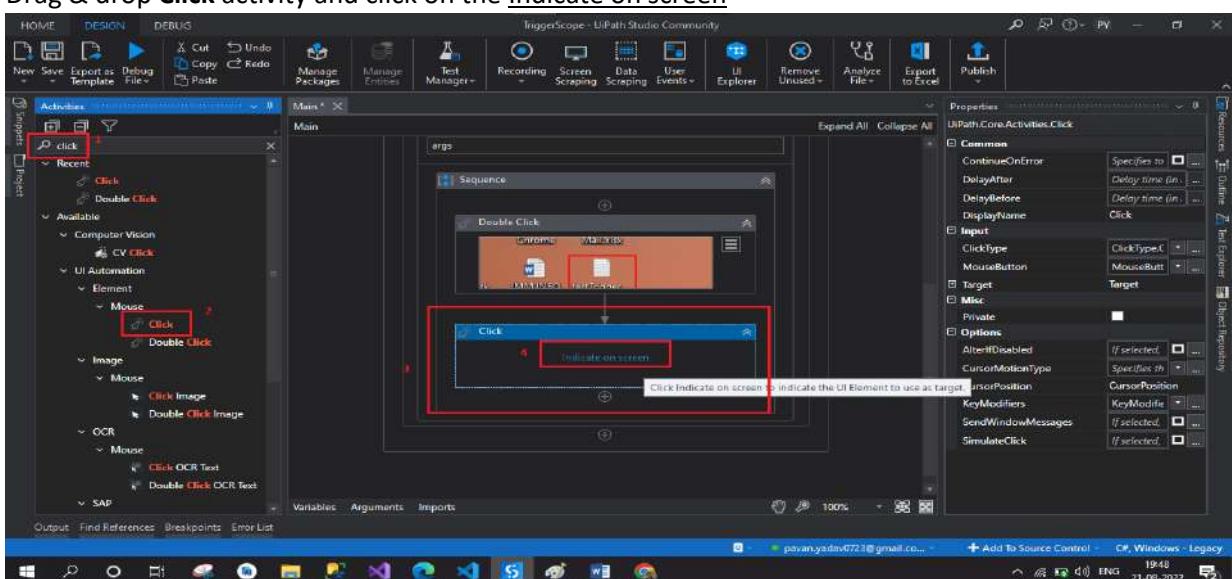


18. Drag & drop Double Click activity and click on the Indicate on screen

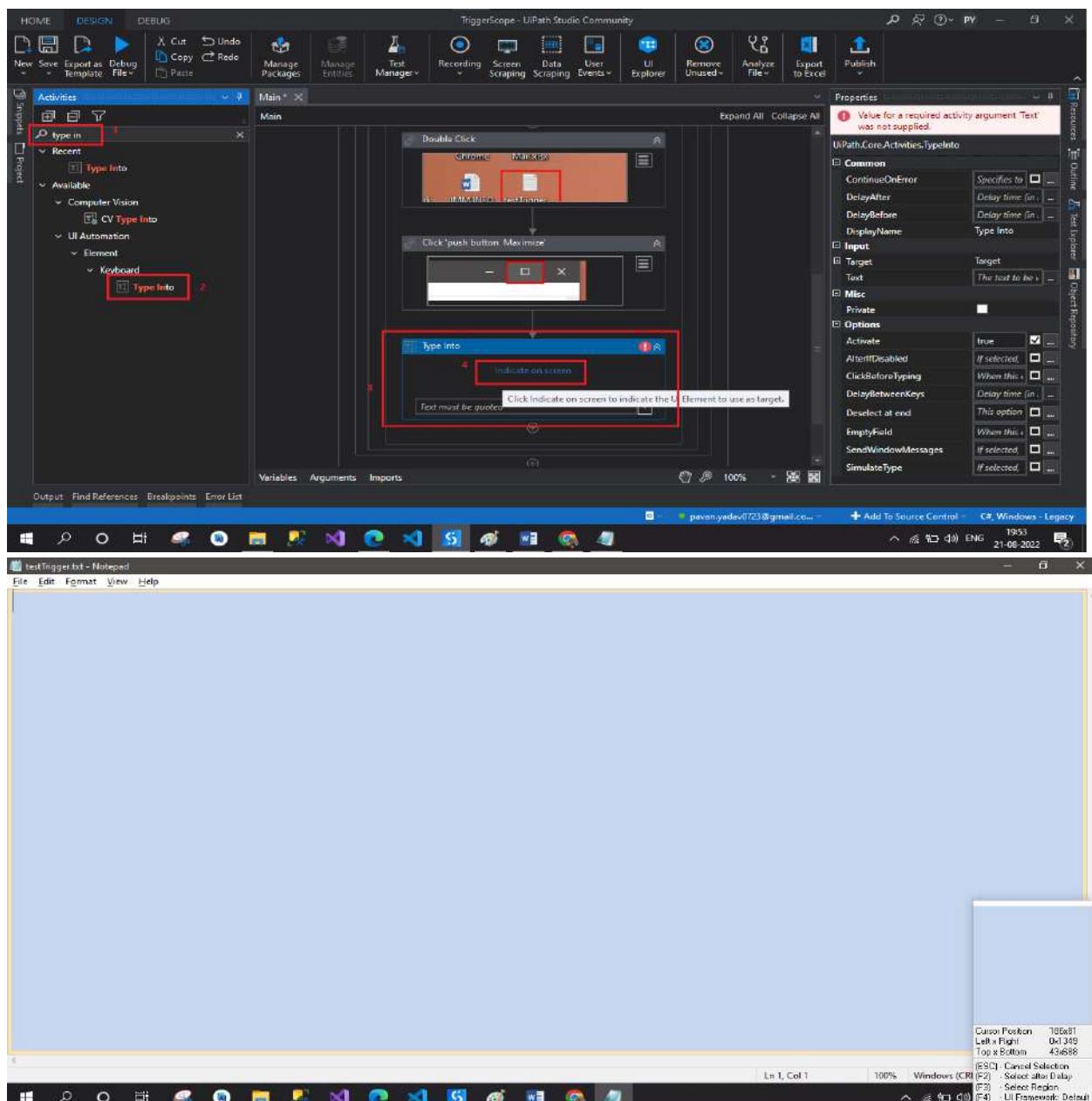




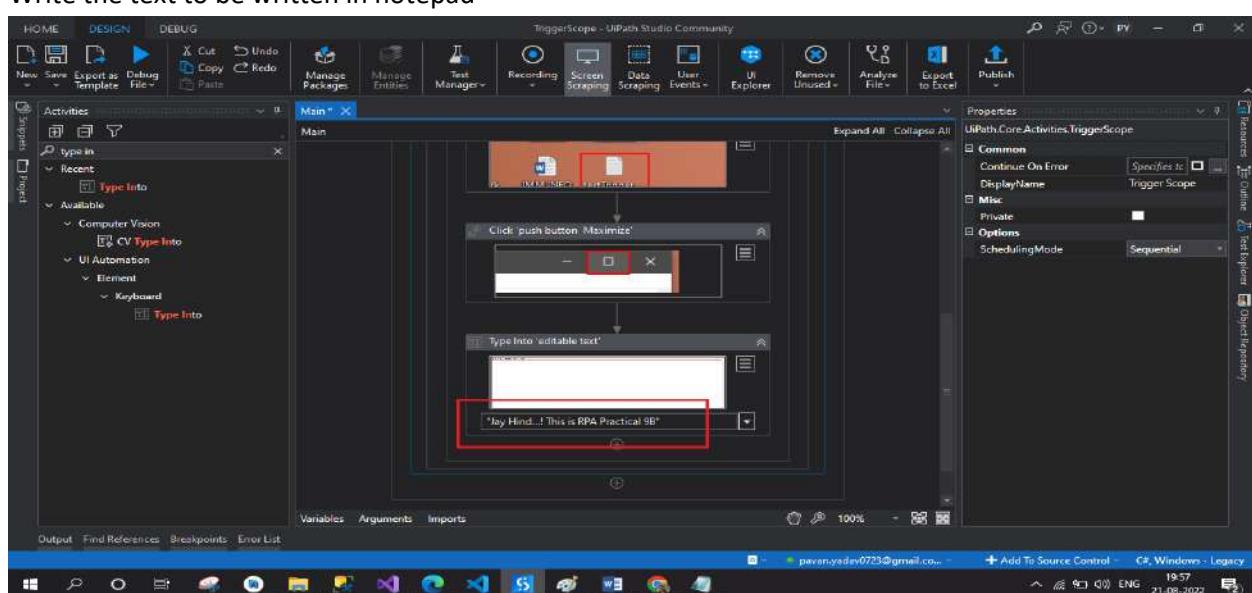
19. Drag & drop Click activity and click on the Indicate on screen



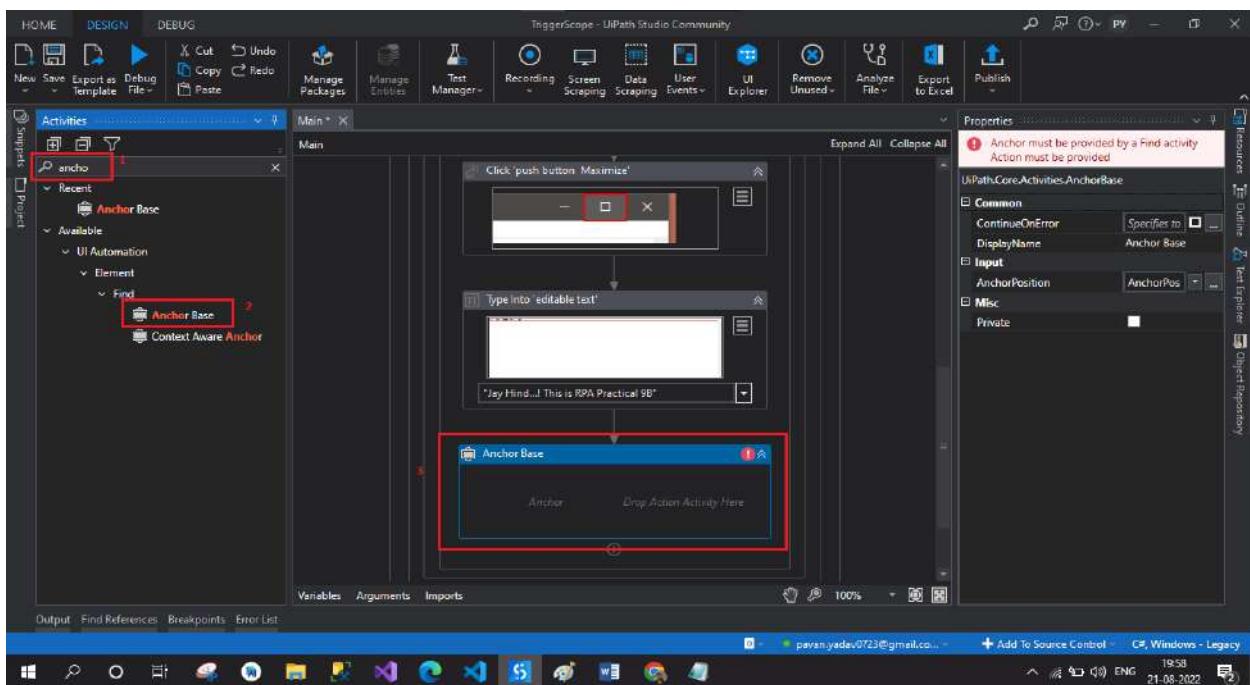
20. Drag & drop Type into activity



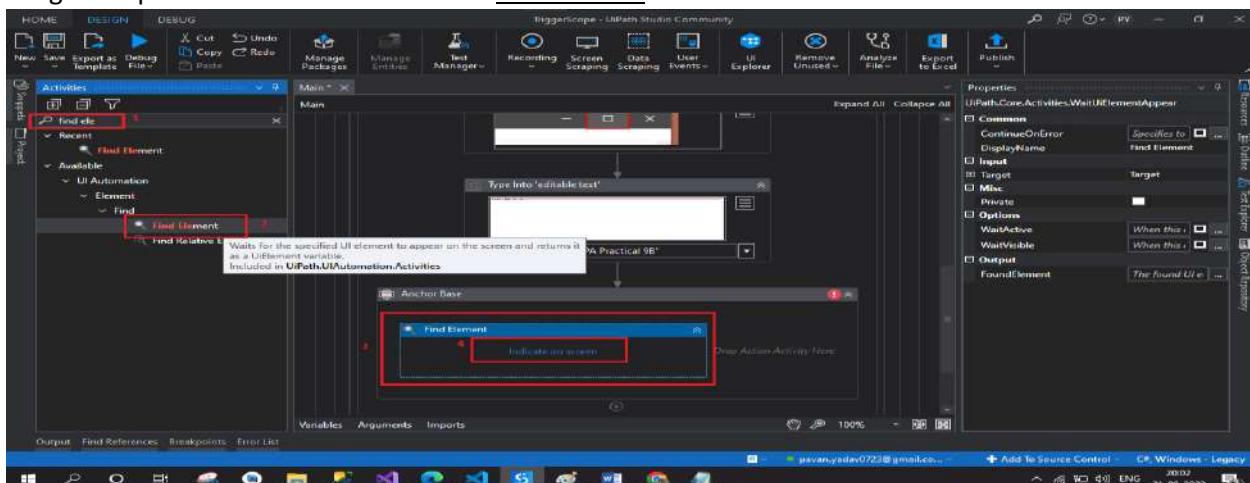
Write the text to be written in notepad



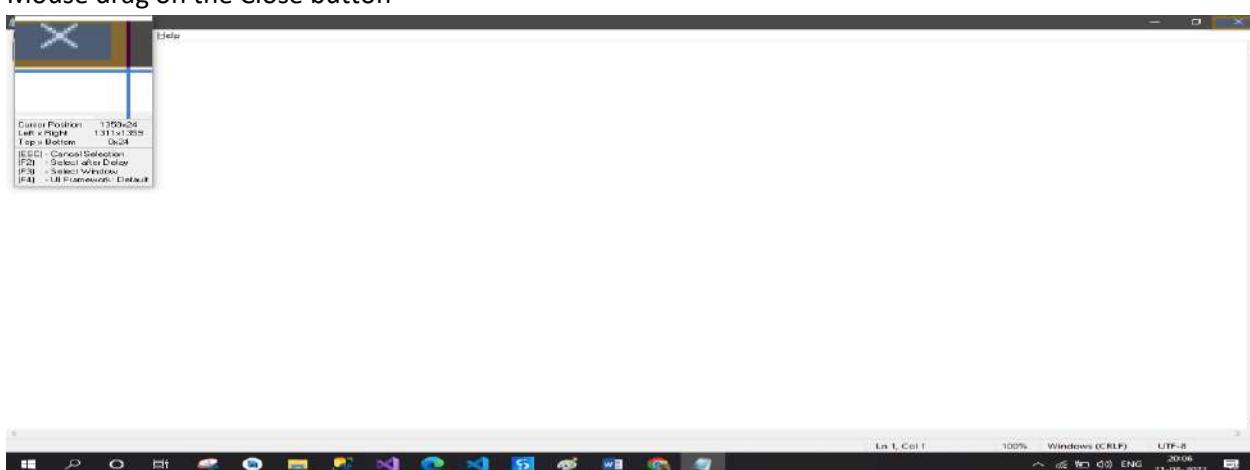
21. Drag & drop Anchor Base activity



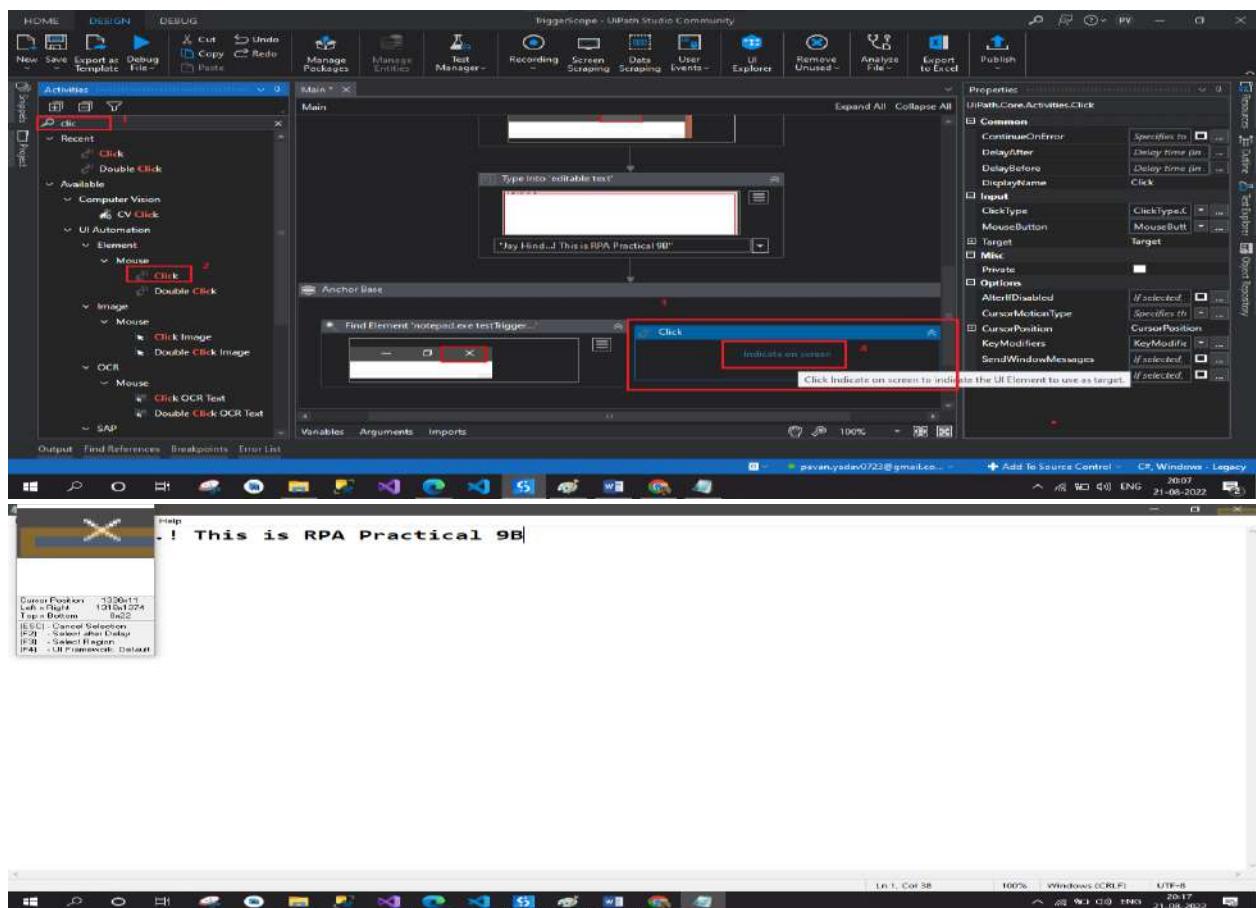
22. Drag & drop the **Find Element** inside the Anchor Base



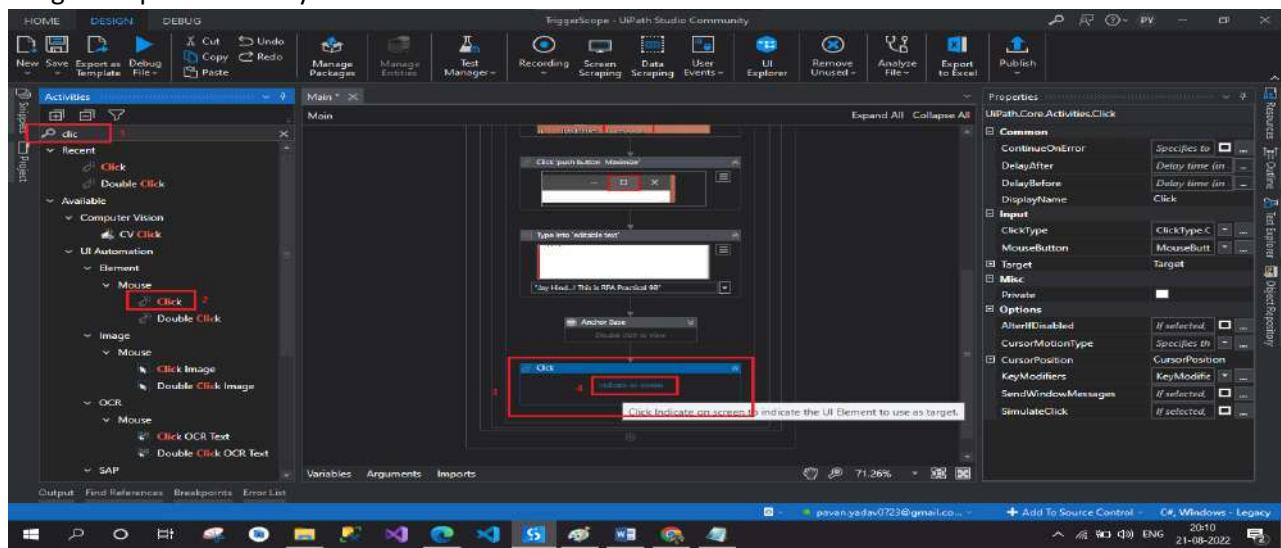
Mouse drag on the Close button

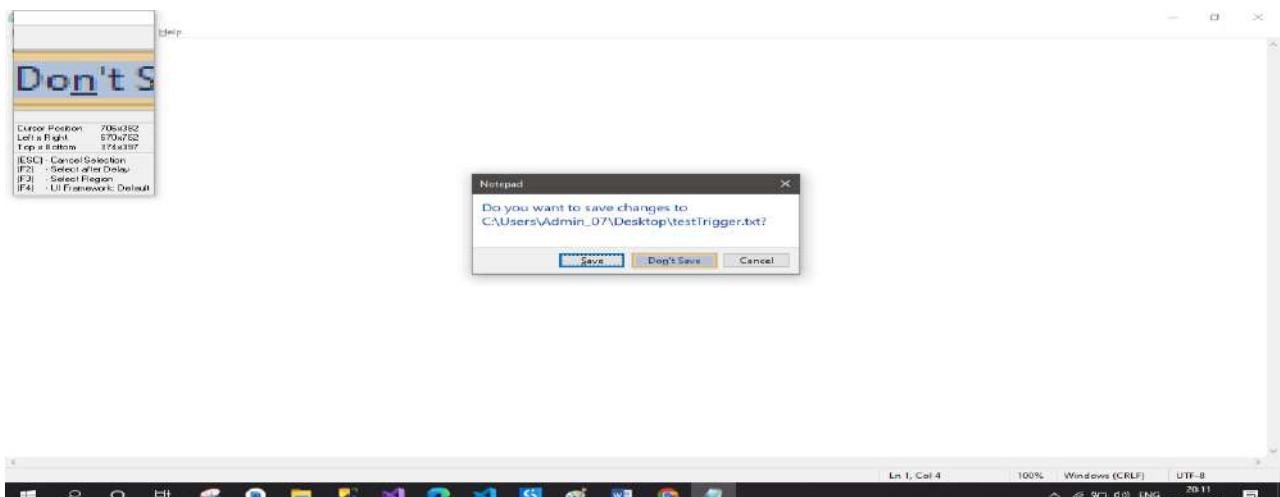


23. Drag & drop the **Click** activity inside the Anchor Base

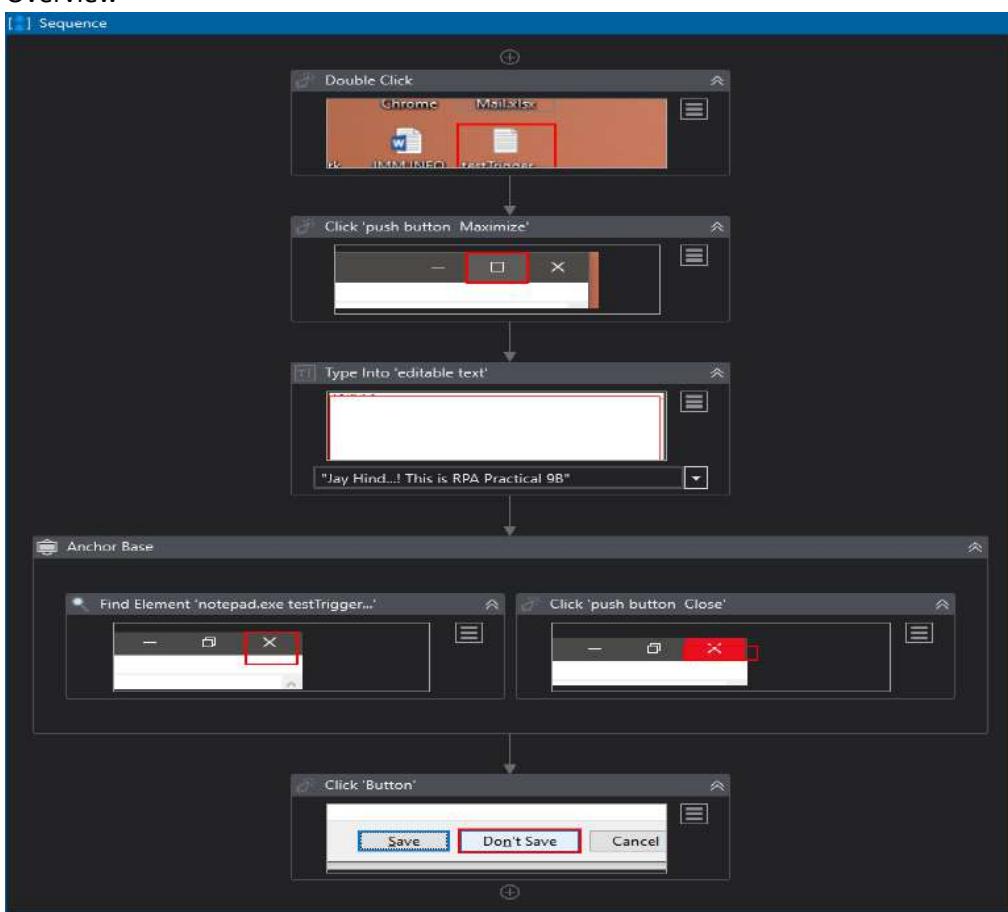


#### 24. Drag & drop Click activity



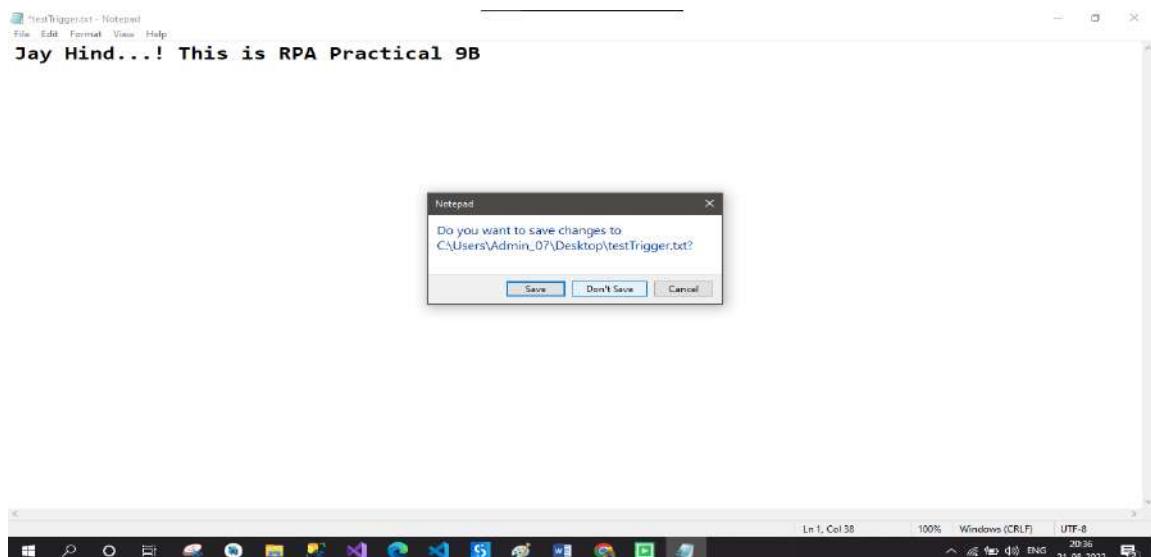


## 25. Overview



## 26. Output

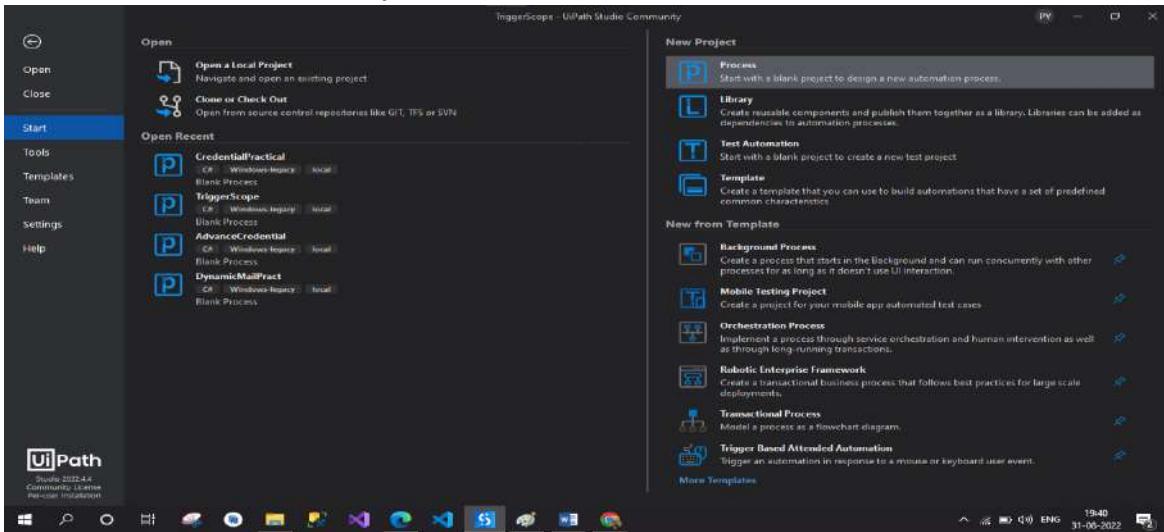




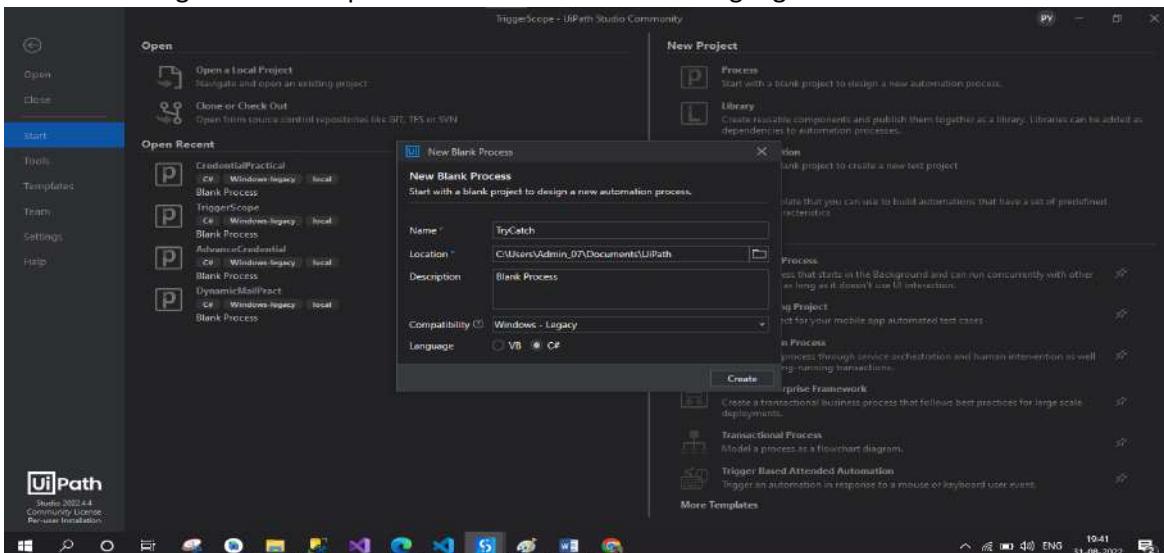
## C] Demonstrate the Exception handling in UI Path.

### Try Catch

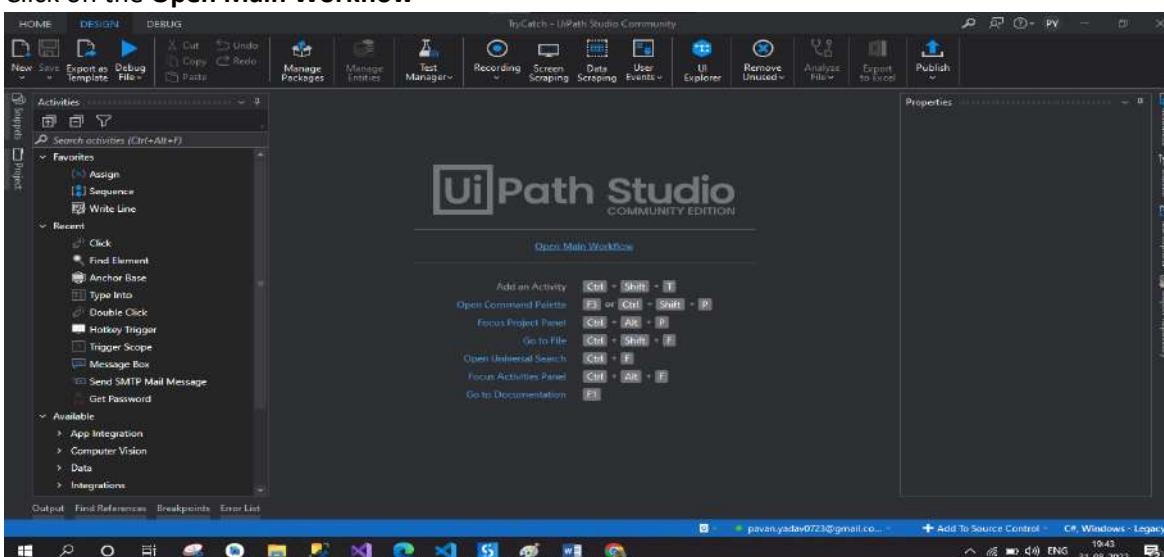
- Click on the **Process** to New Project



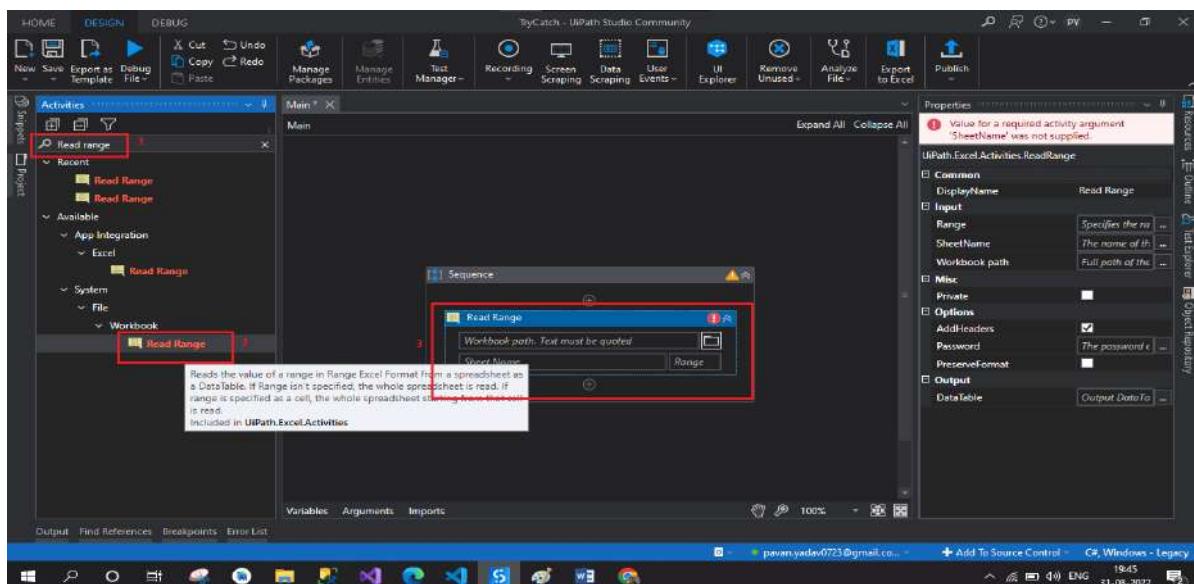
- Write following detail of the process. Note: Select the C# Language



- Click on the **Open Main Workflow**



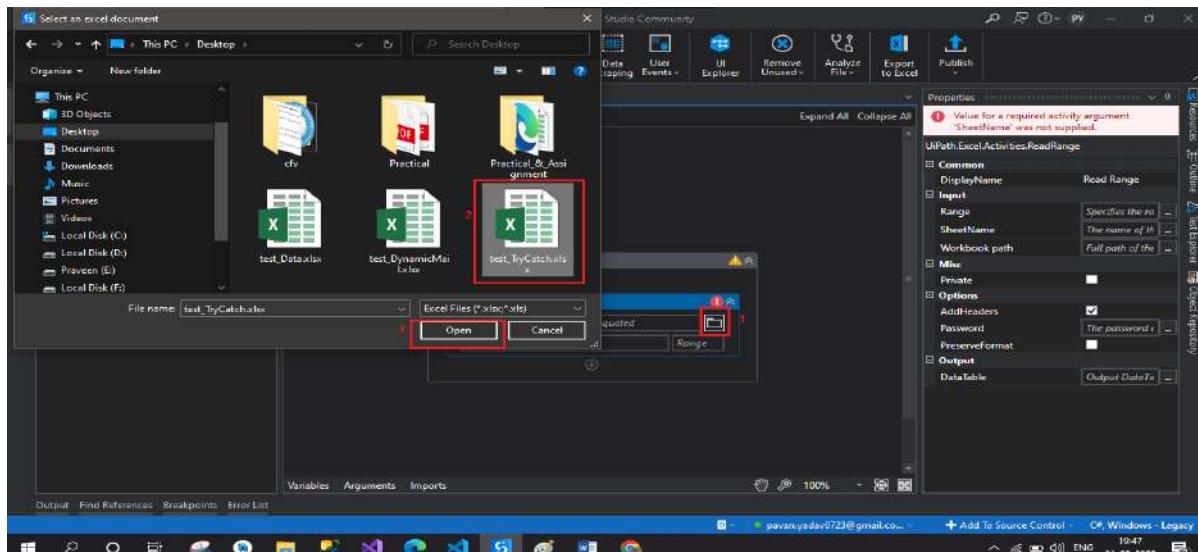
- Drag and drop the **Read Range** activity of the workbook



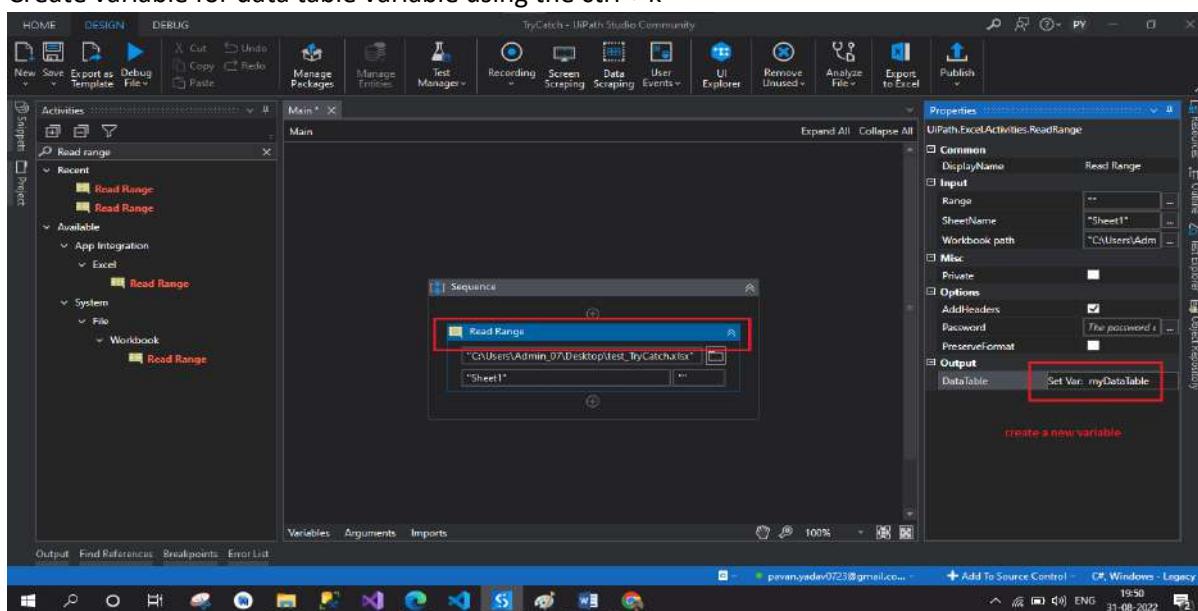
5. Give the path /location of the excel file in the sheet

**Sheet Name:** "Sheet1"

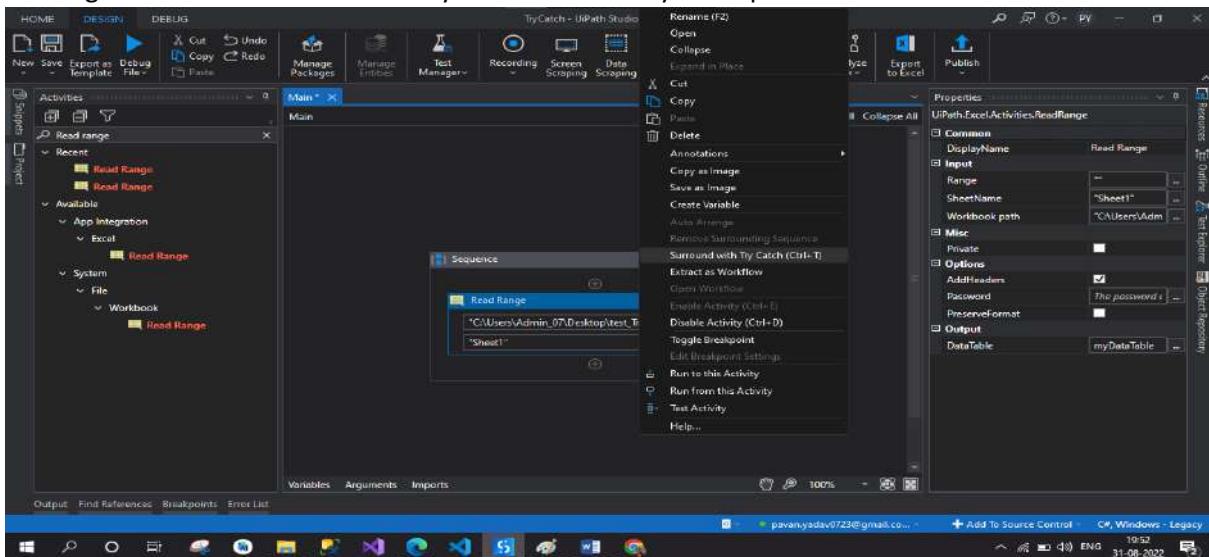
**Range:** "".



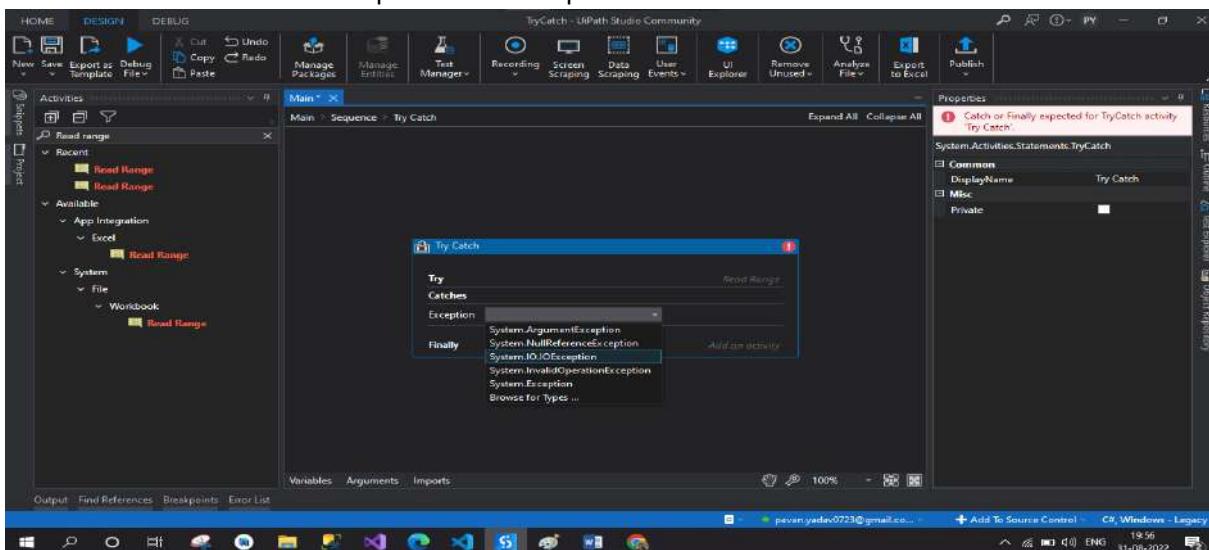
6. Create variable for data table variable using the **ctrl + k**



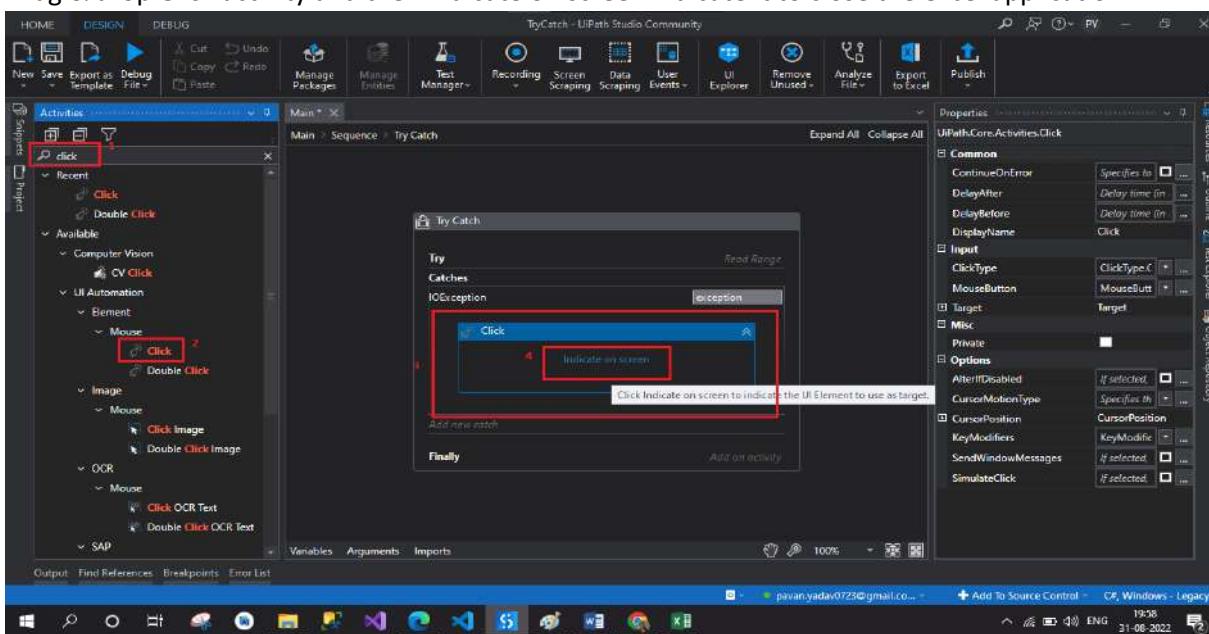
7. Now right click and surround with Try Catch or from keyboard press Ctrl+T

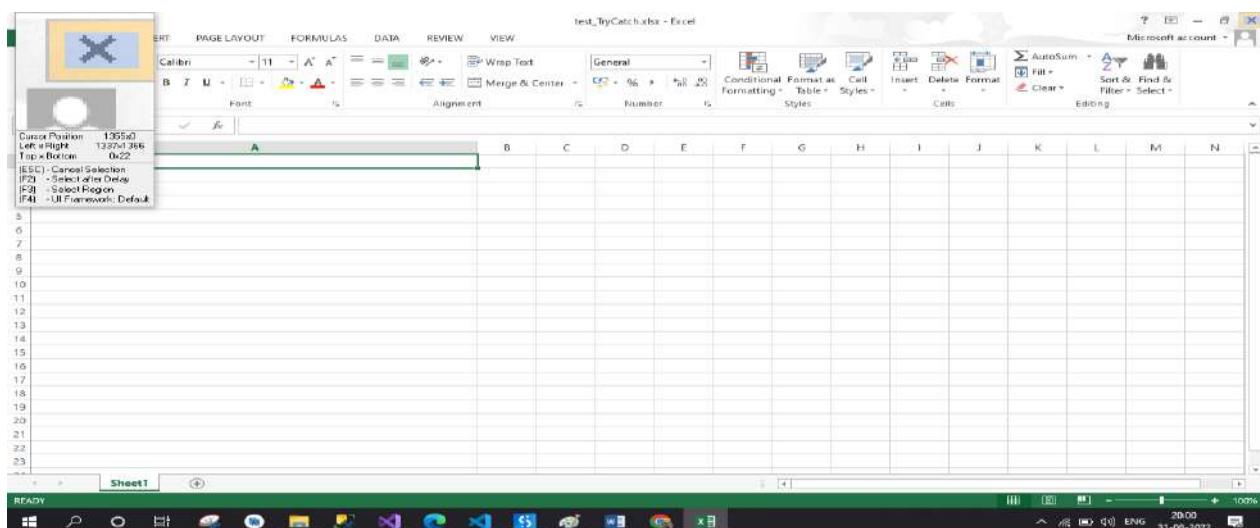


8. In catch section select the exception as IO.Exception

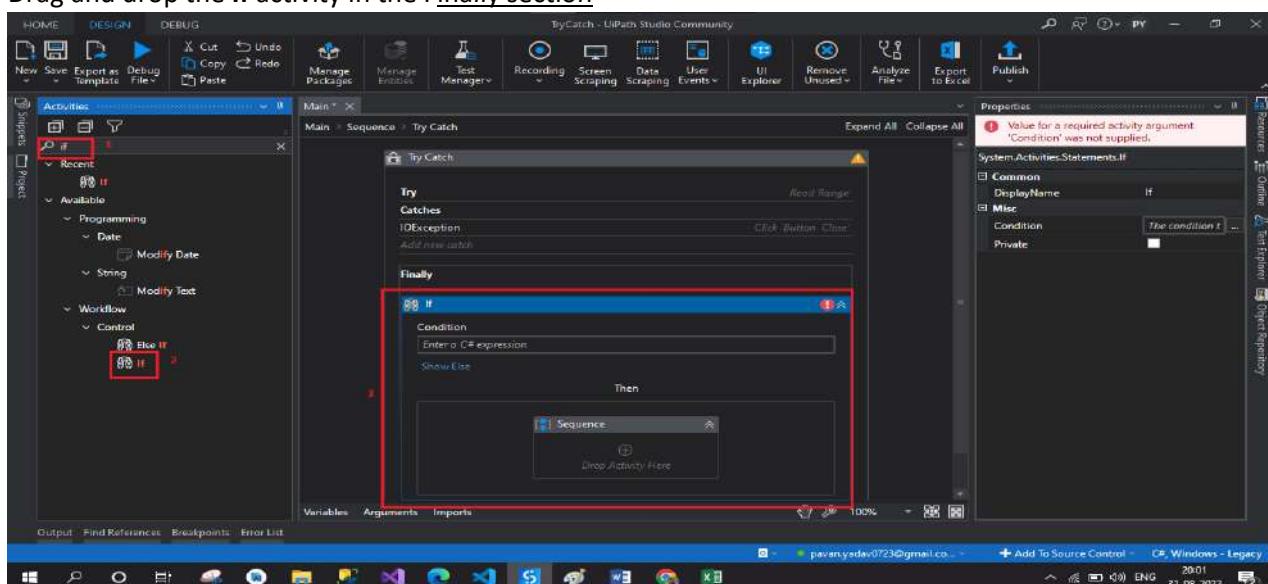


9. Drag & drop Click activity and then indicate on screen indicate it to close the excel application

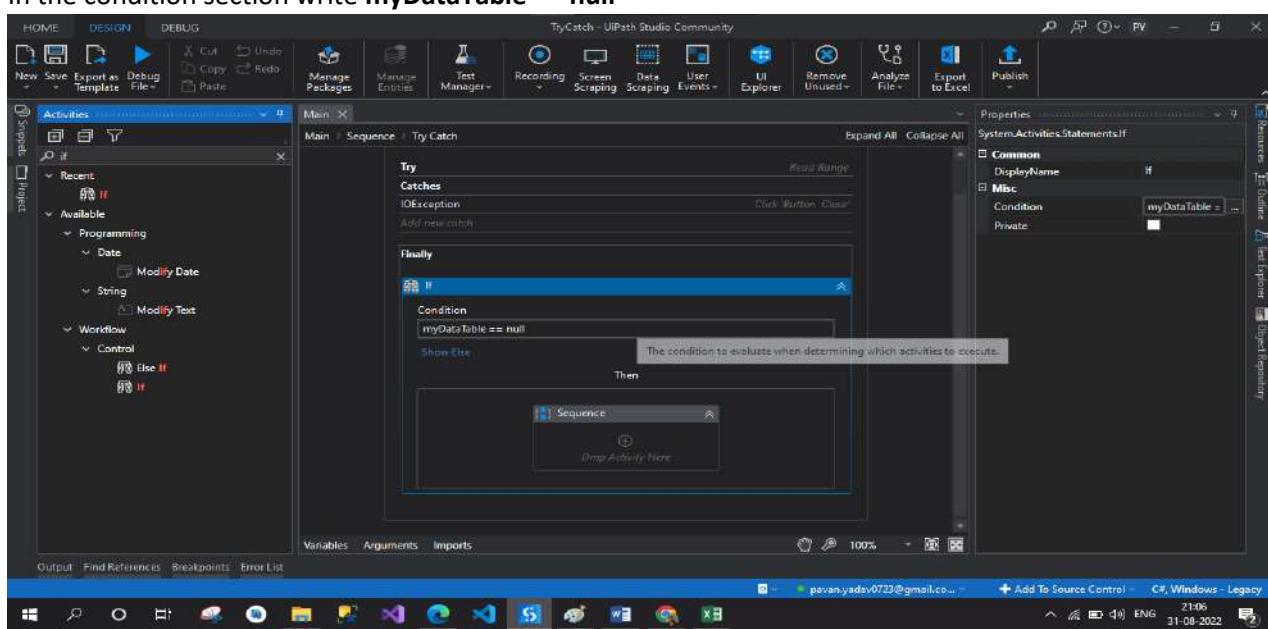




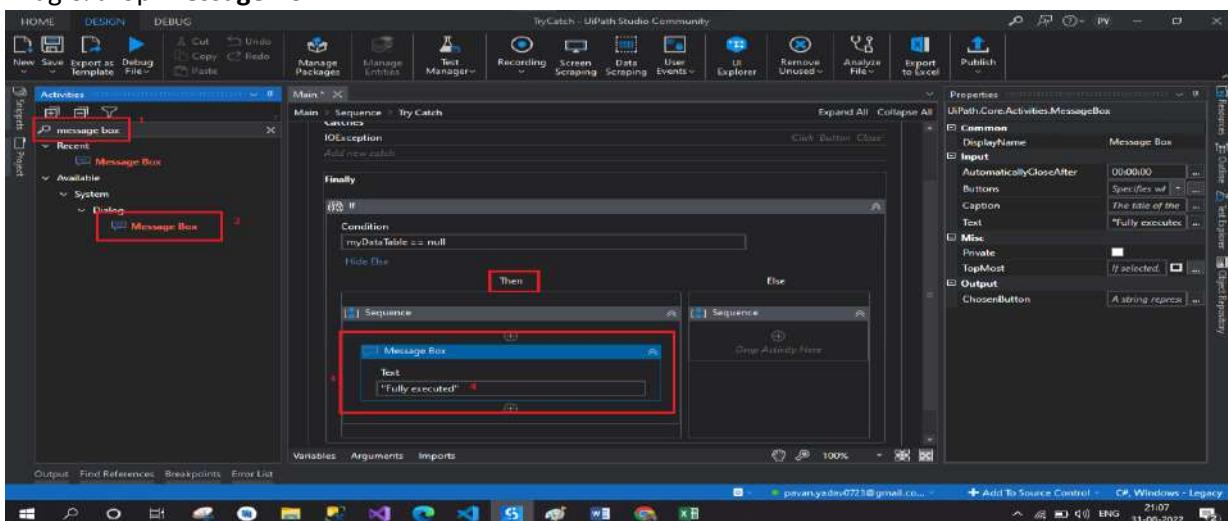
**10. Drag and drop the If activity in the Finally section**



**11. In the condition section write myDataTable == null**

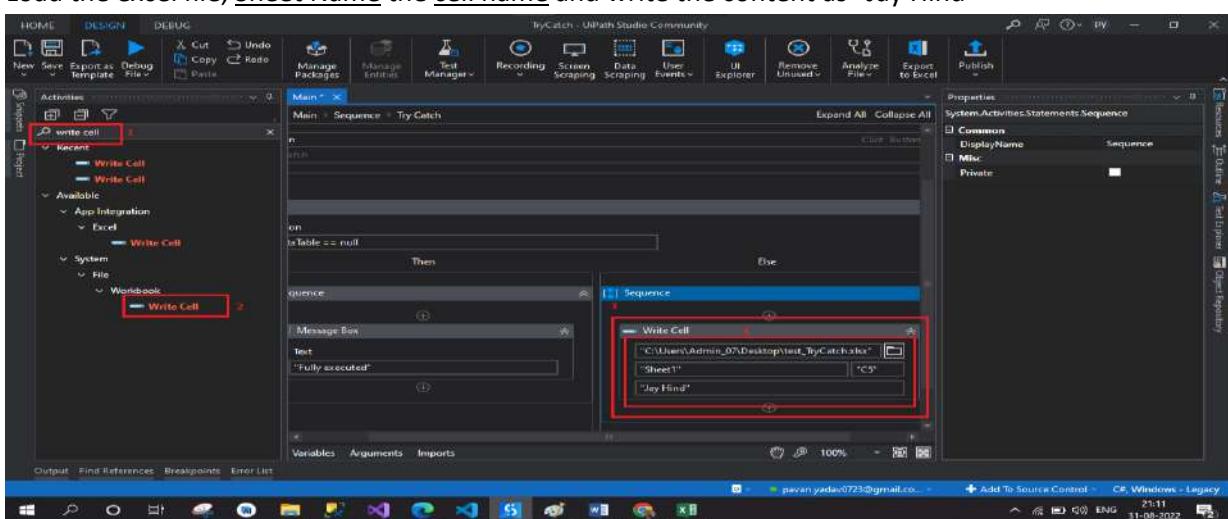


## 12. Drag & drop Message Box

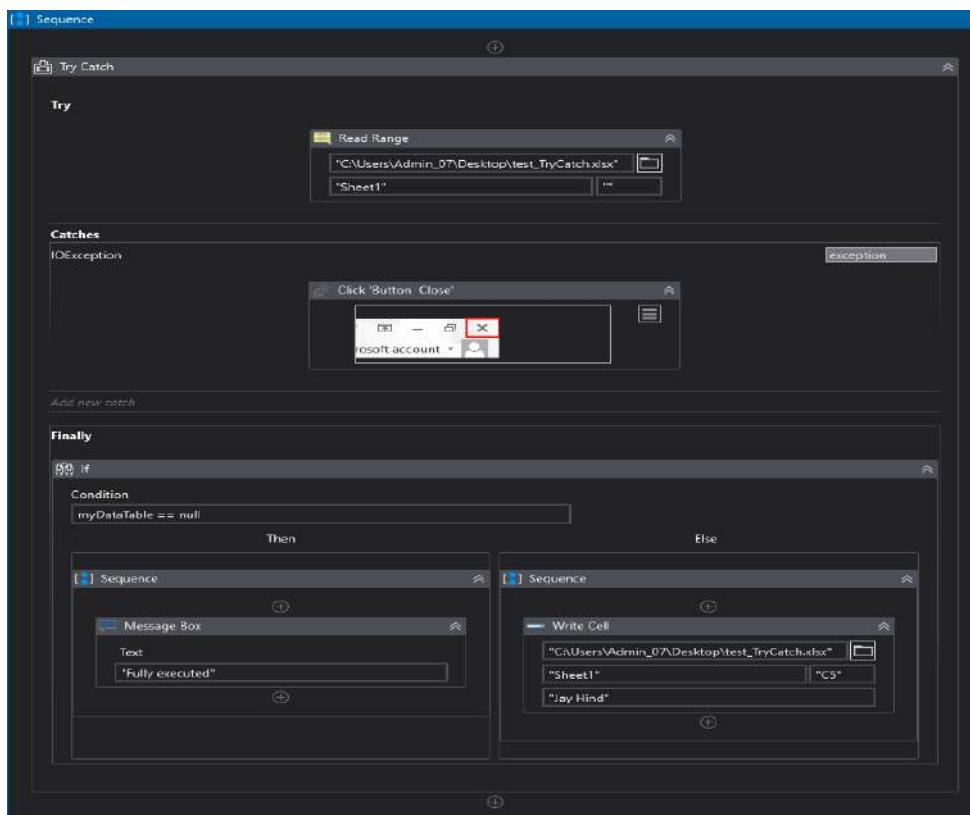


## 13. Drag & drop Write Cell

Load the excel file, Sheet Name the cell name and write the content as "Jay Hind"

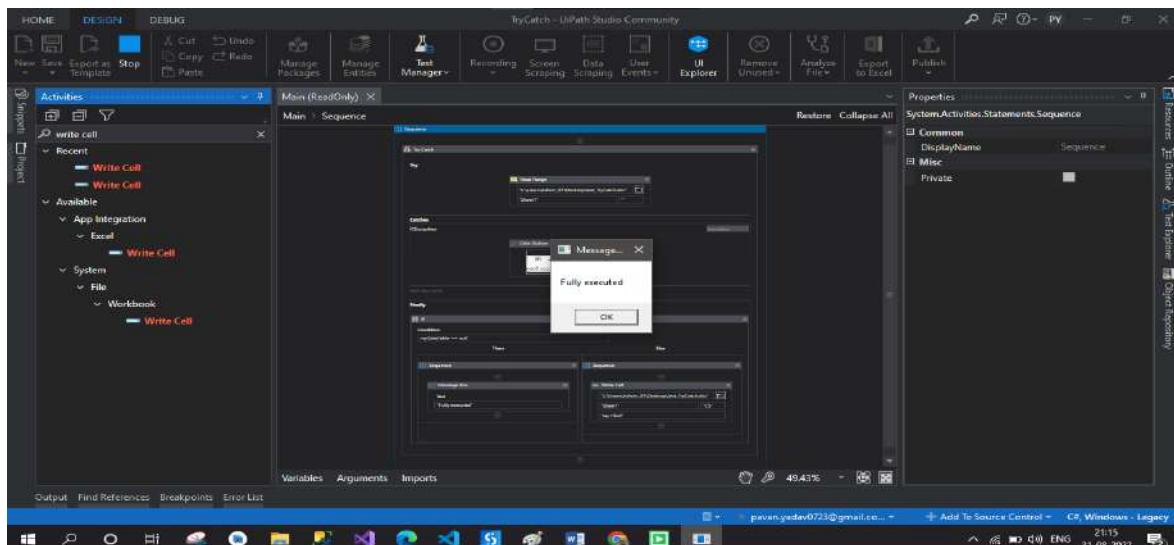


## 14. Overview

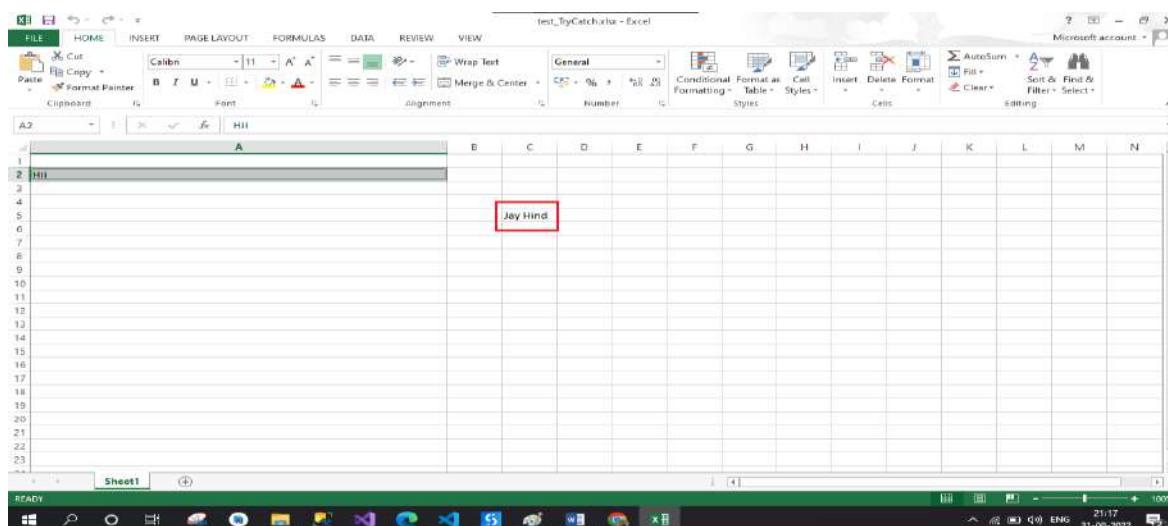


## 15. Output

If file have no data

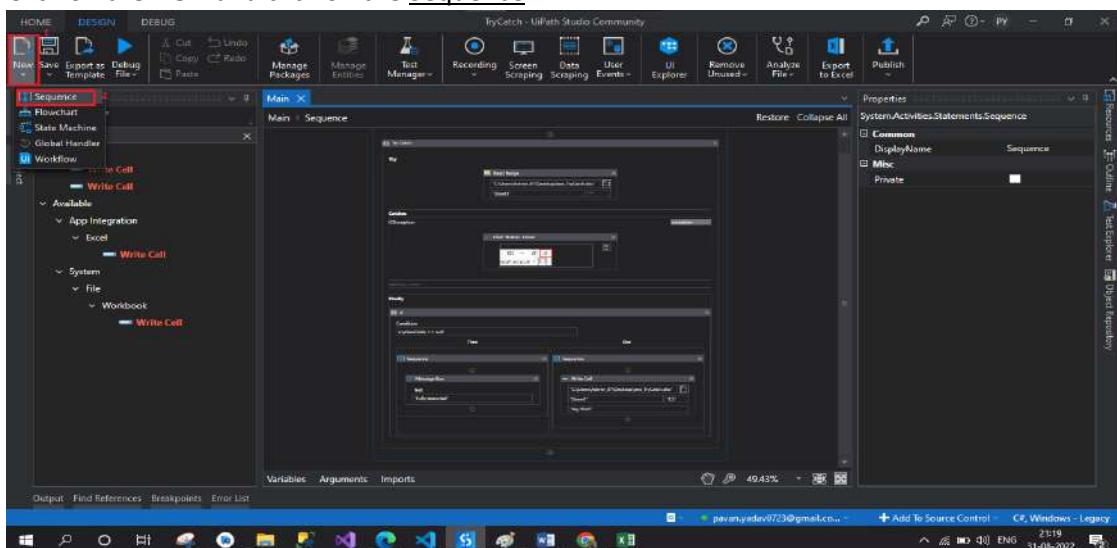


If file have some data

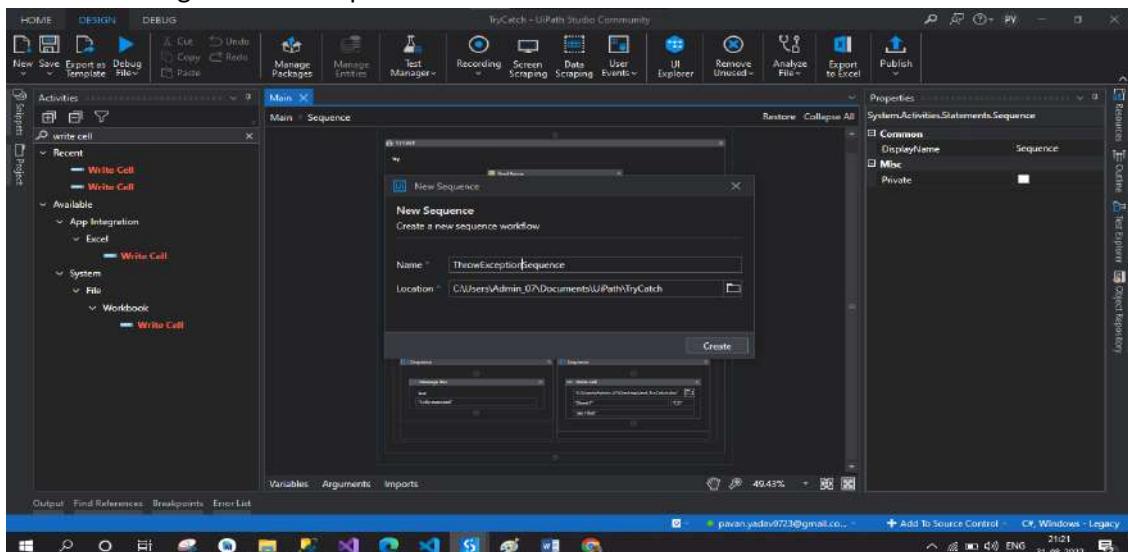


## Throw Exception

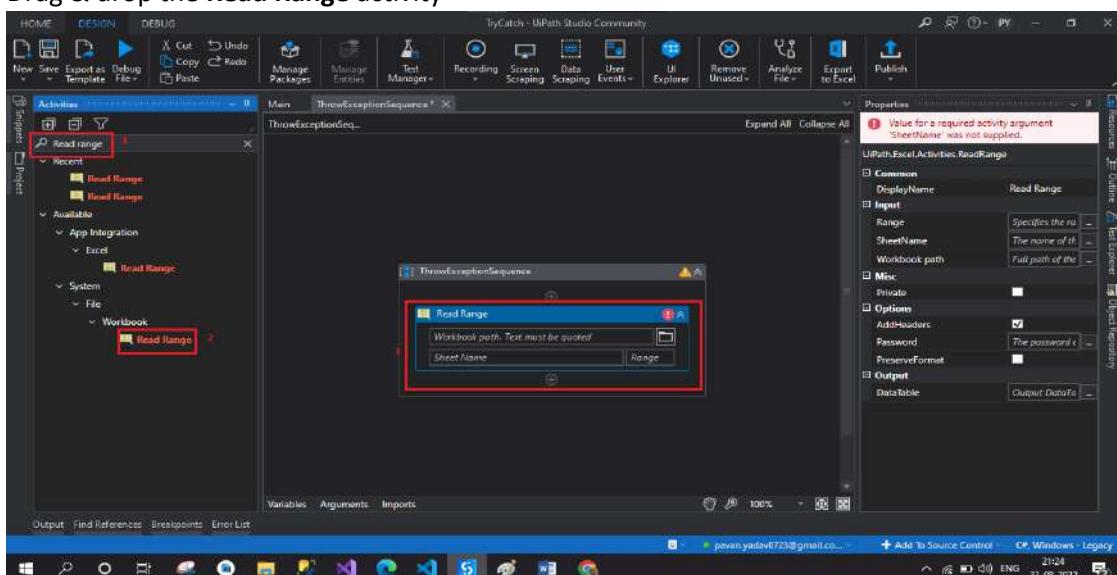
- Click on the **New** and click on the **Sequence**



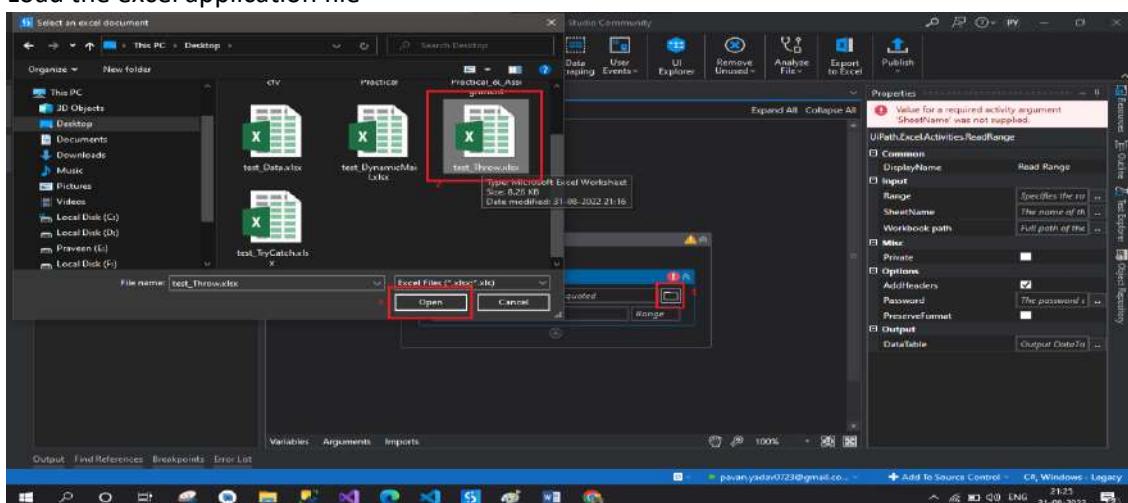
- Write following detail of the process.



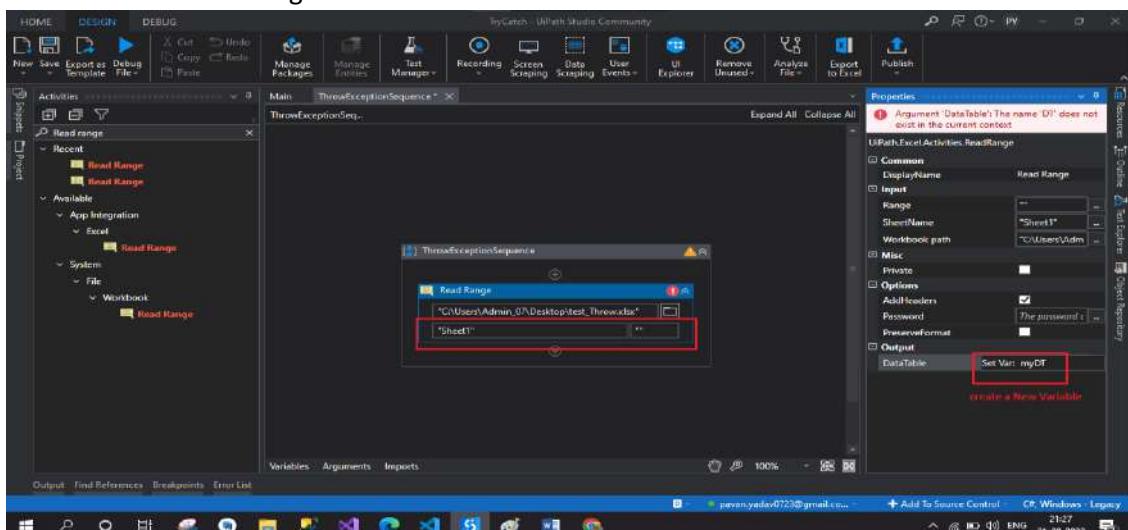
- Drag & drop the **Read Range** activity



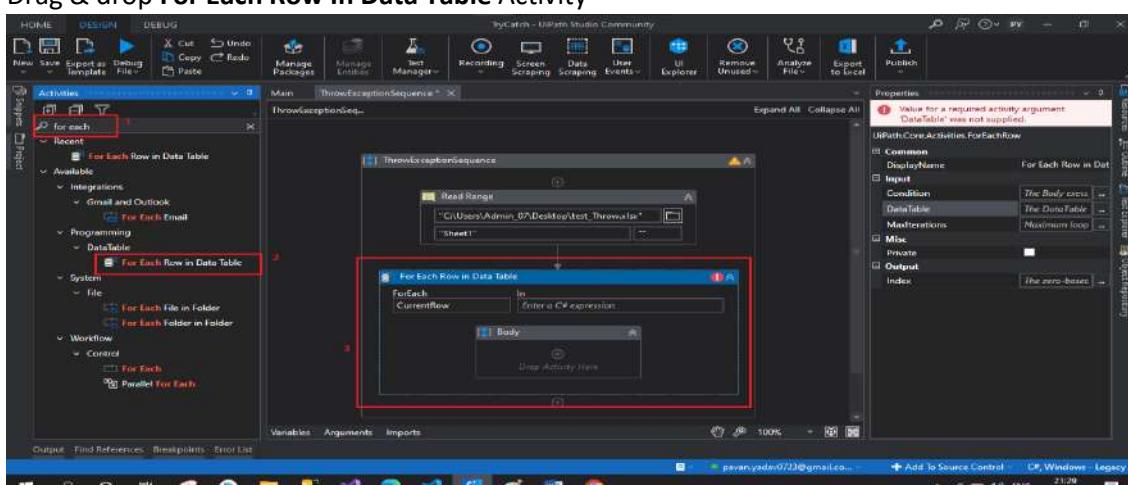
4. Load the excel application file



5. Enter "Sheet1" and Range "" Create Variable DT

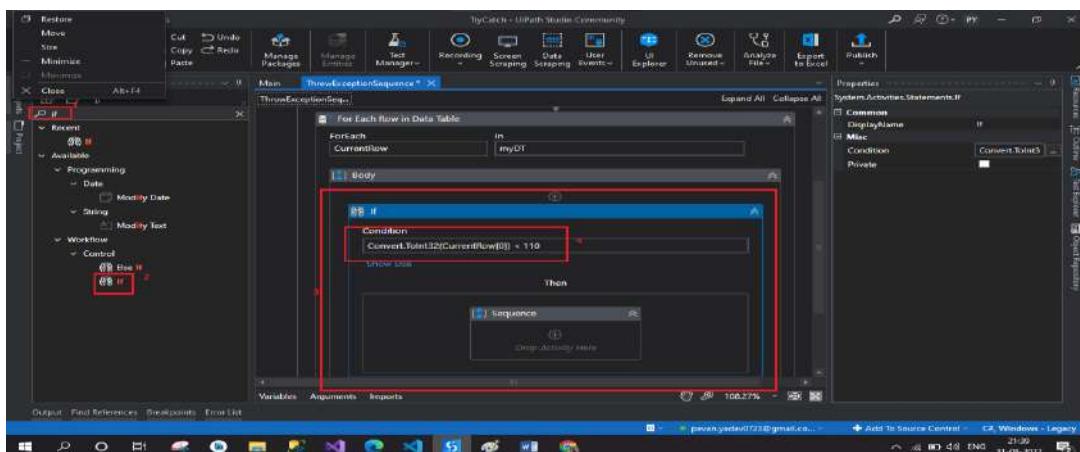


6. Drag & drop For Each Row In Data Table Activity

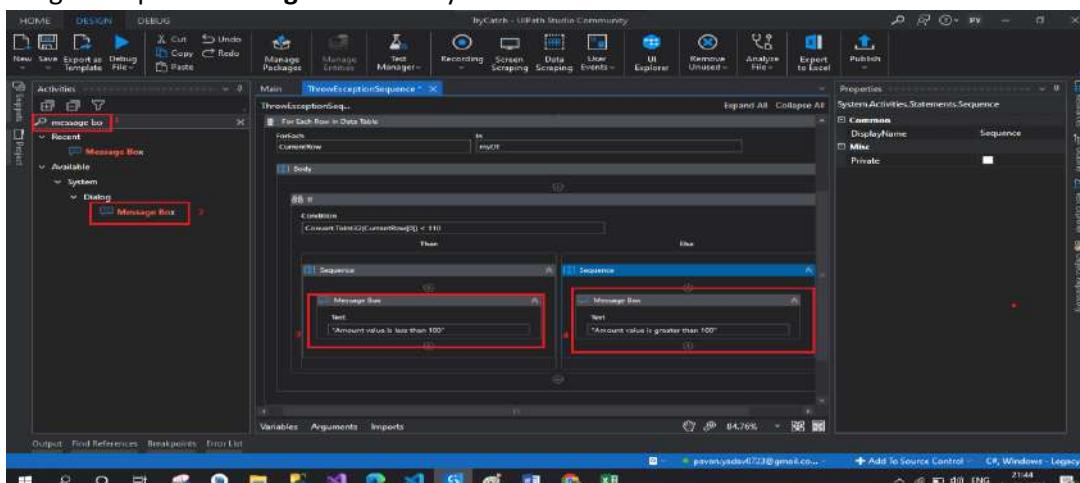


7. Drag & drop the If activity

In If condition write Convert.ToInt32(.CurrentRow[0]) < 110

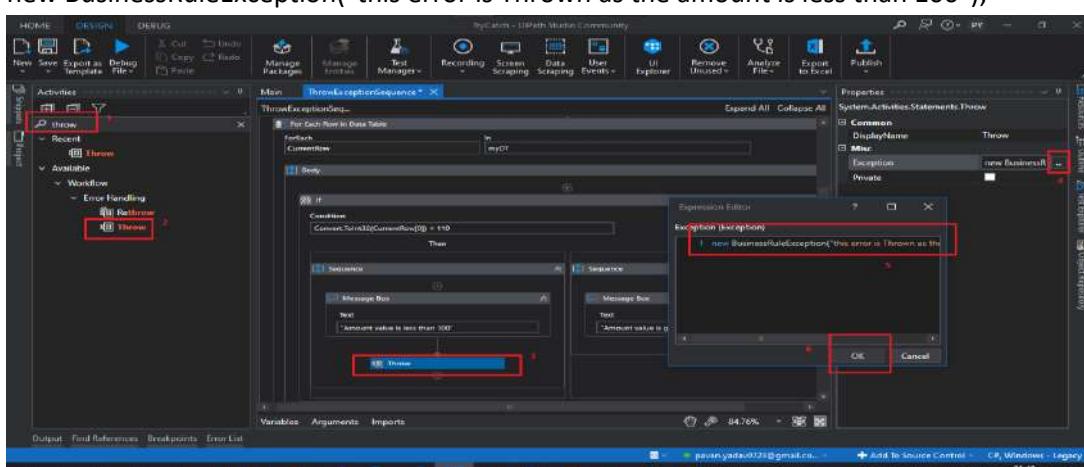


8. Drag & drop the **Message Box** activity



9. Drag & drop the **Throw** activity in the **Then** section of if activity

new BusinessRuleException("this error is Thrown as the amount is less than 100");



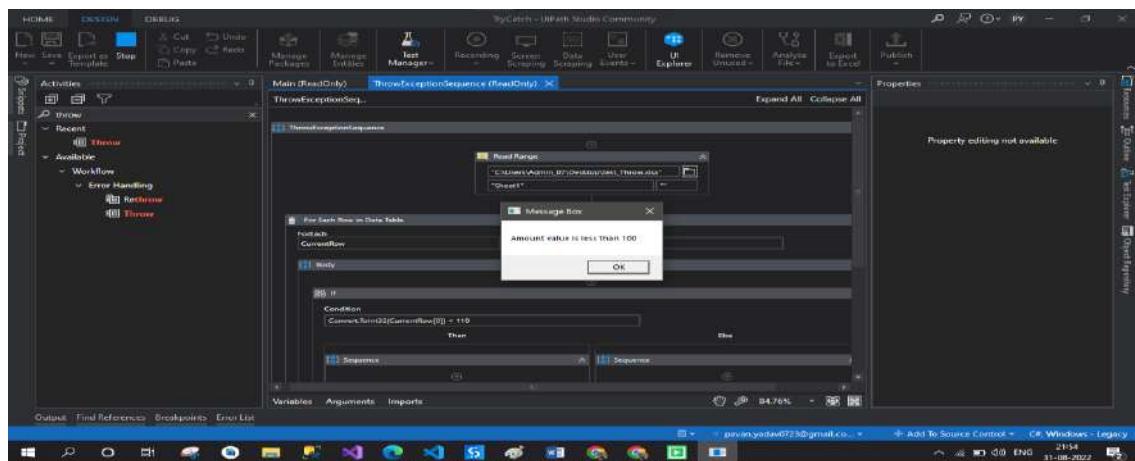
10. Excel File

Available Amount
100
99
300
3000
4000
5000
99

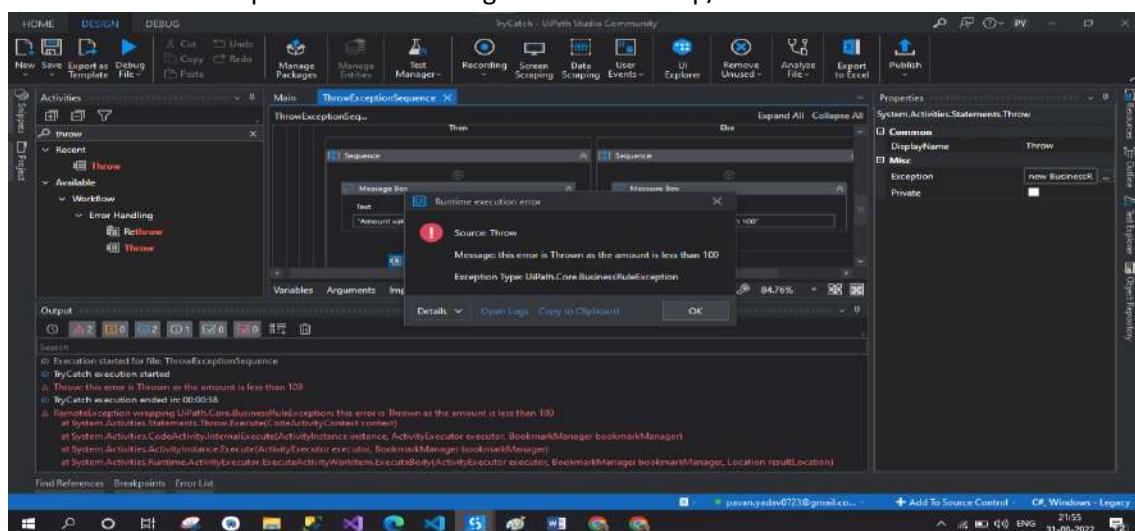
55

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Available Amount																		
2			100																
3			99																
4			300																
5			3000																
6			4000																
7			5000																
8			99																
9			55																
10																			
11																			
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16																			
17																			
18																			
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25																			

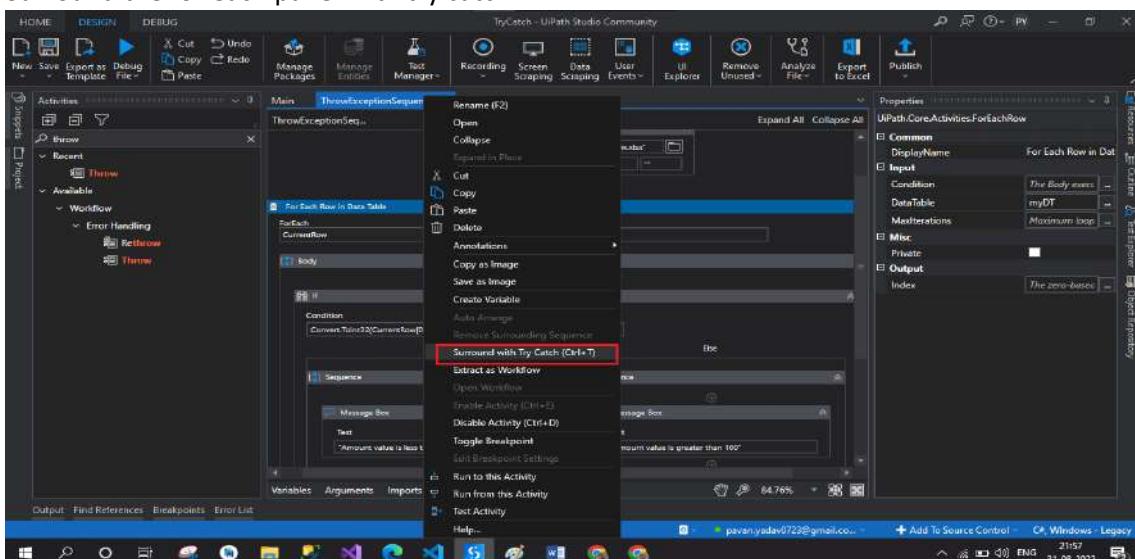
### 11. Run the File



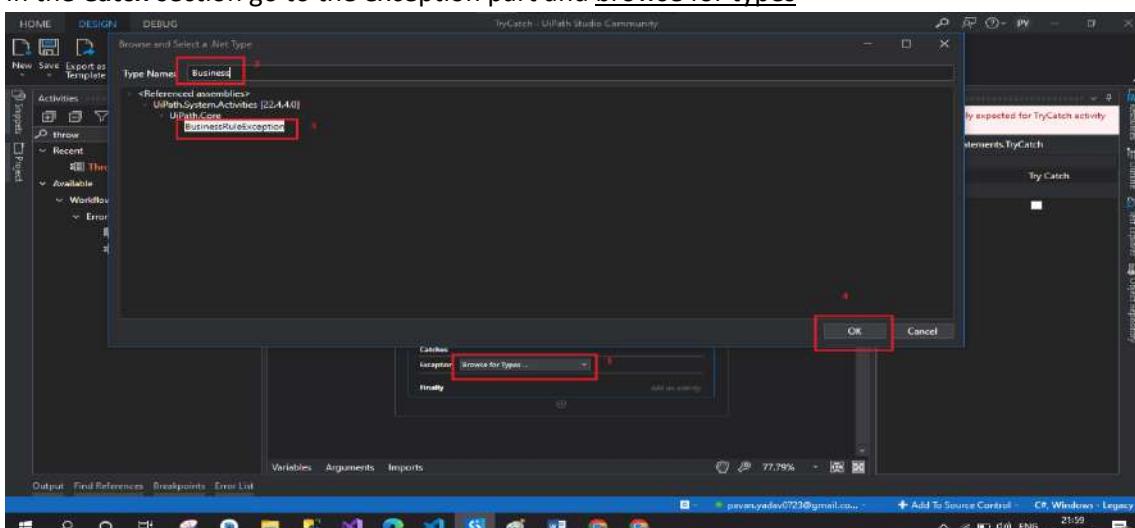
The throw exception is being thrown because the amount is less than 100 and when the throw is executed it aborts the execution process it does not go to the next step/Process



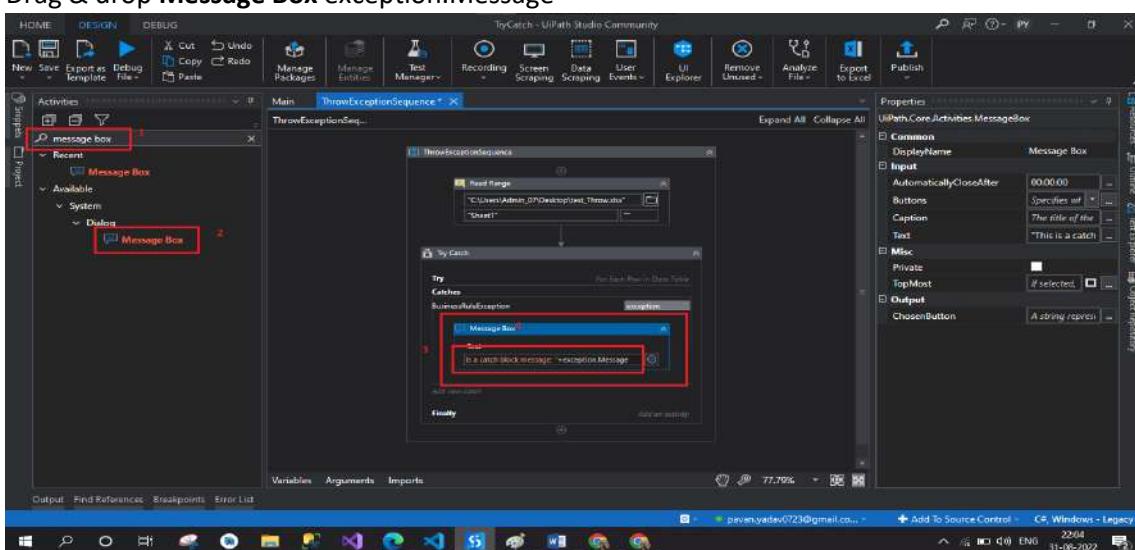
12. Surround the for each panel with try catch



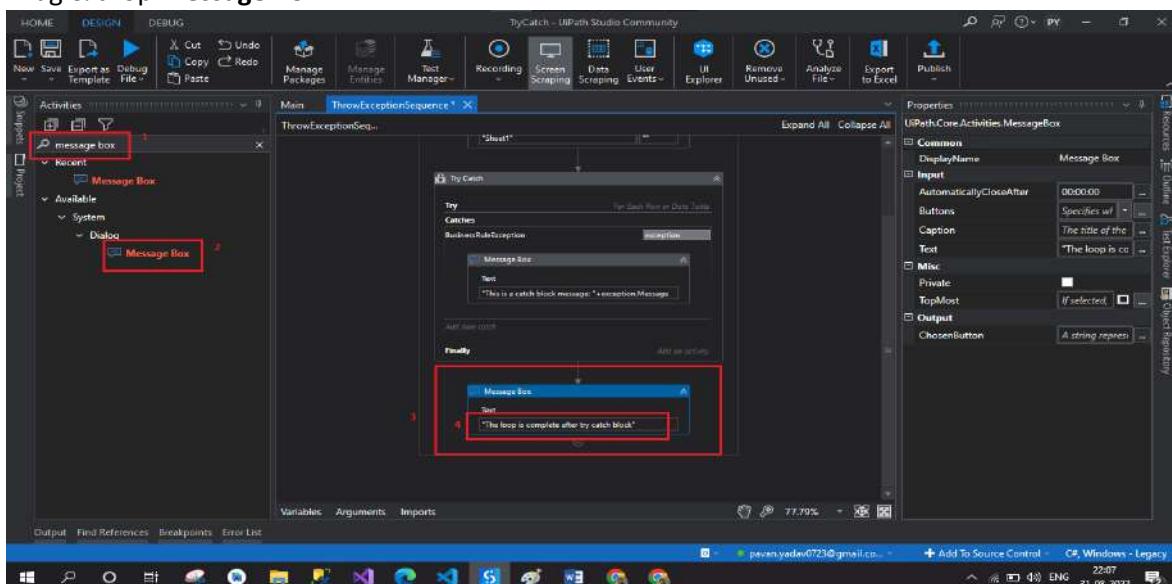
13. In the Catch section go to the exception part and browse for types



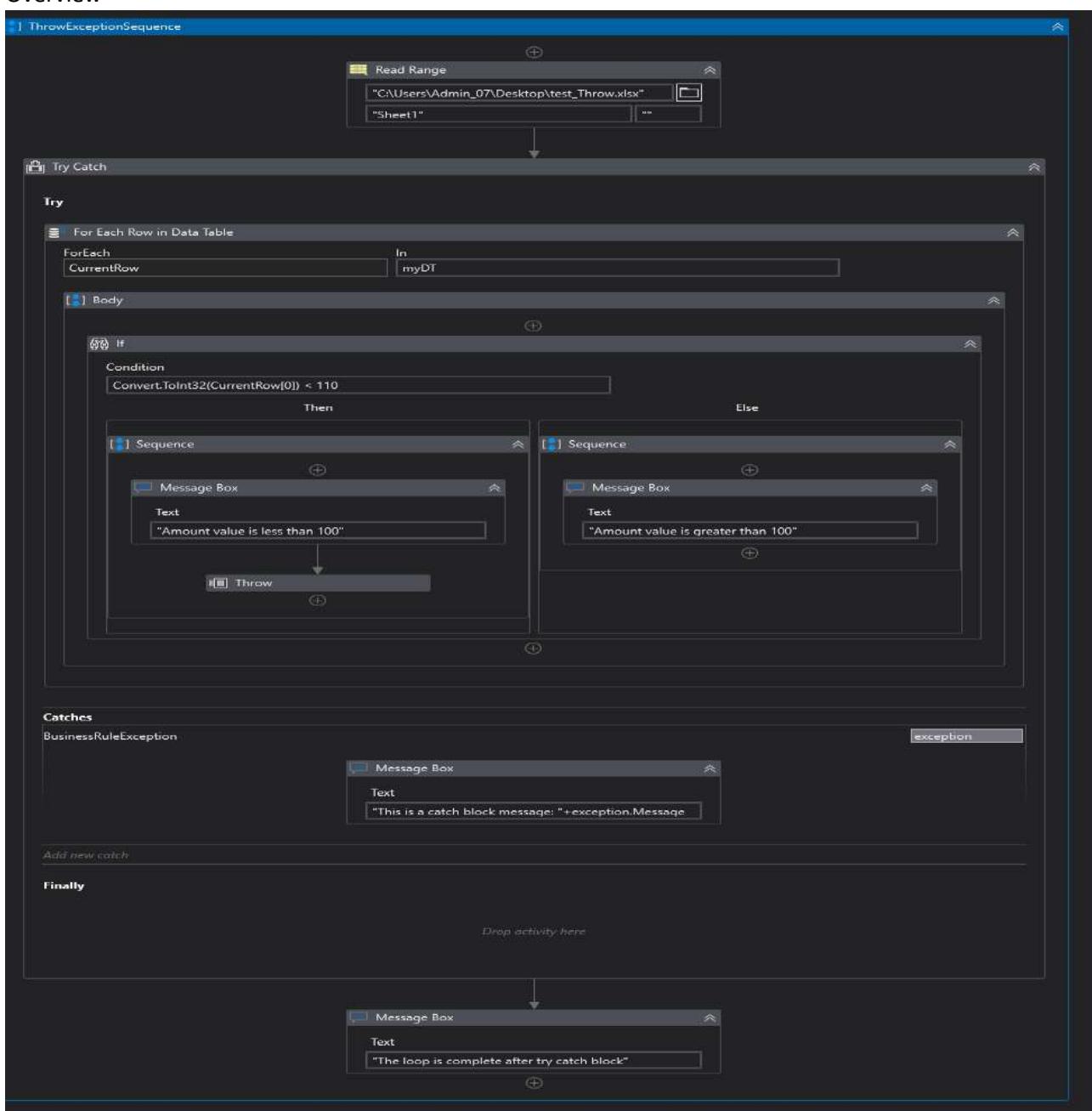
14. Drag & drop Message Box exception.Message



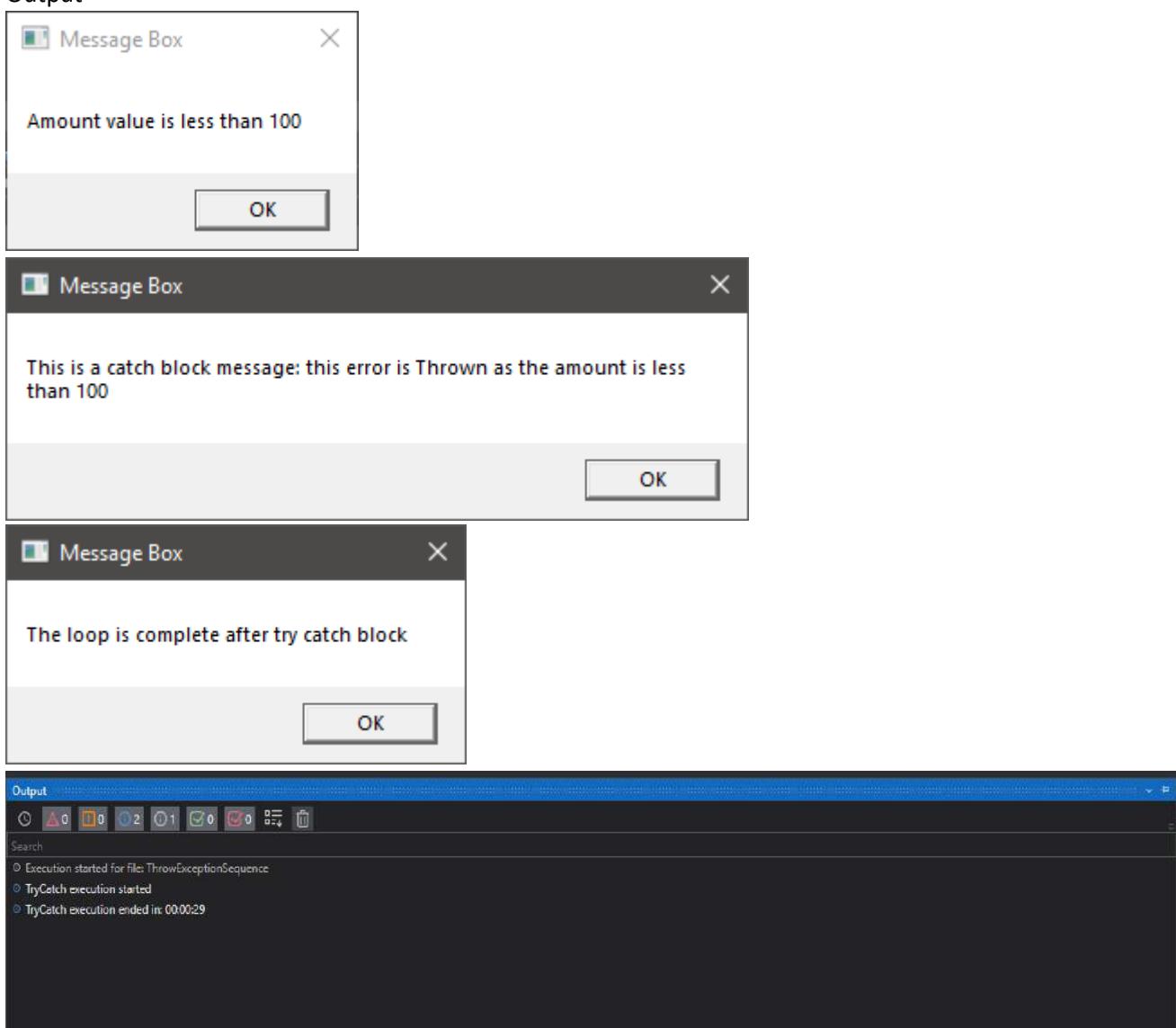
### 15. Drag & drop Message Box



### 16. Overview



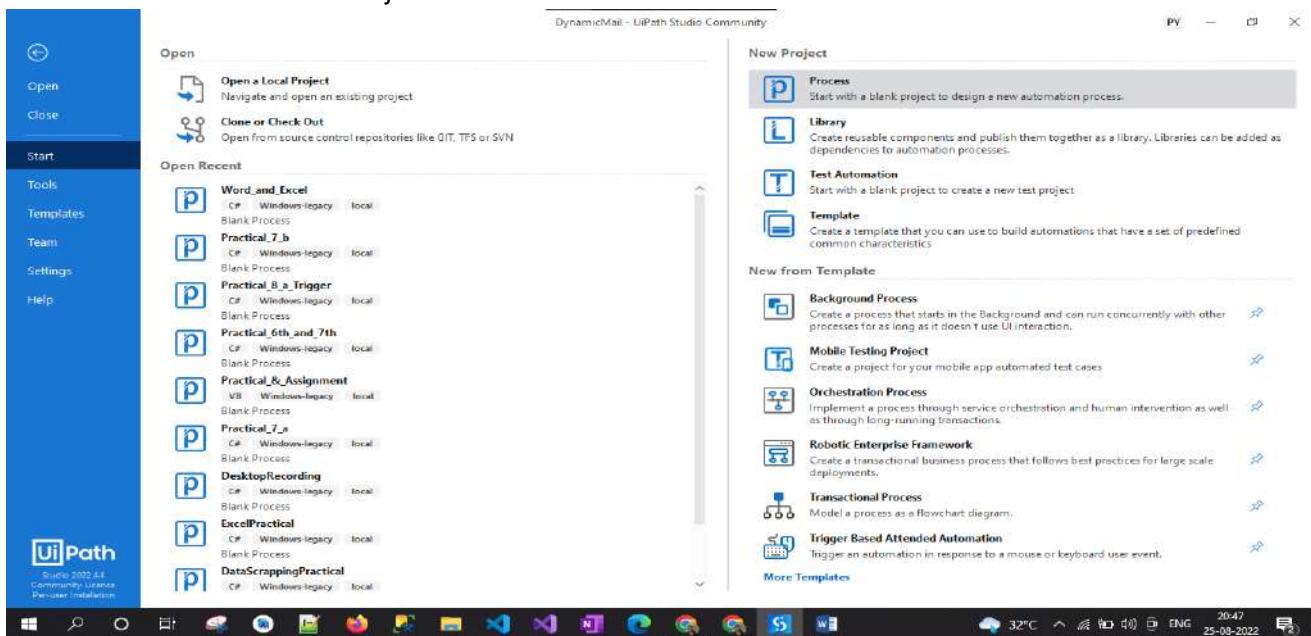
## 17. Output



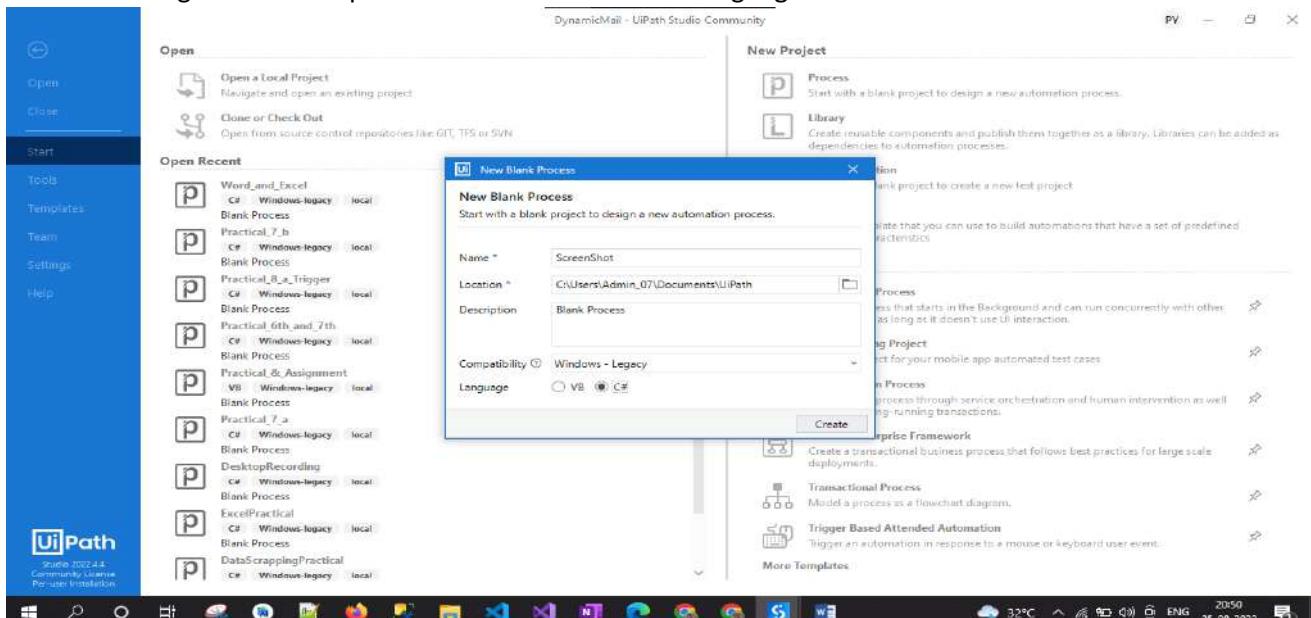
## Practical 10:

### A] Automate the process of logging and taking screenshots in UI Path.

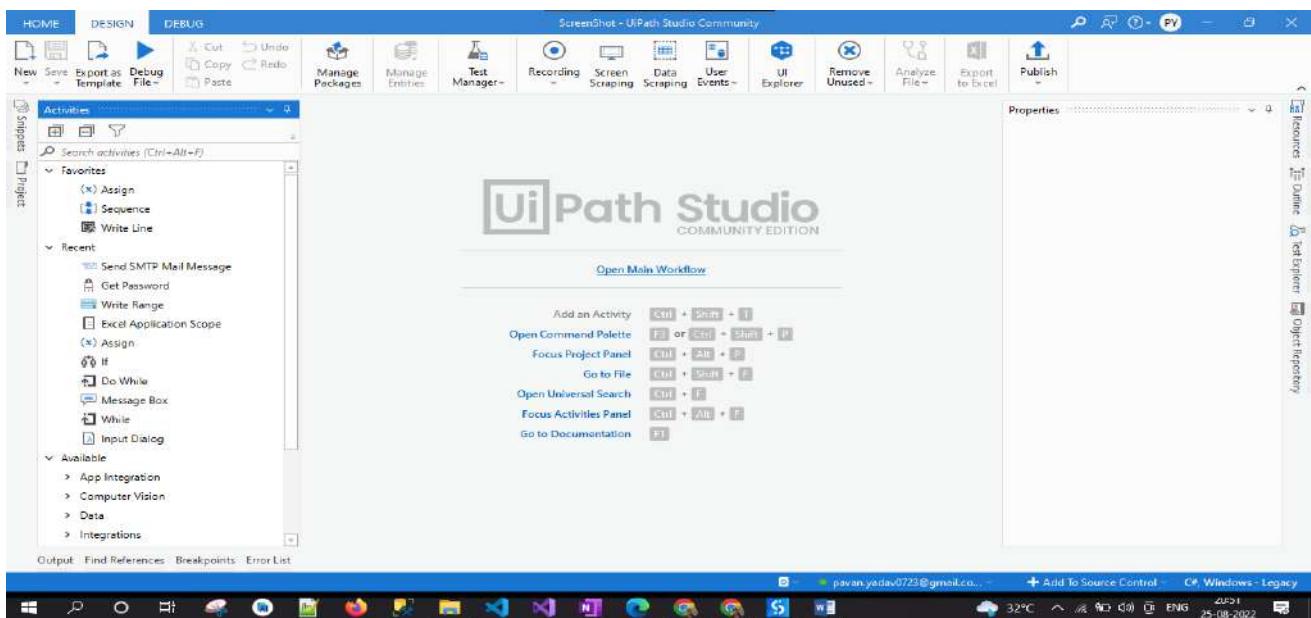
- Click on the Process to New Project



- Write following detail of the process. Note: Select the C# Language

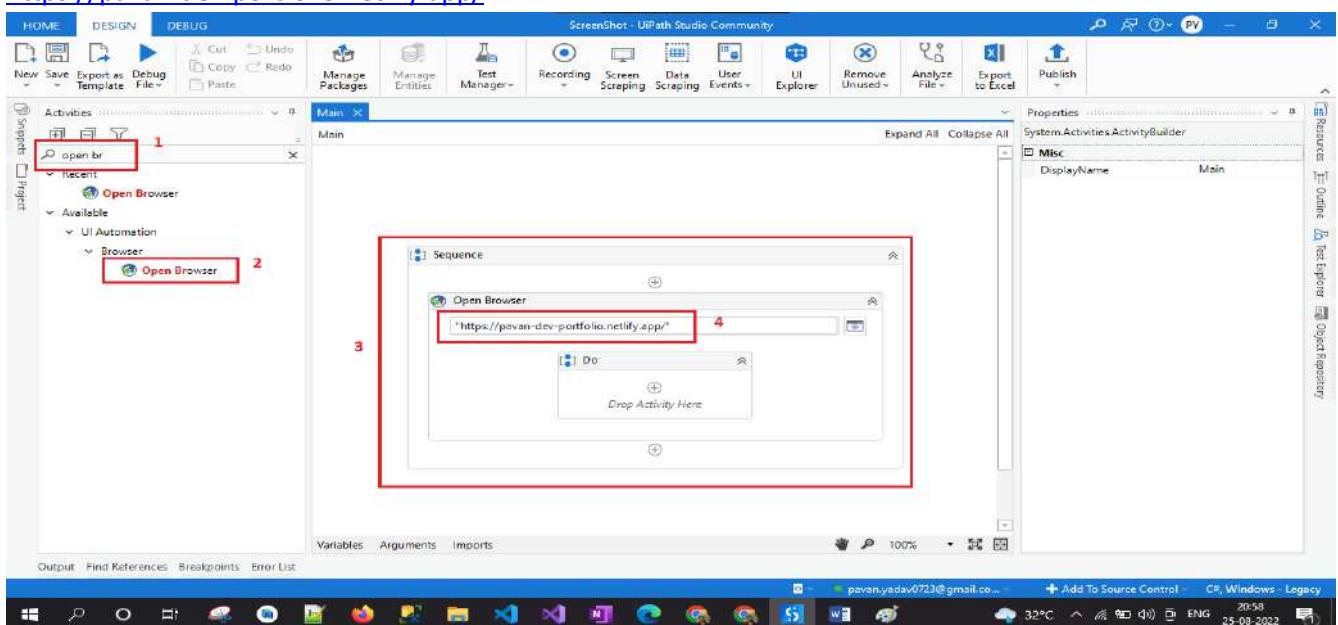


- Click on the Open Main Workflow

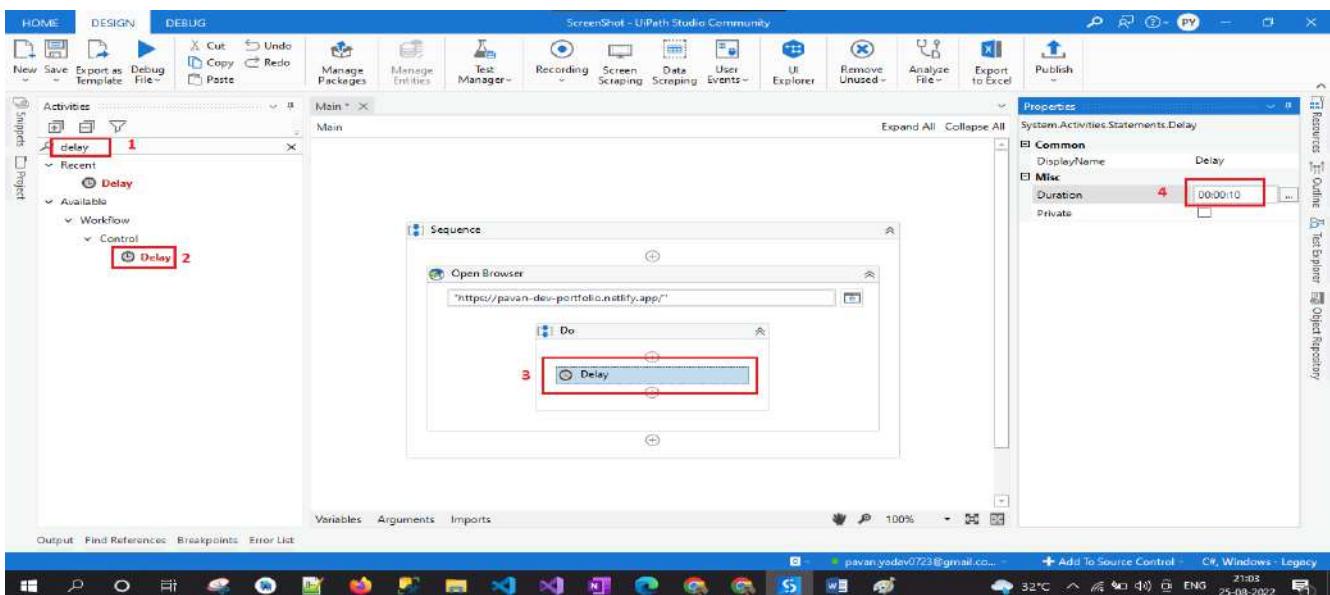


#### 4. Follow the step of below image

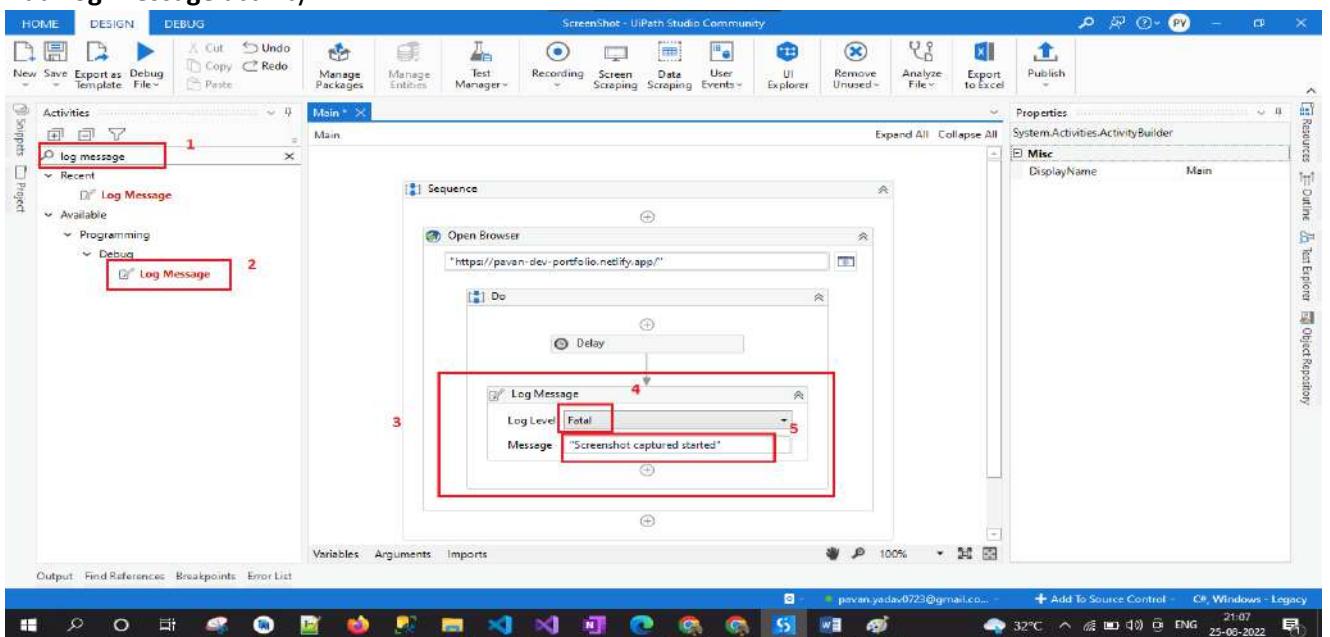
Add the Open Browser activity on Main Work Flow and Insert the any URL. In this case I insert my portfolio url.  
<https://pavan-dev-portfolio.netlify.app/>



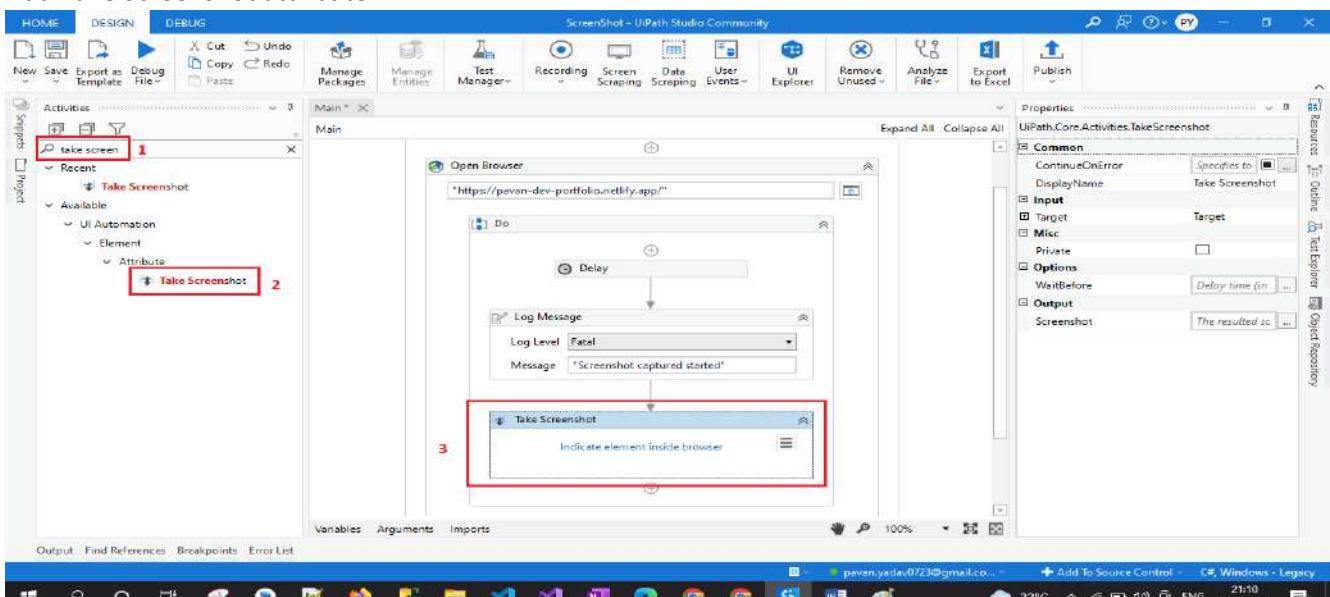
#### 5. Add **Delay** activity inside the Do Sequence of Open Browser activity and write the Duration same like below image i.e. 10 sec (00:00:10)



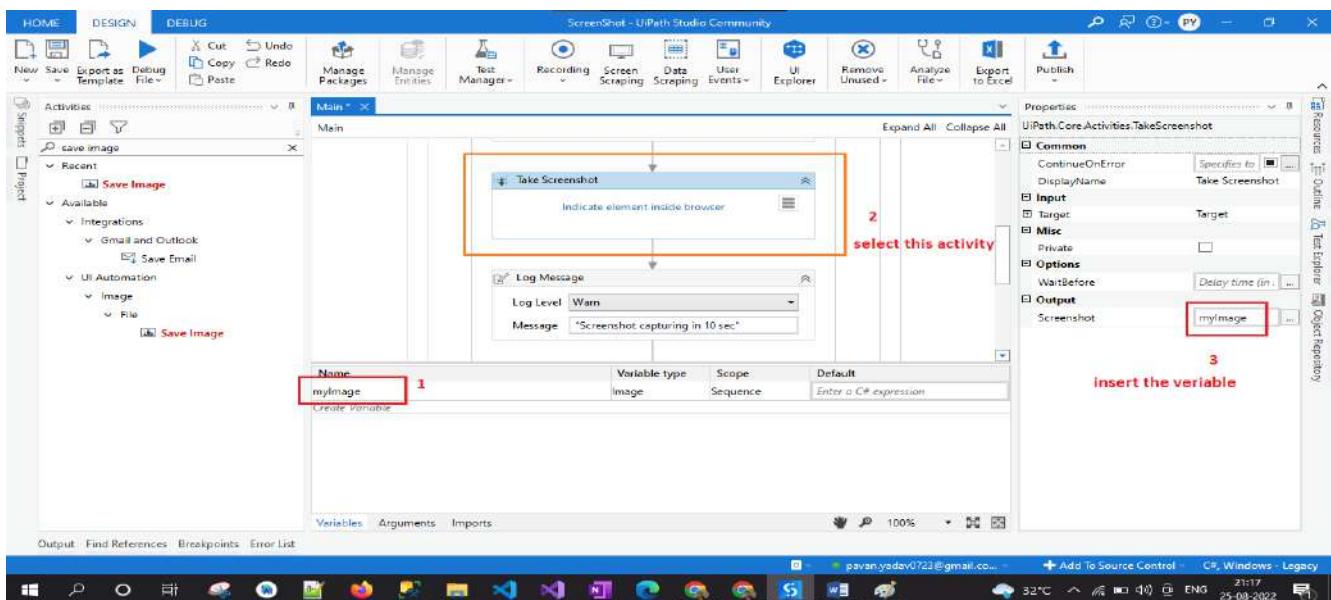
## 6. Add Log Message activity



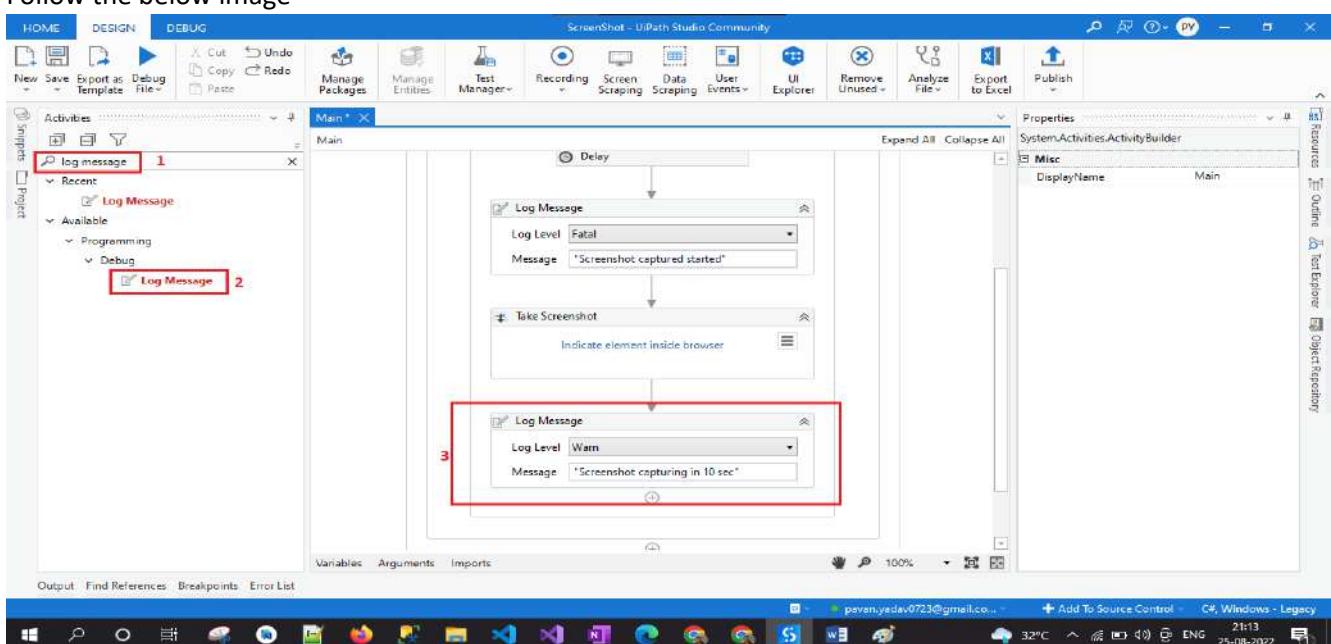
## 7. Add Take Screenshot attribute



## 8. Create a variable (i.e. myImage) and add the Take Screenshot activity declare inside the Output section

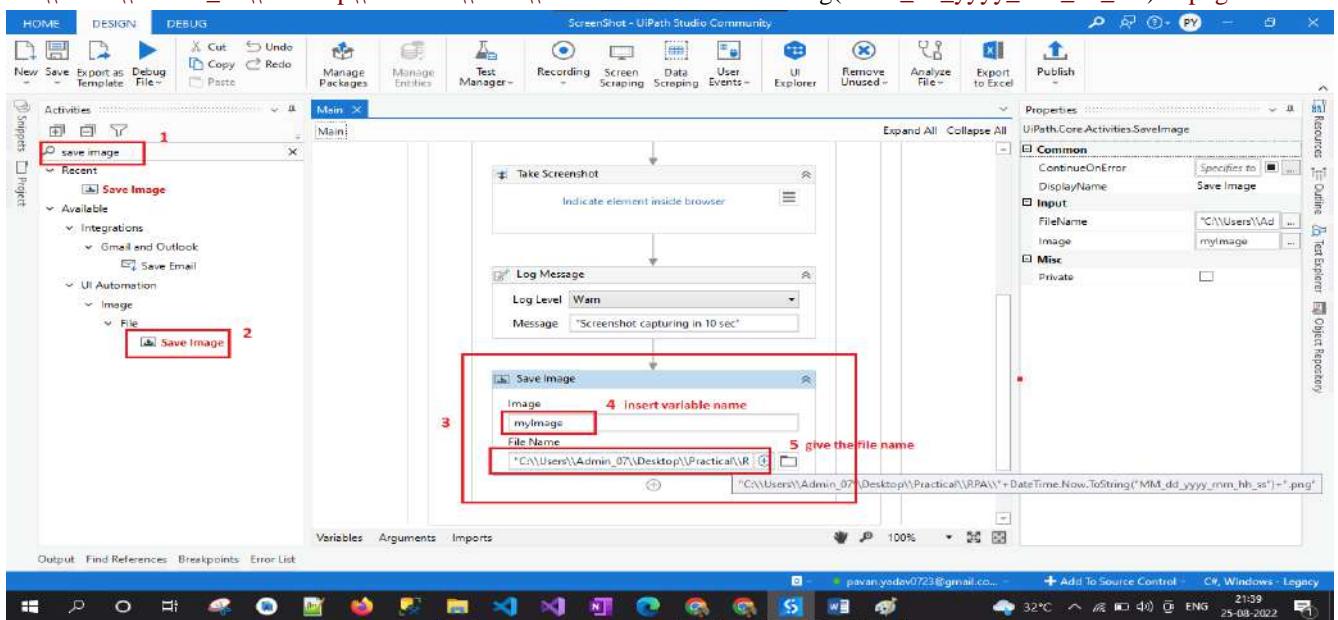


### 9. Follow the below image

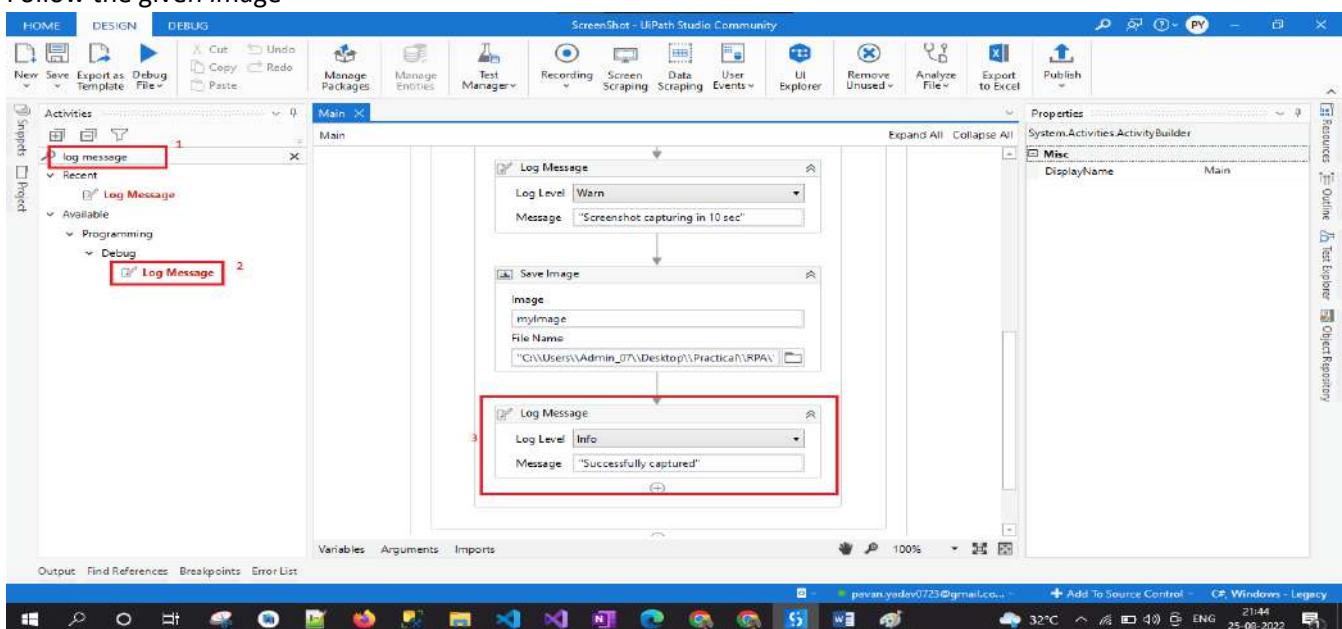


### 10. Add Save Image activity

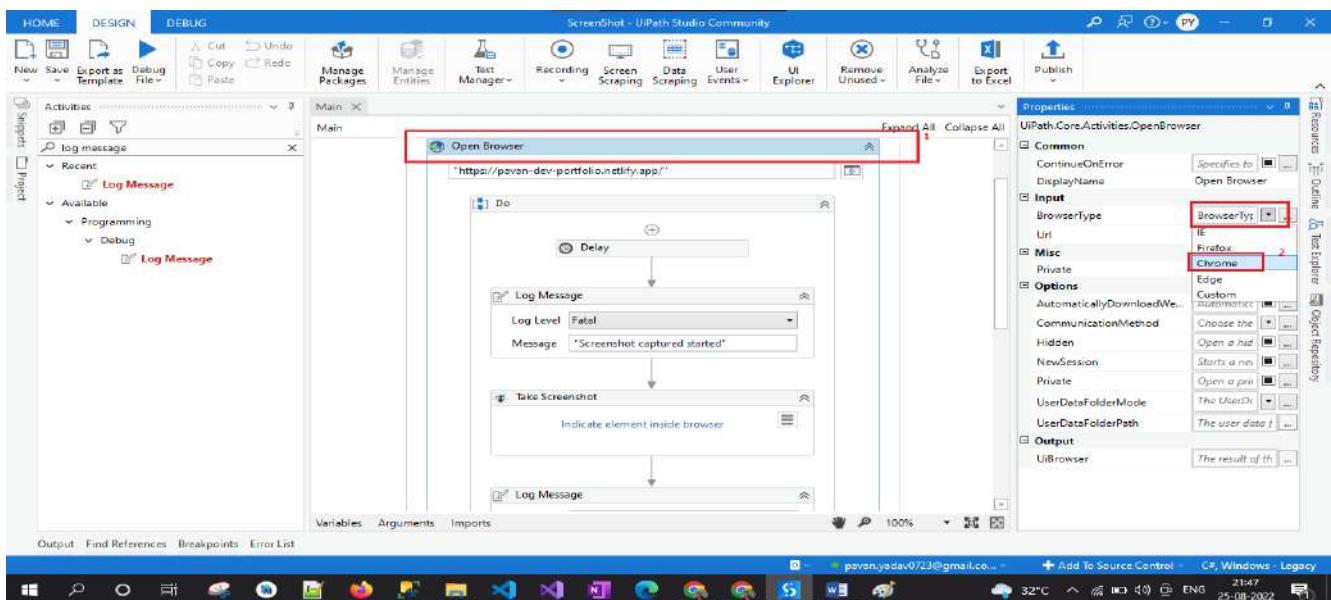
"C:\\Users\\Admin\_07\\Desktop\\Practical\\RPA\\\"+DateTime.Now.ToString("MM\_dd\_yyyy\_mm\_hh\_ss")+".png"



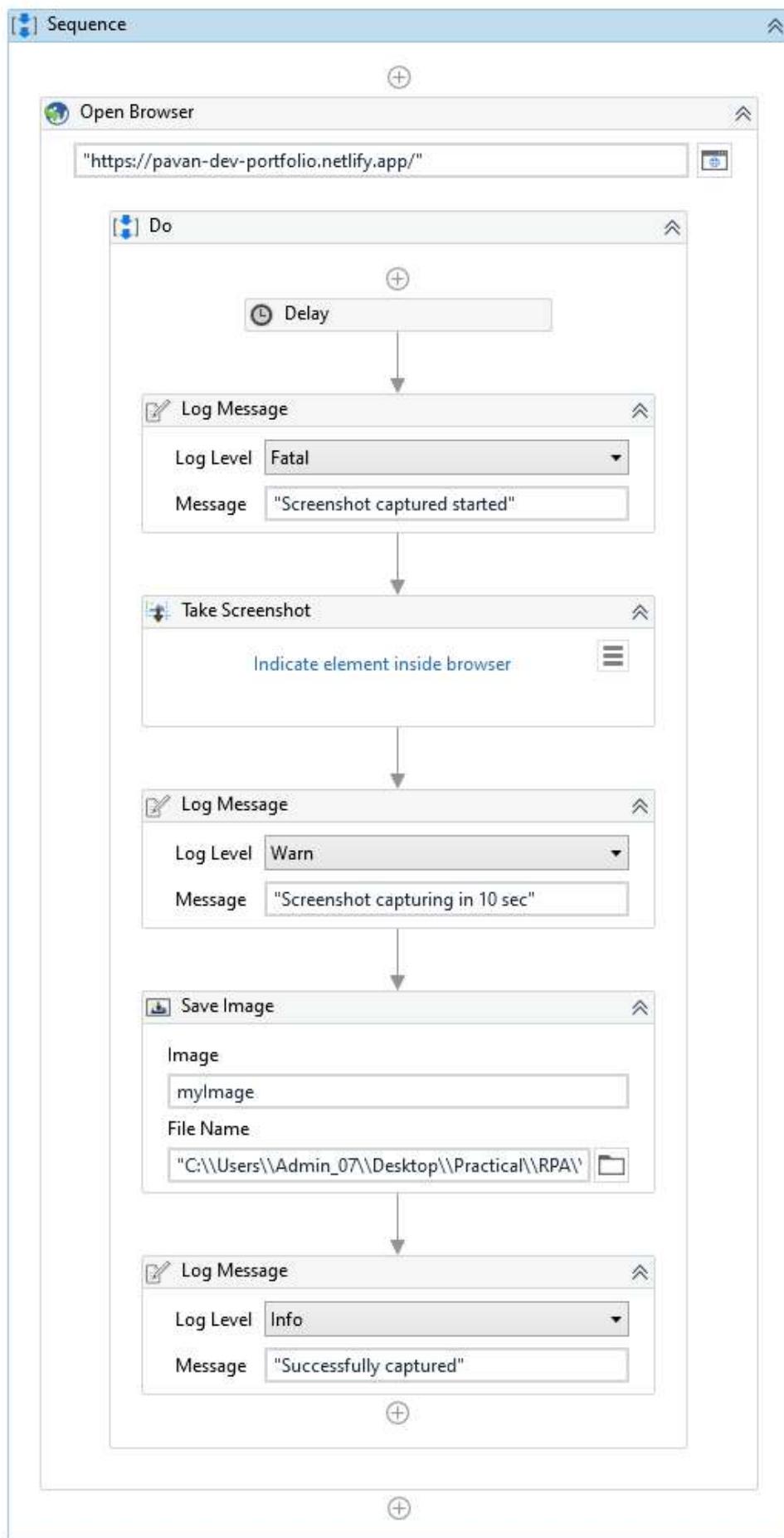
### 11. Follow the given image



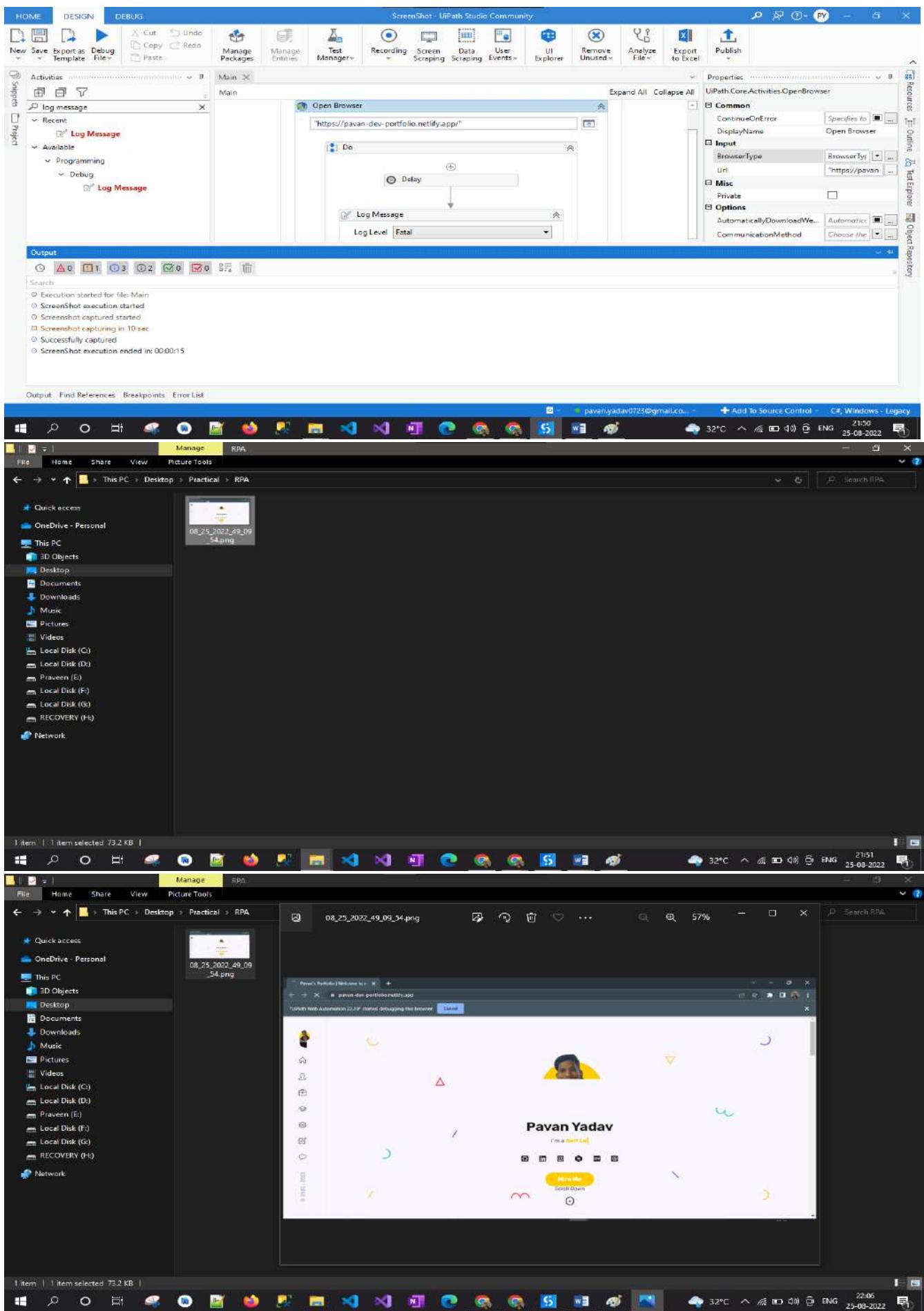
### 12. Change the default Browser



### 13. Overview of the Sequence

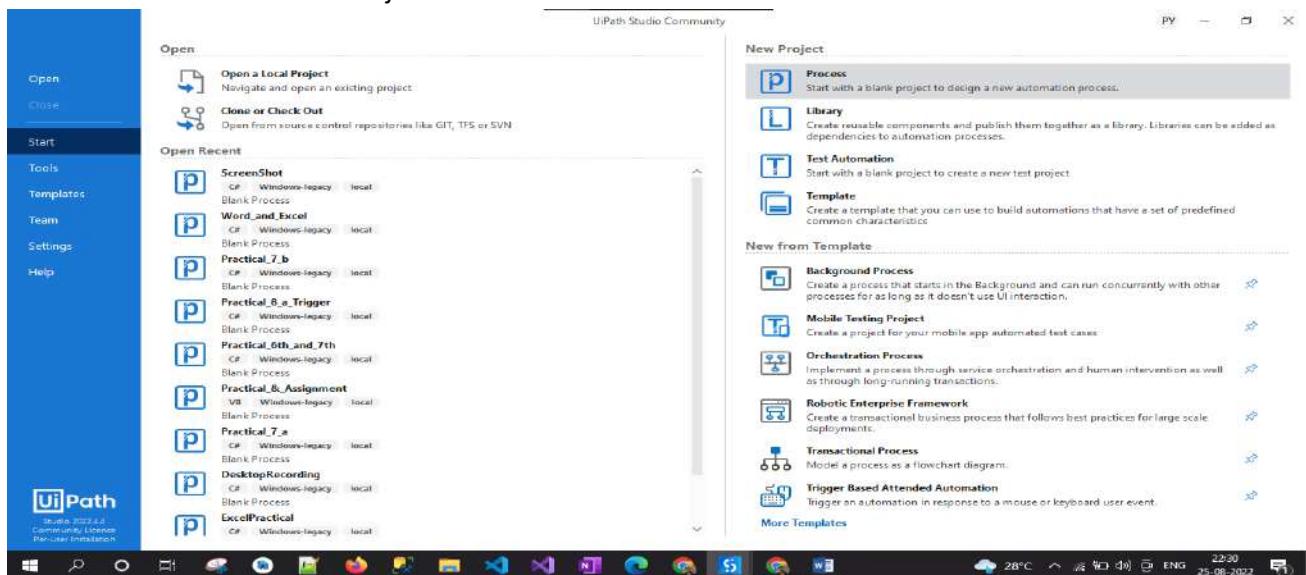


## 14. Output

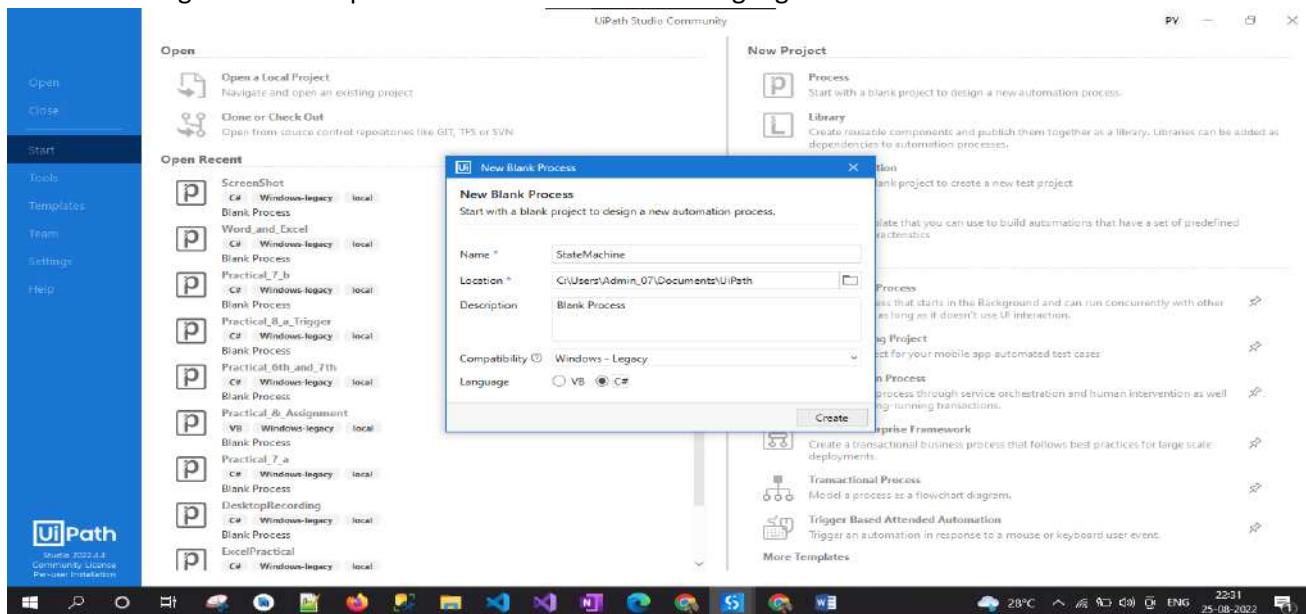


## B] Automate any process using the State Machine in UI Path.

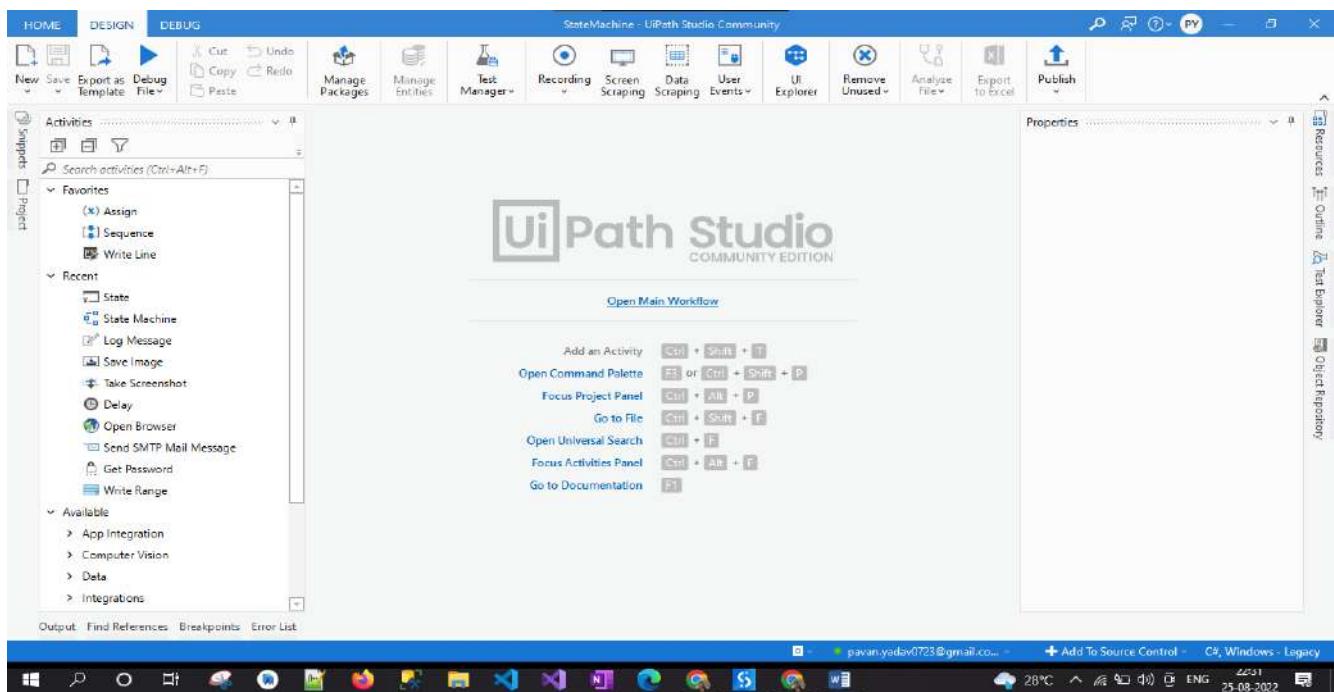
- Click on the Process to New Project



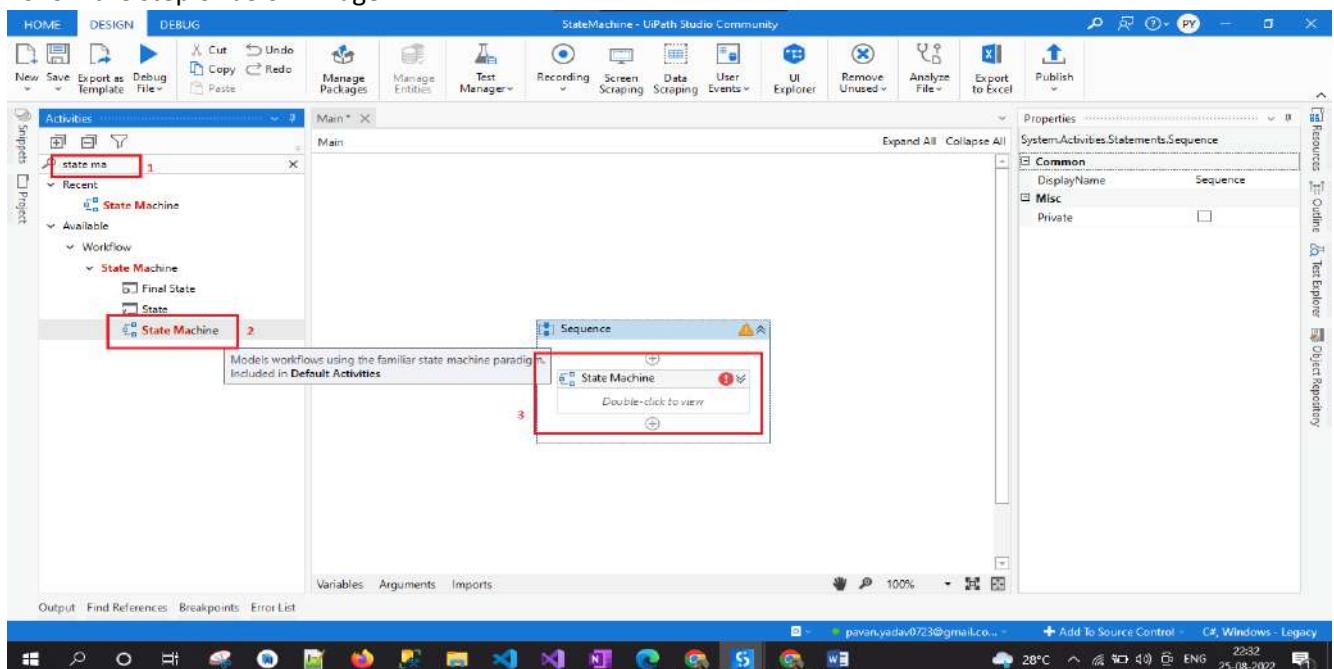
- Write following detail of the process. Note: Select the C# Language



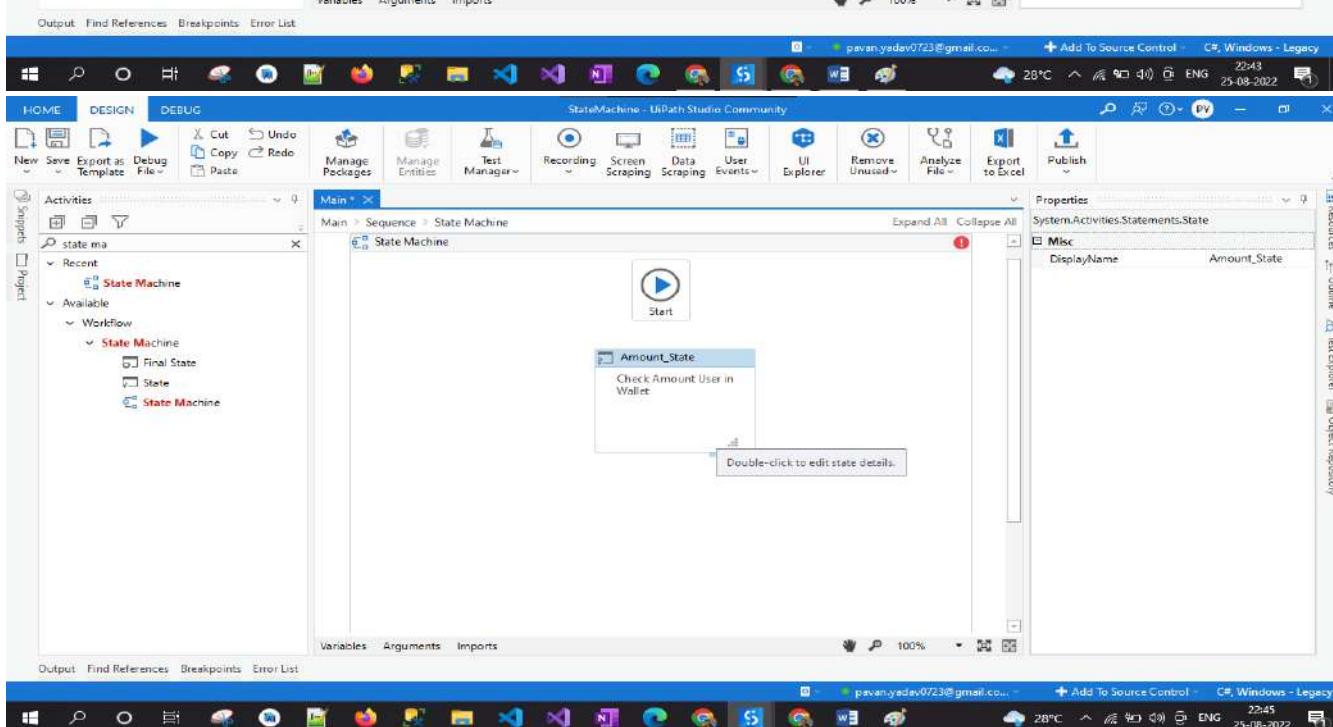
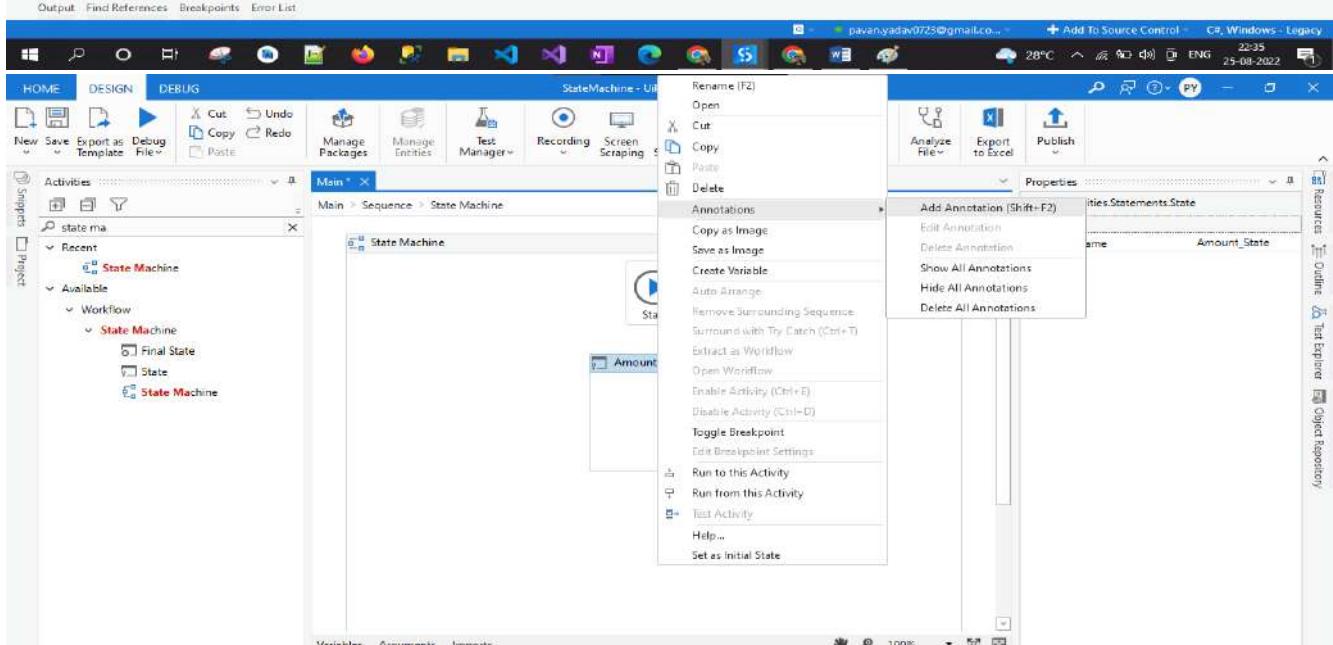
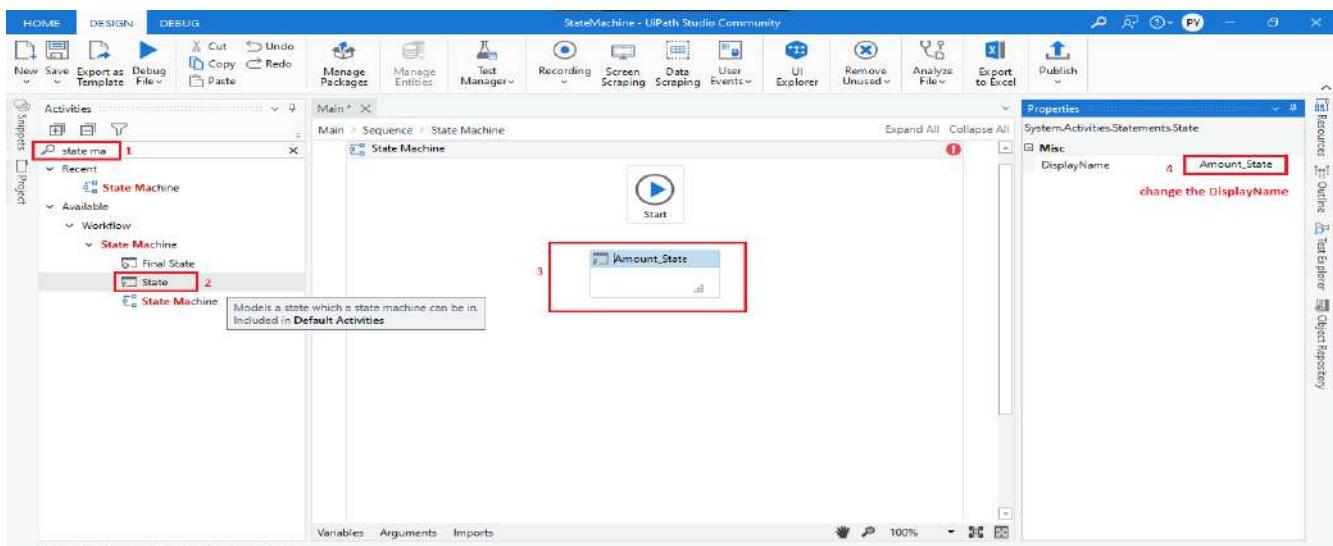
- Click on the Open Main Workflow



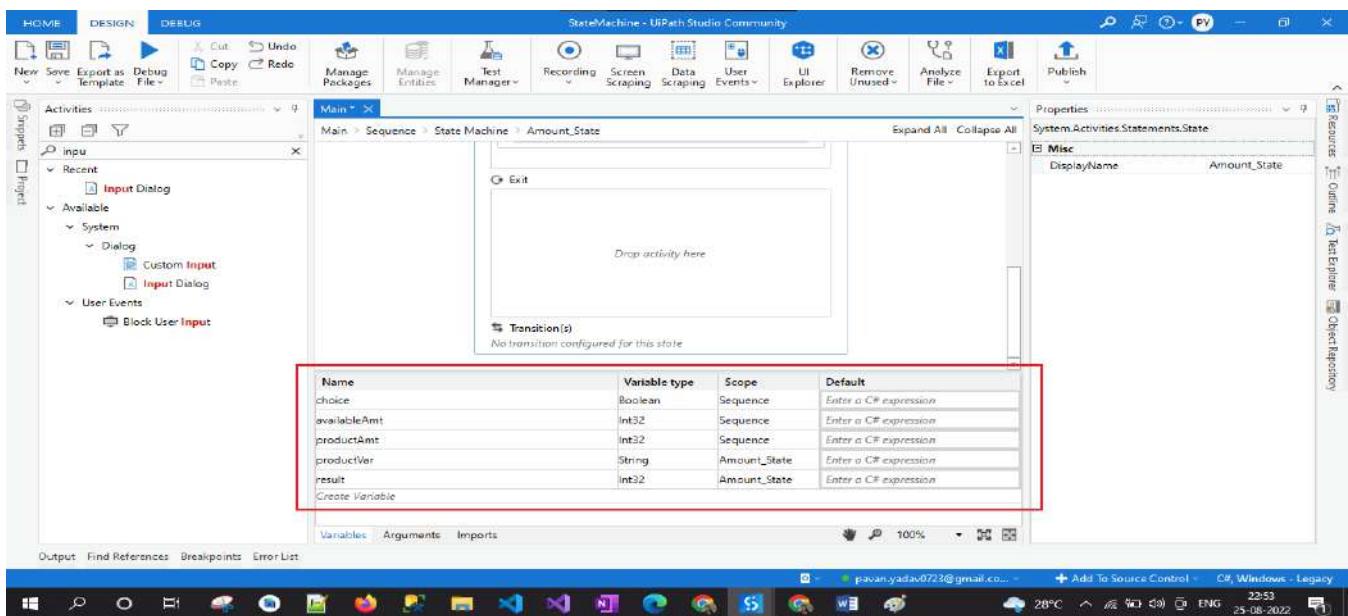
#### 4. Follow the step of below image



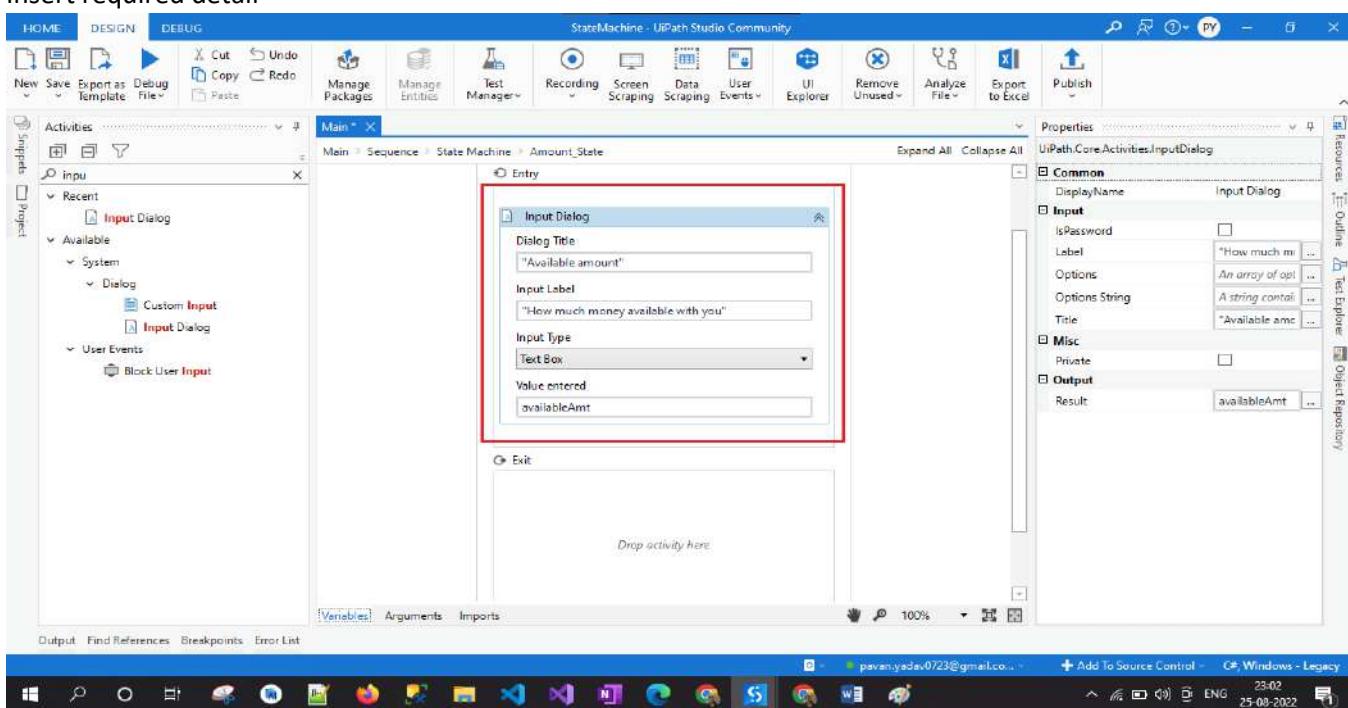
#### 5. Add State inside the State Machine and change the display name



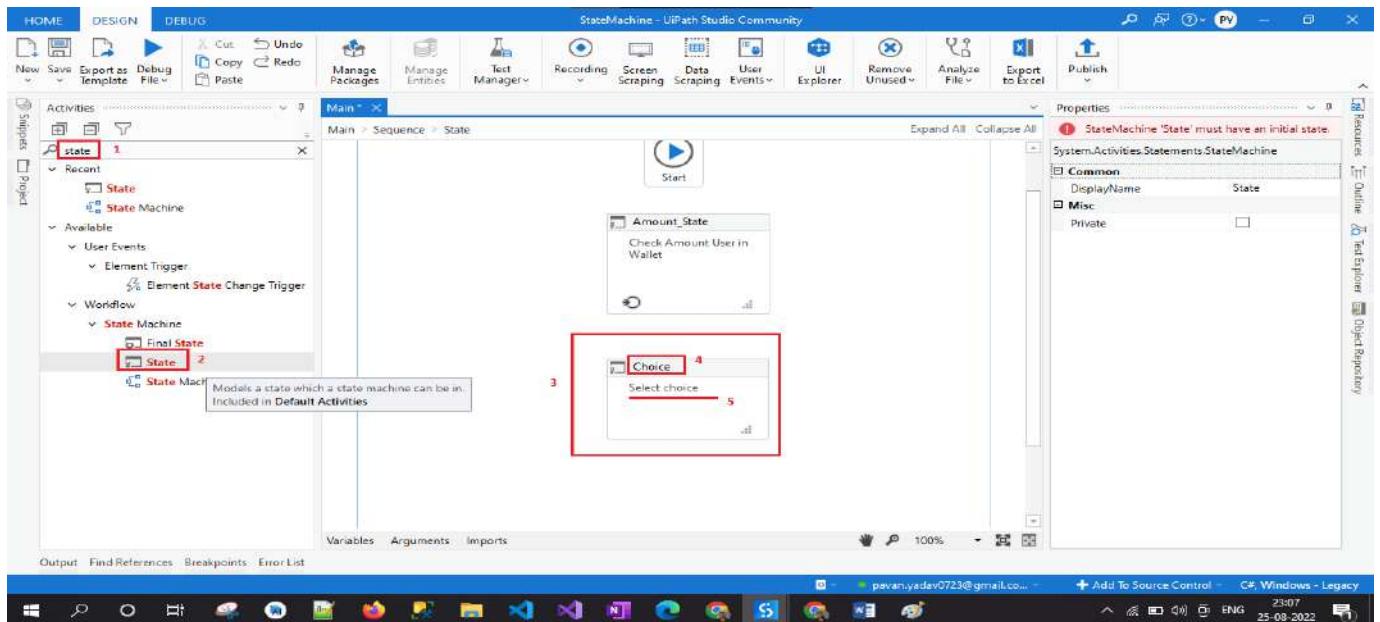
## 6. Create variables



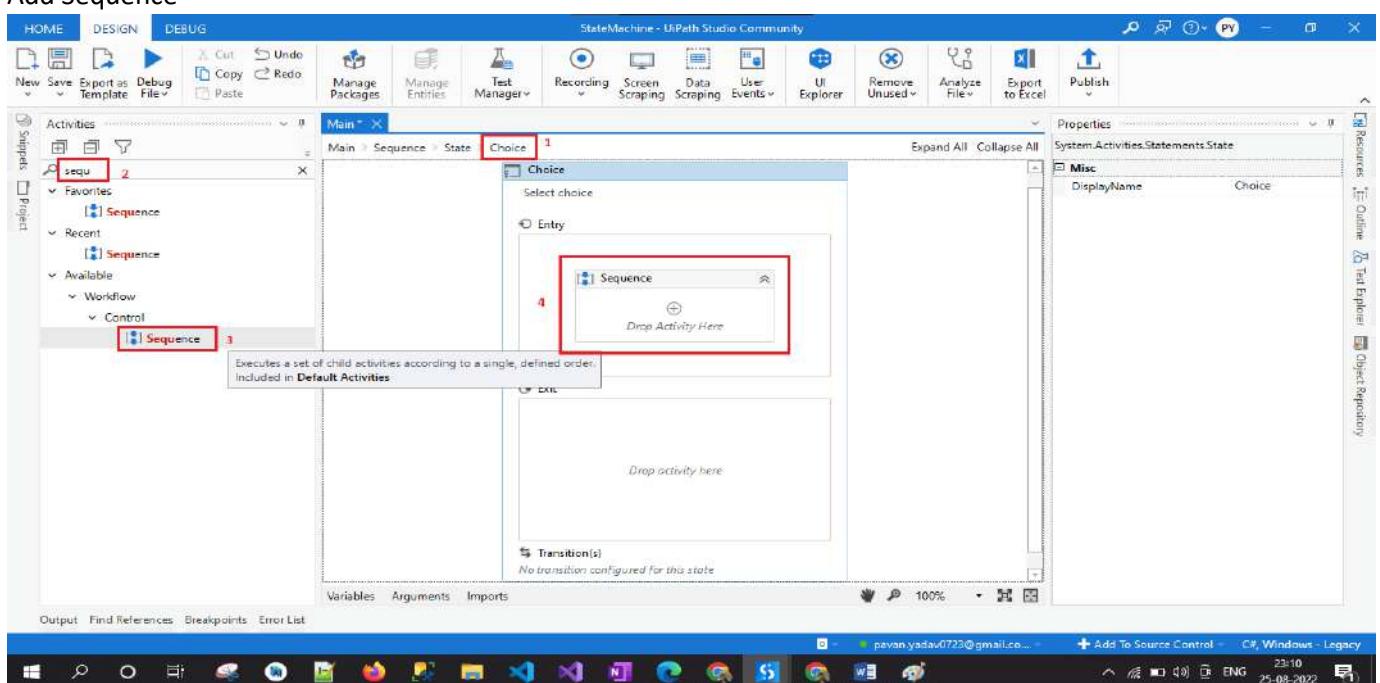
## 7. Insert required detail



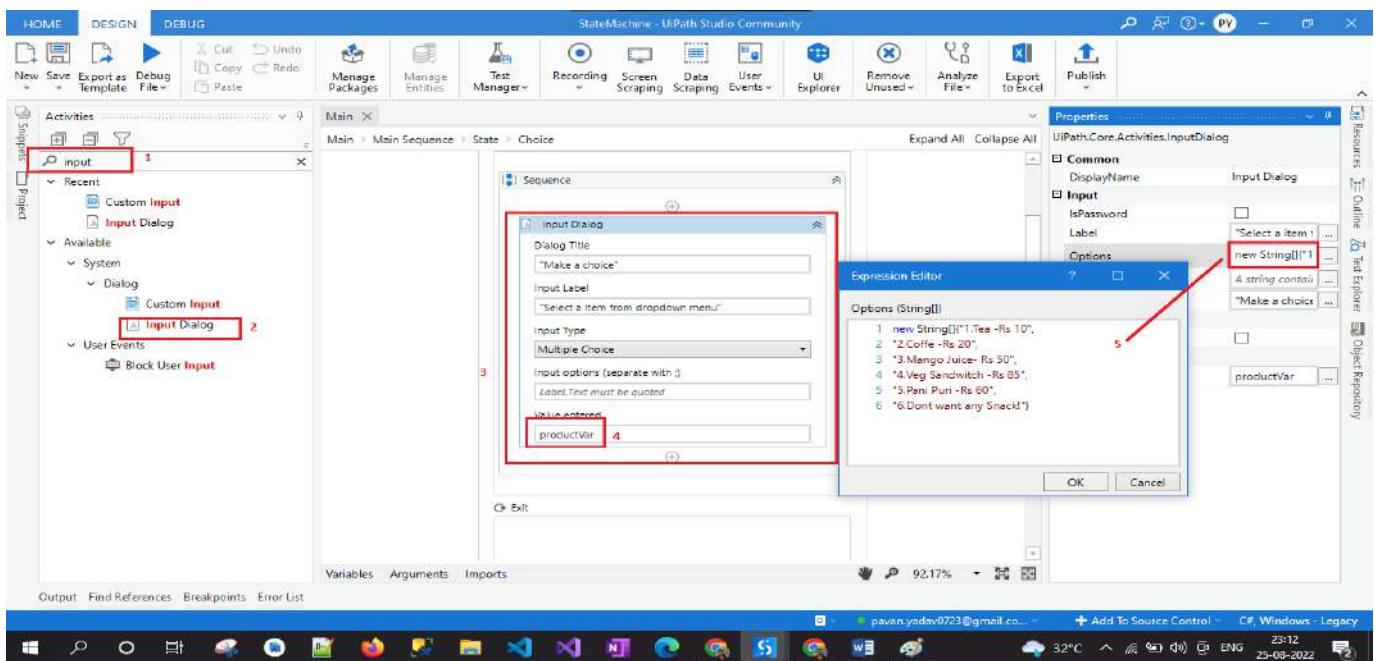
### 8. Add another State inside the State Machine i.e. for Choice



### 9. Add Sequence

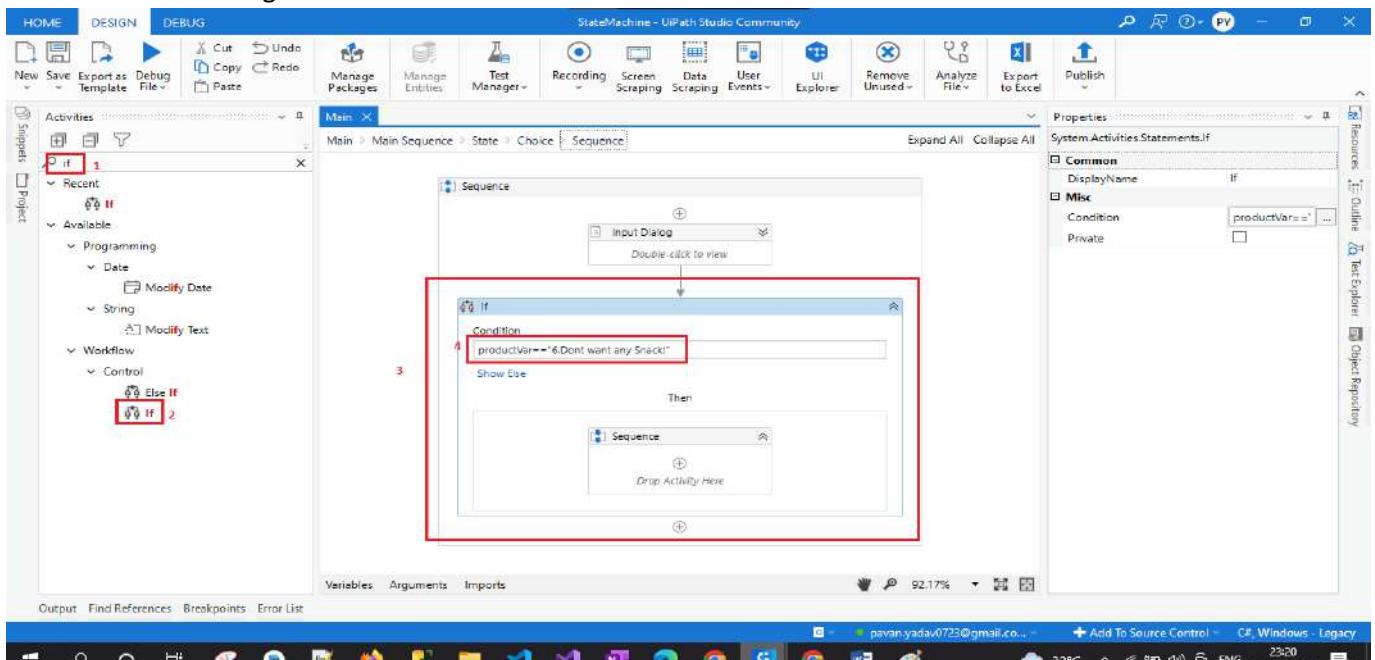


### 10. Add Input Dialog

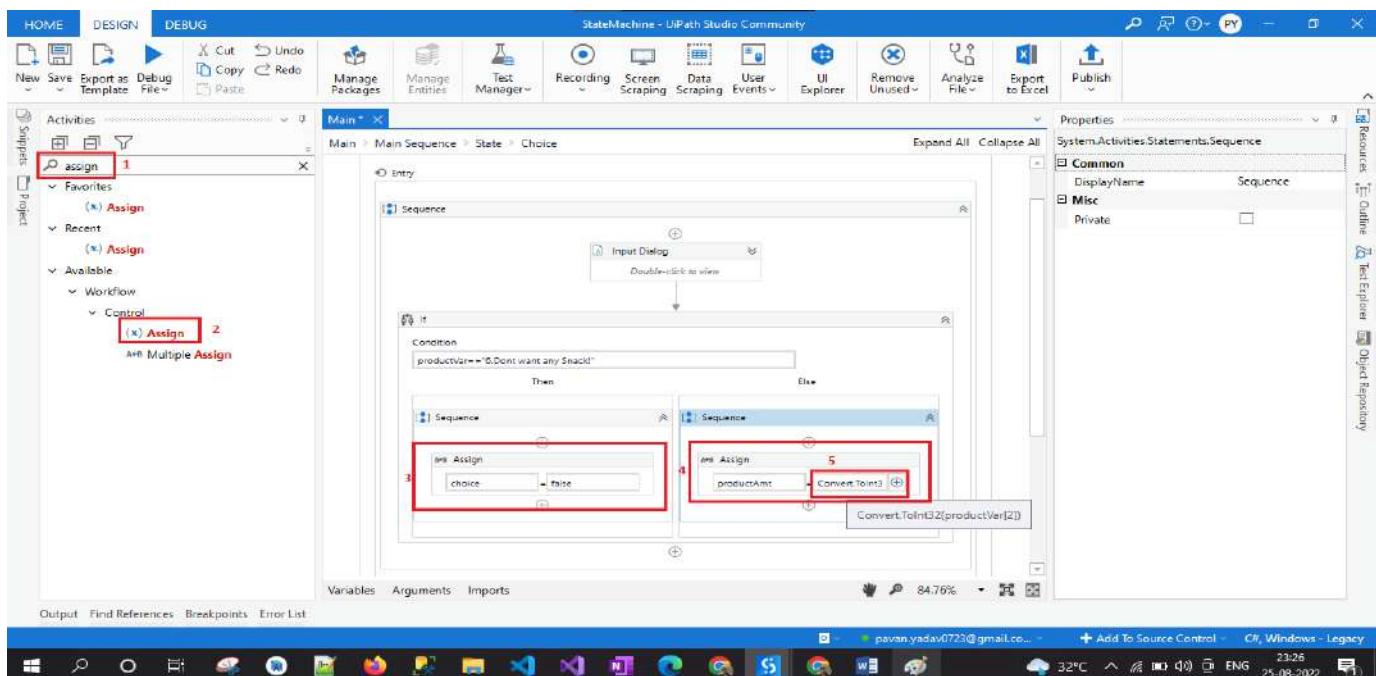


```
new String[]{ "1.Tea -Rs 10",
"2.Coffe -Rs 20",
"3.Mango Juice- Rs 50",
"4.Veg Sandwitch -Rs 85",
"5.Pani Puri -Rs 60",
"6.Dont want any Snack!"}
```

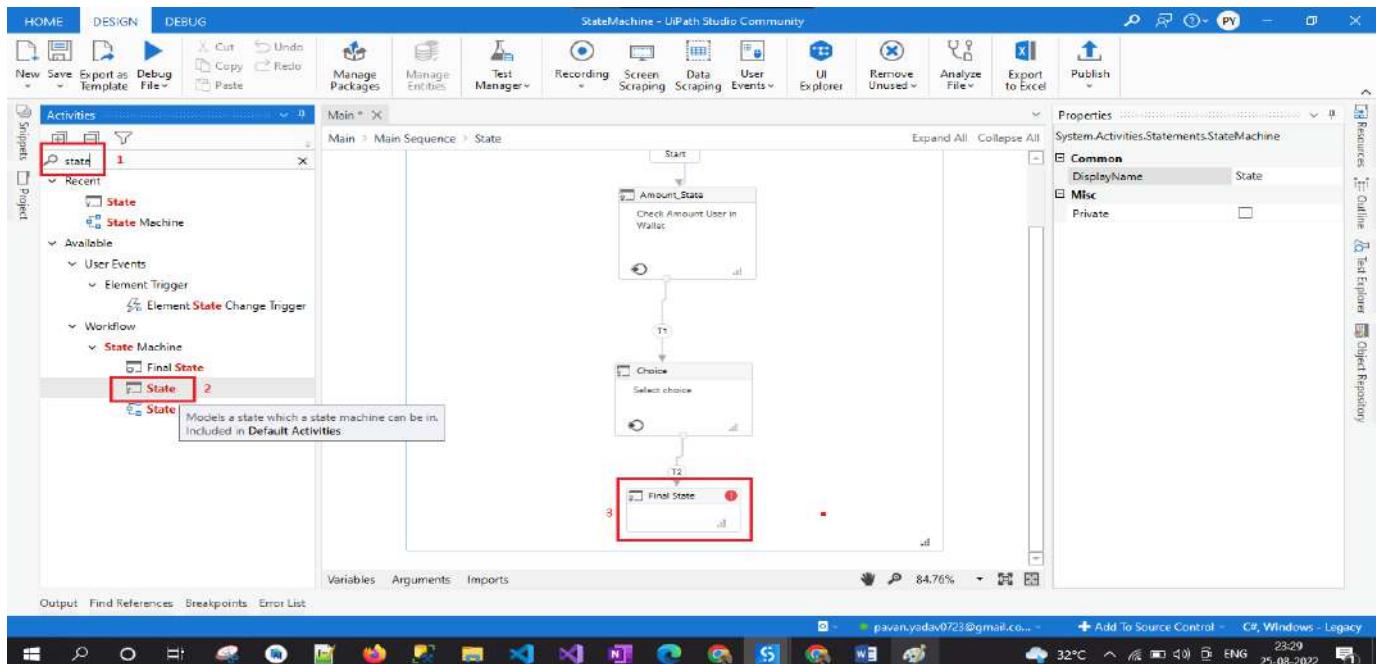
#### 11. Follow the below image



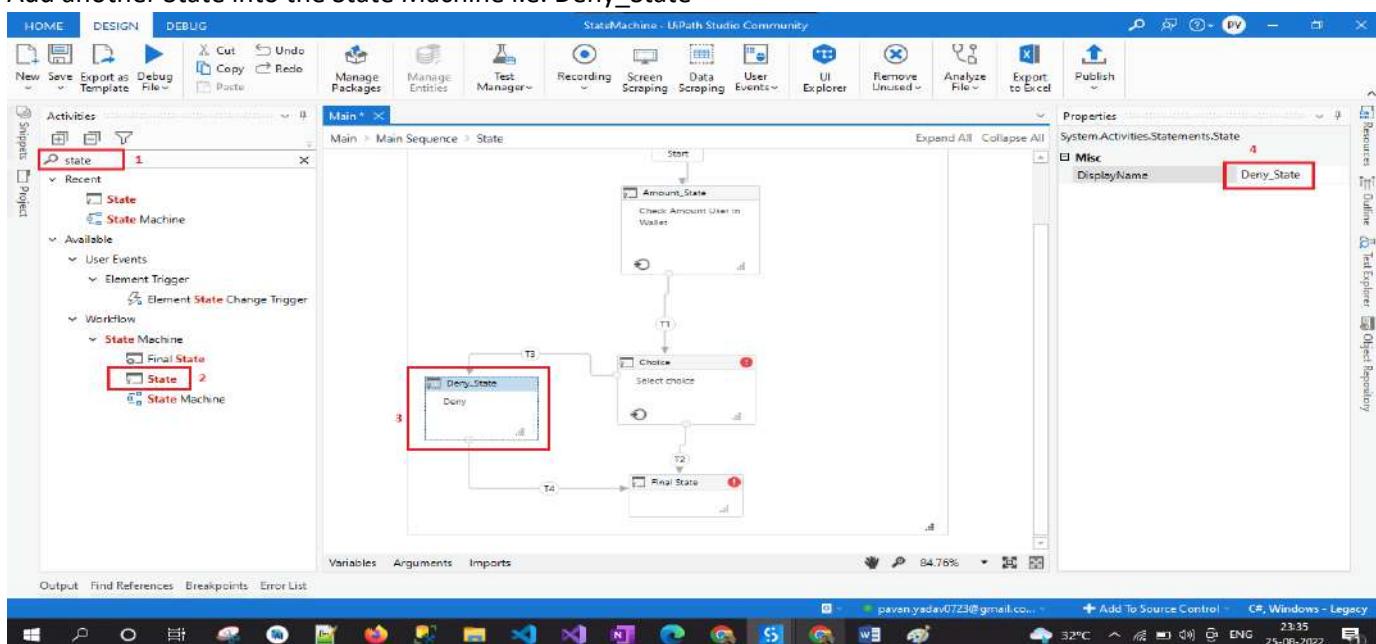
#### 12. Add Assign



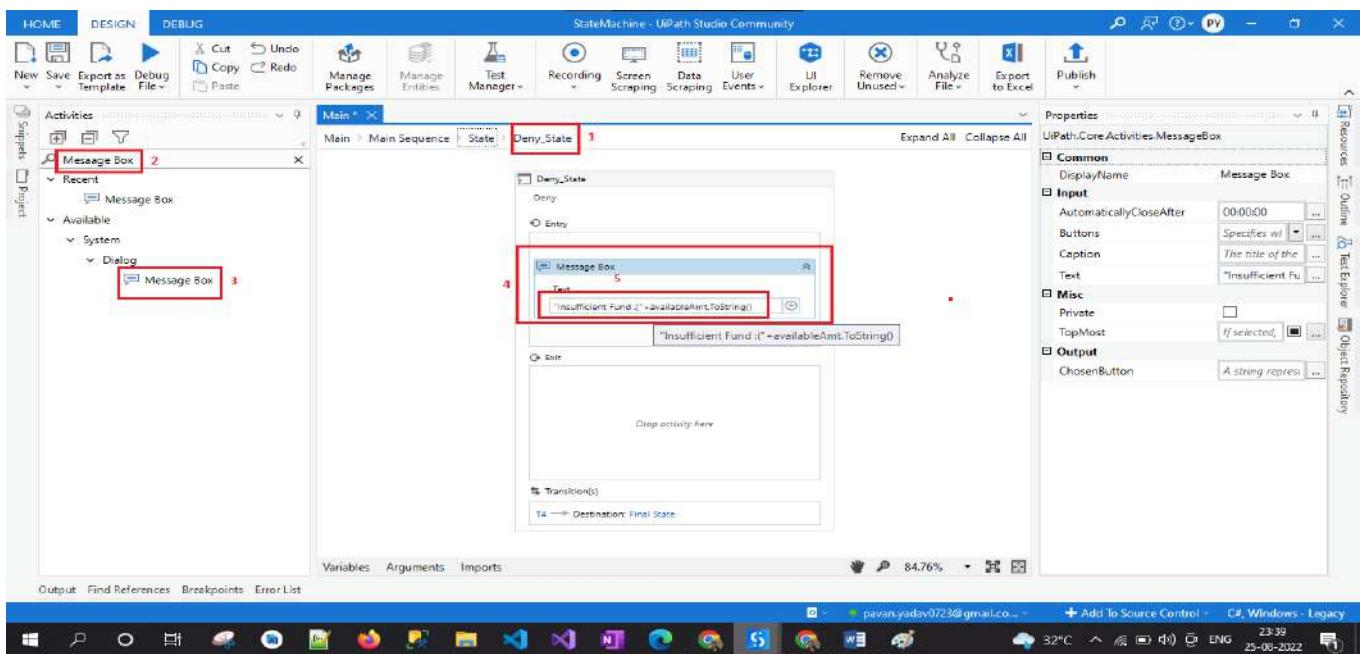
### 13. Add another State



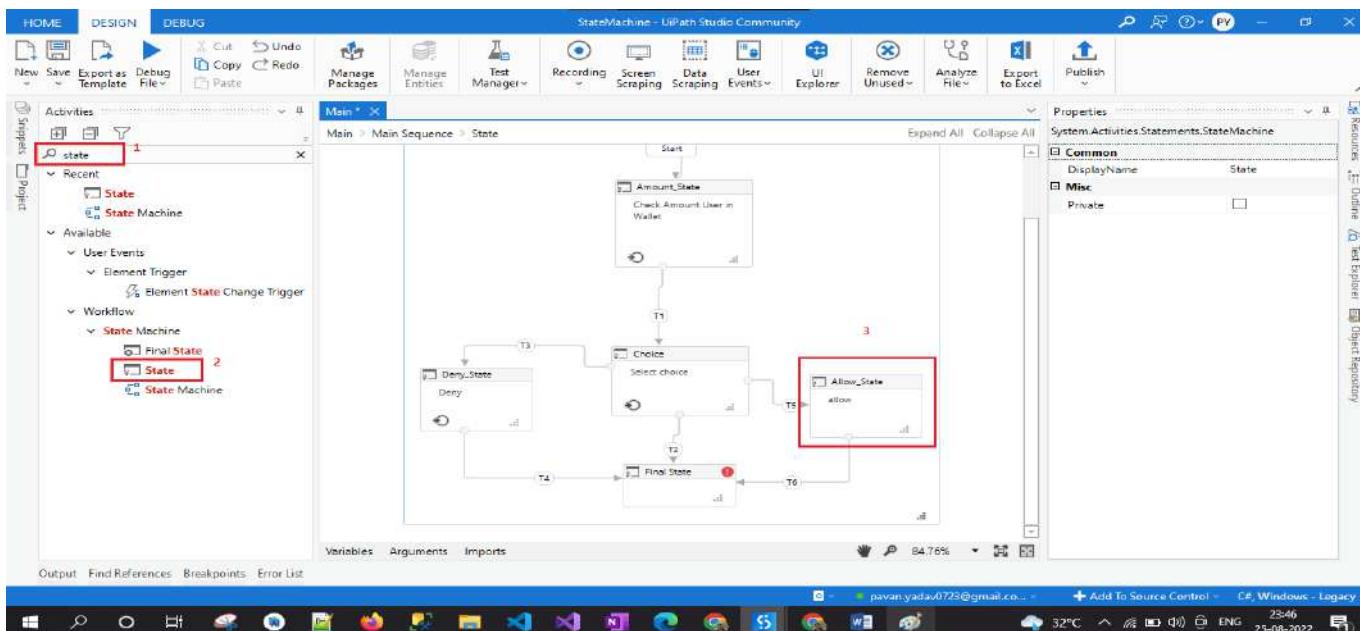
### 14. Add another State into the State Machine i.e. Deny\_State



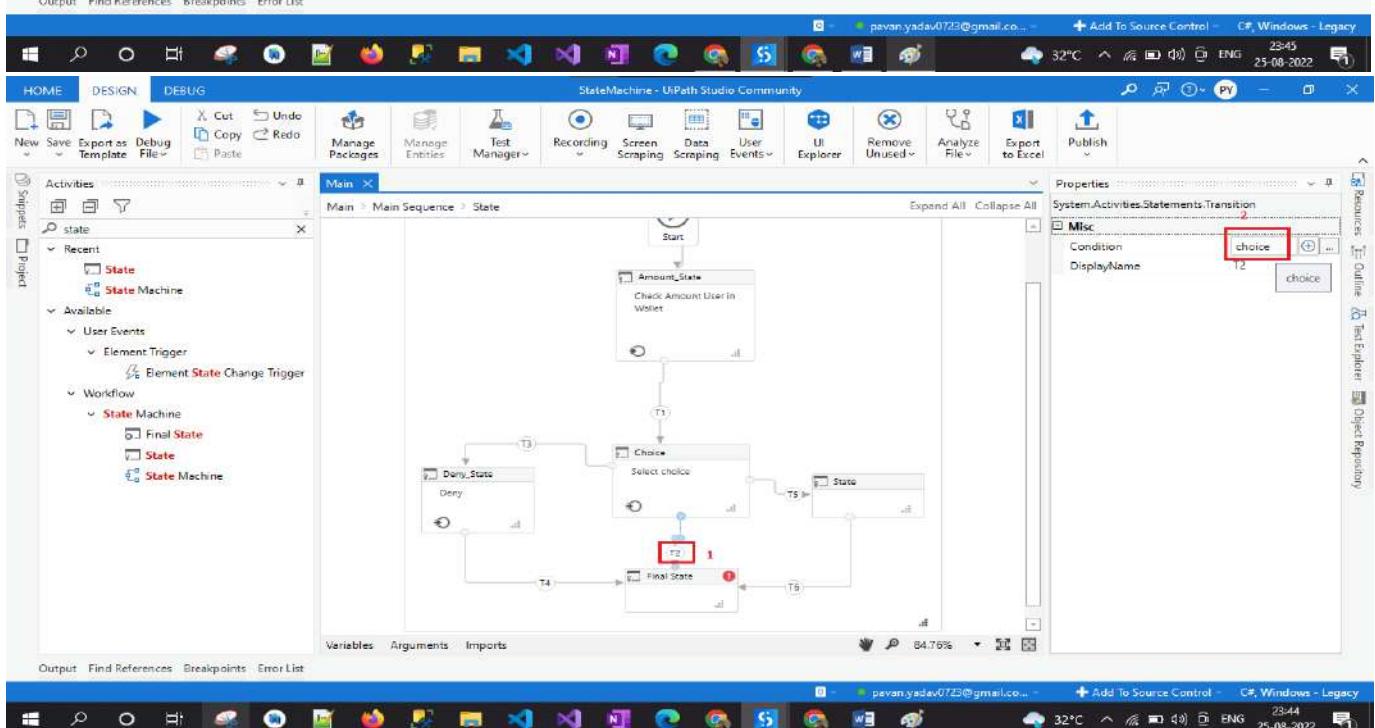
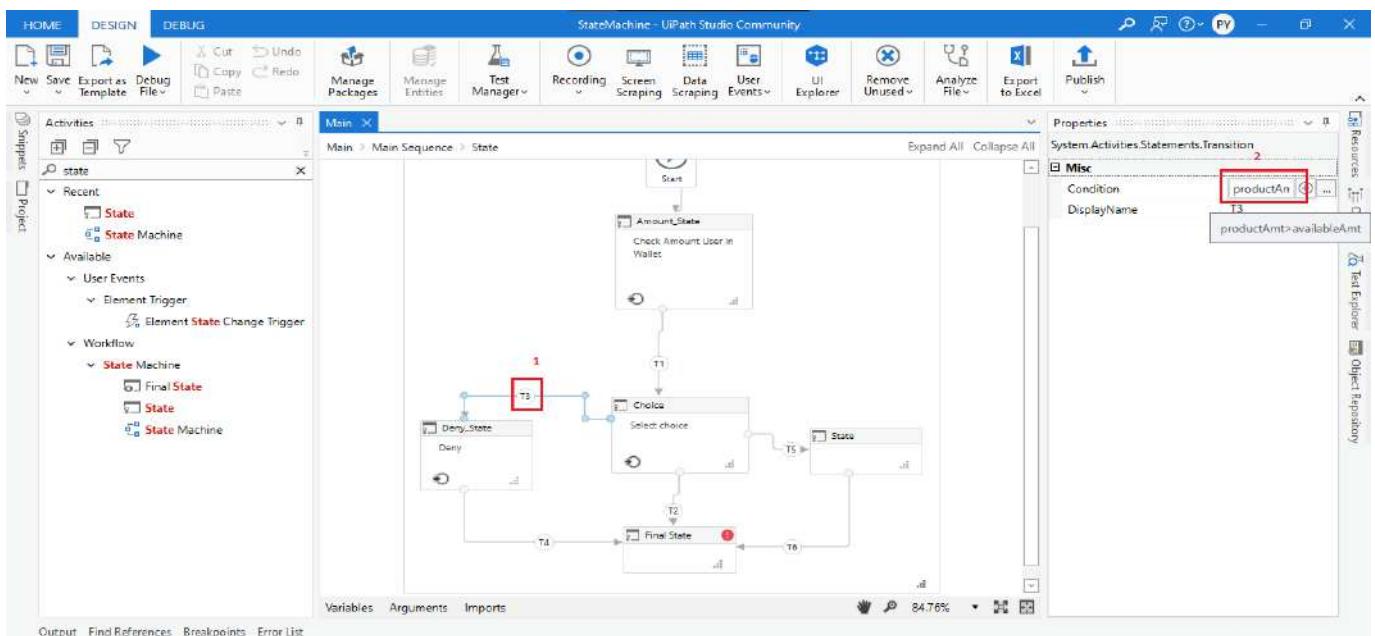
### 15. Add Message Box inside the Deny\_State

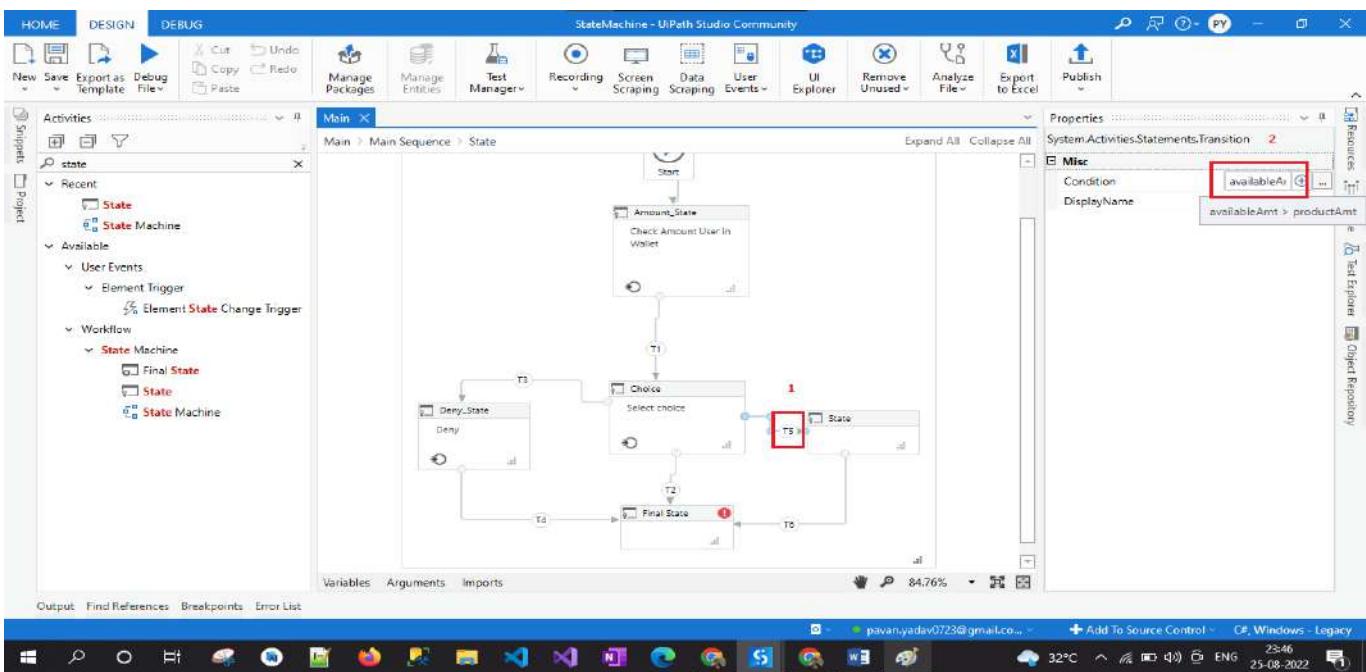


## 16. Add Another State

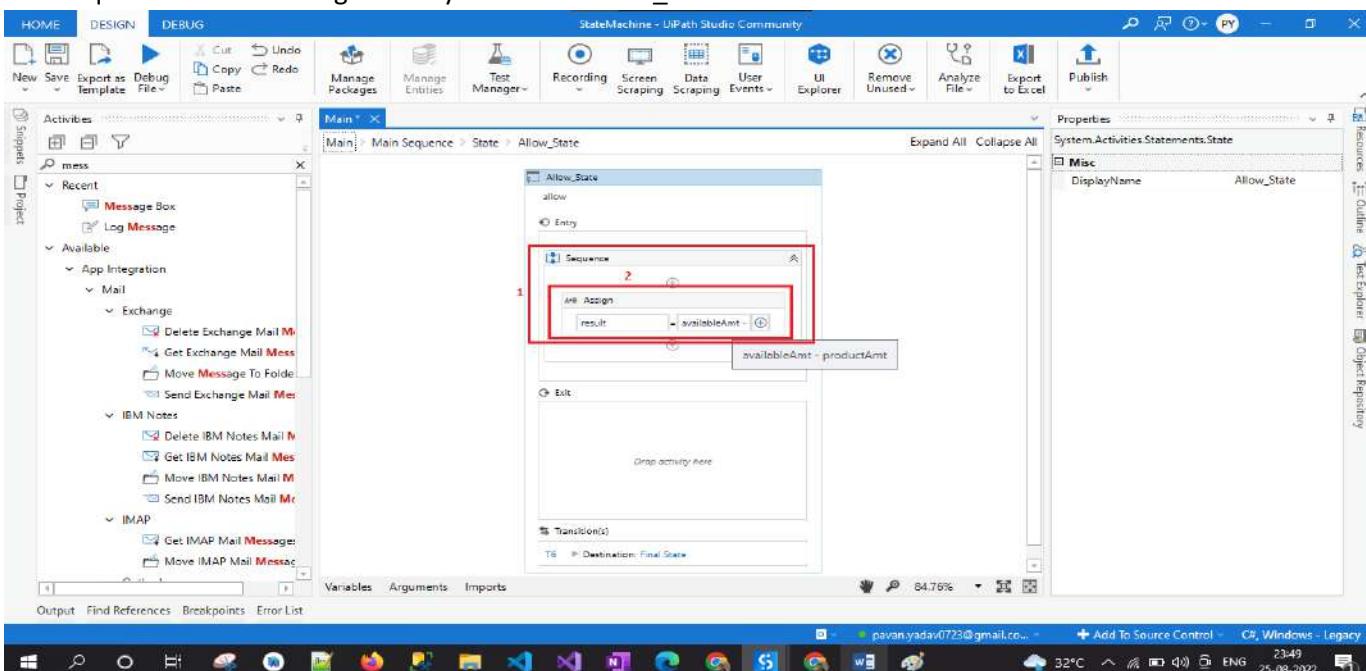


## 17. Trigger Condition

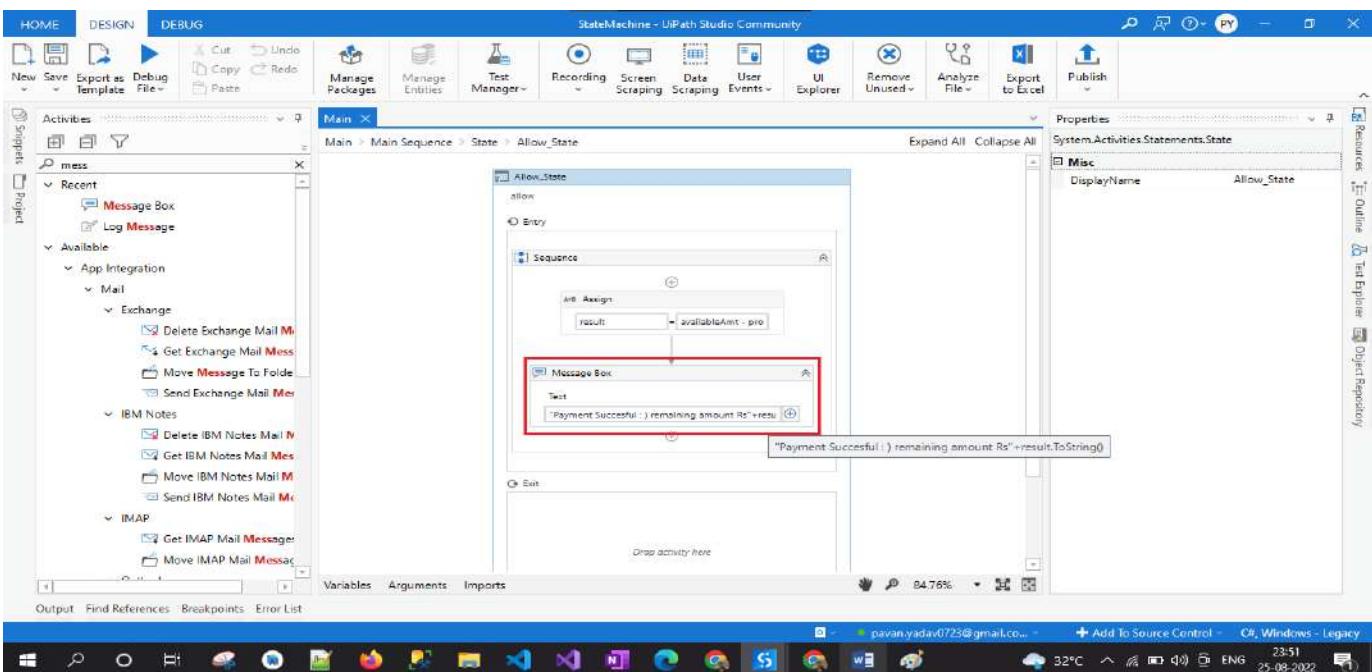




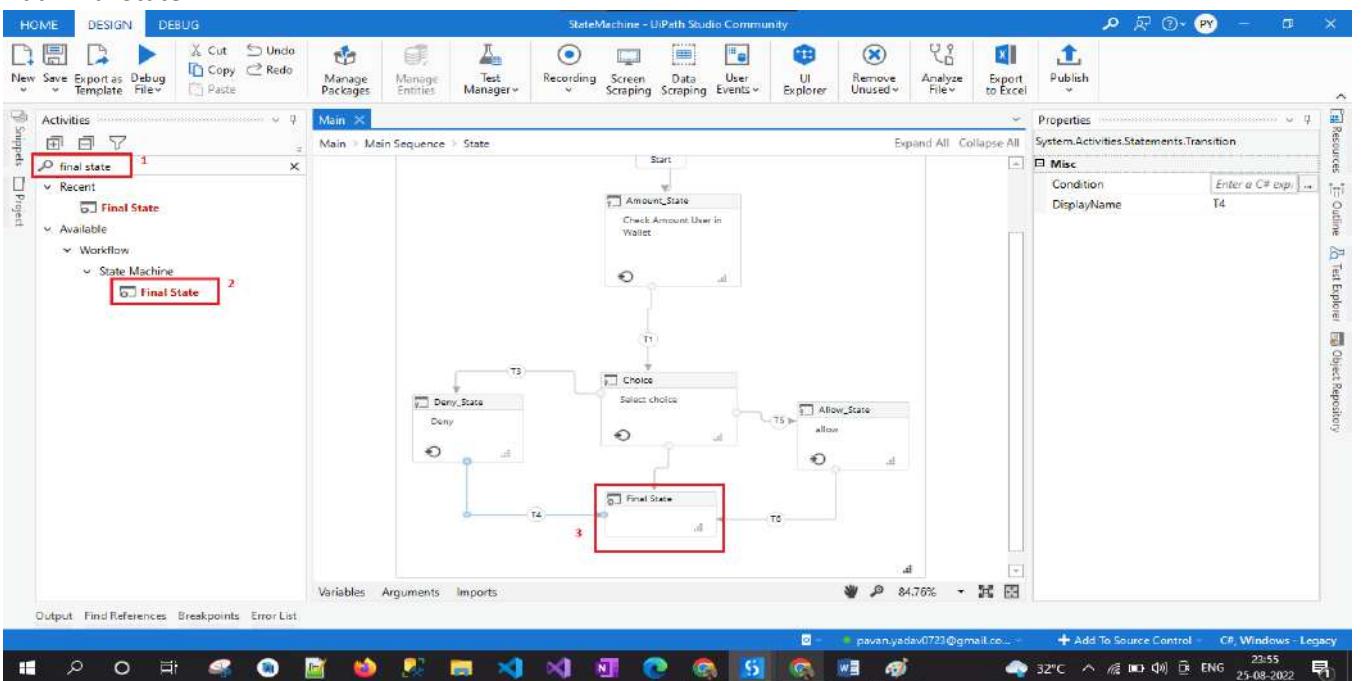
### 18. Add Sequence and Add Assign activity inside the Allow\_State



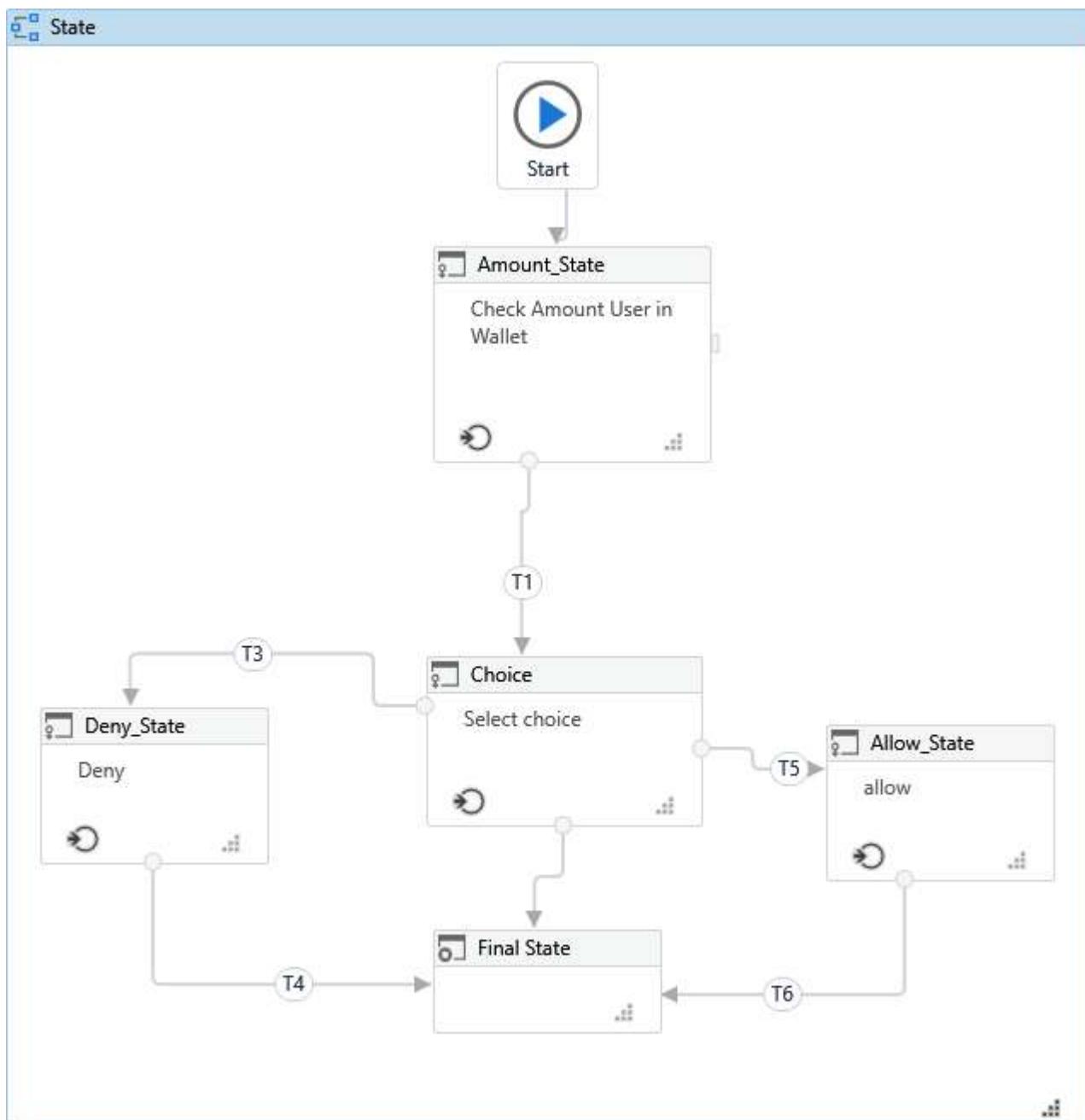
Add Message Box



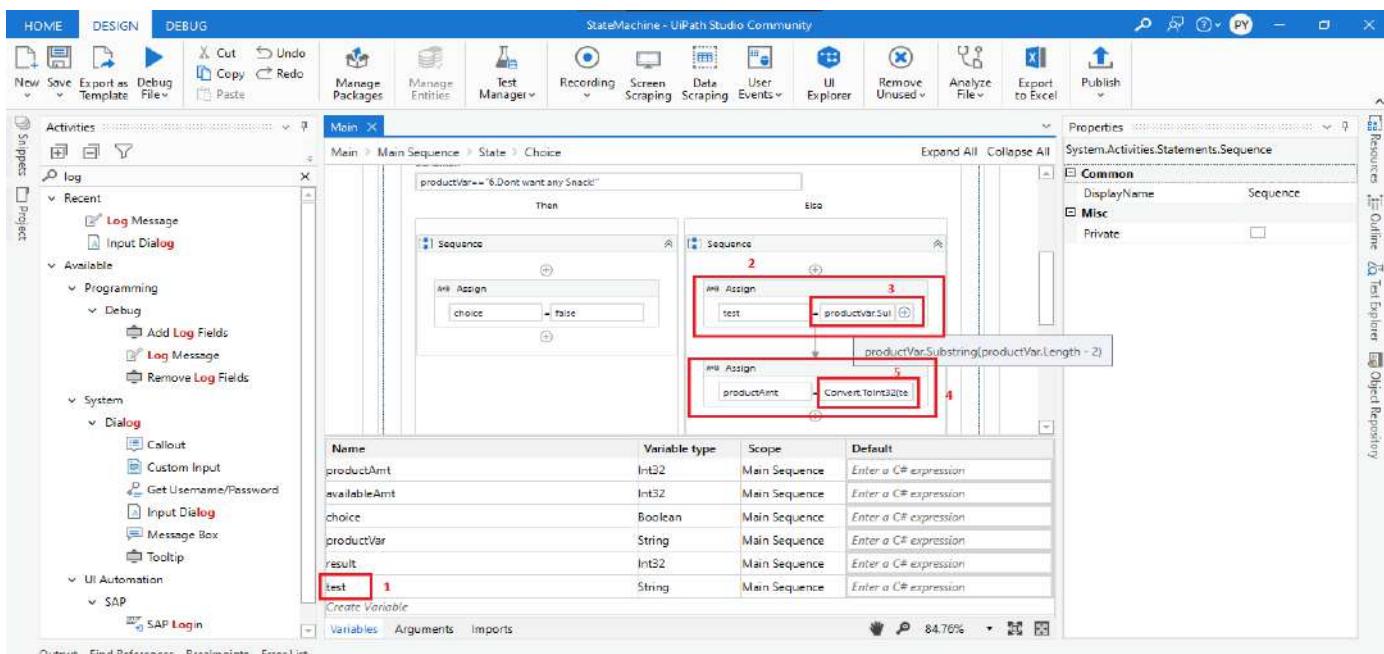
## 19. Add Final State



## 20. Overview

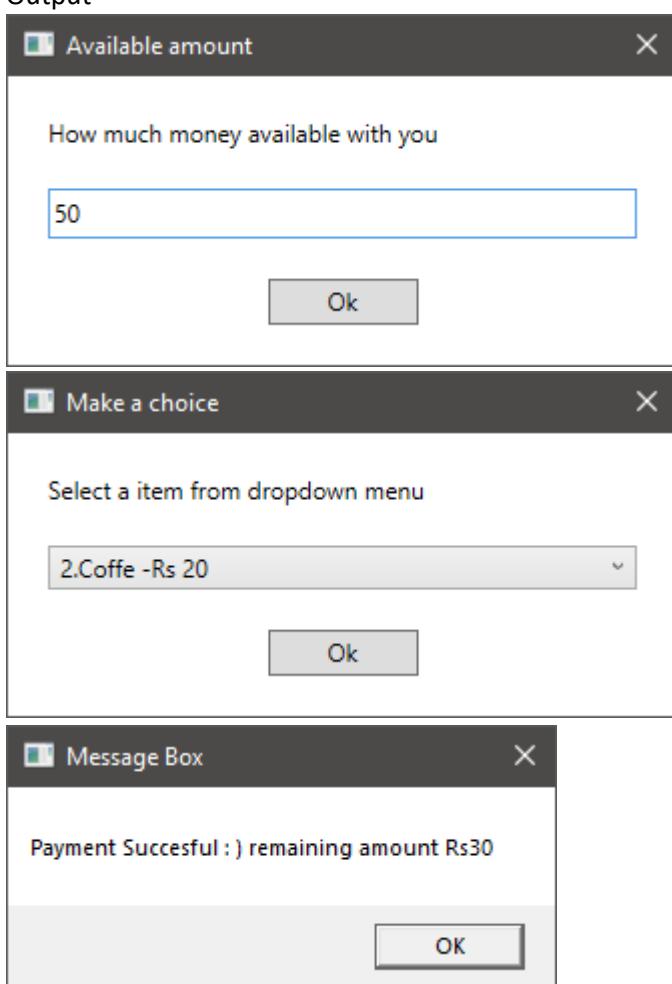


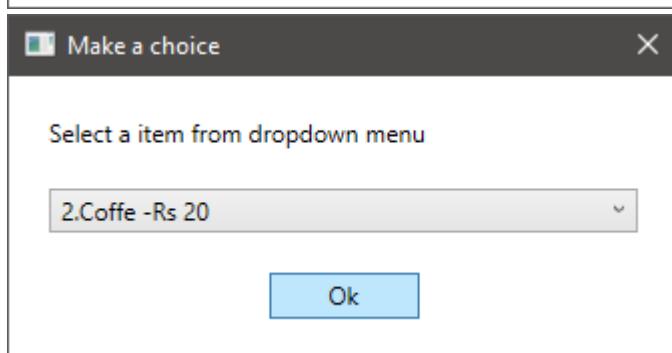
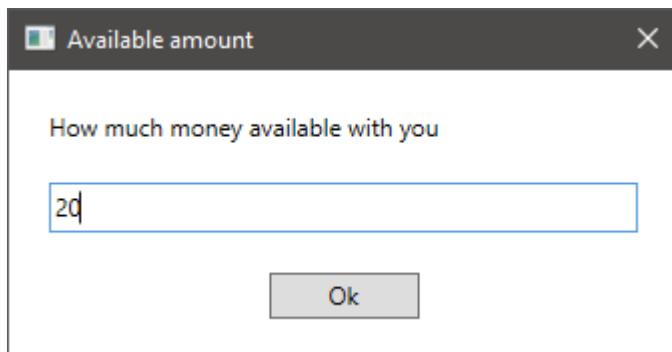
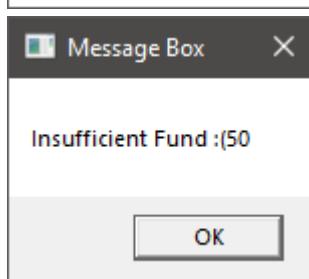
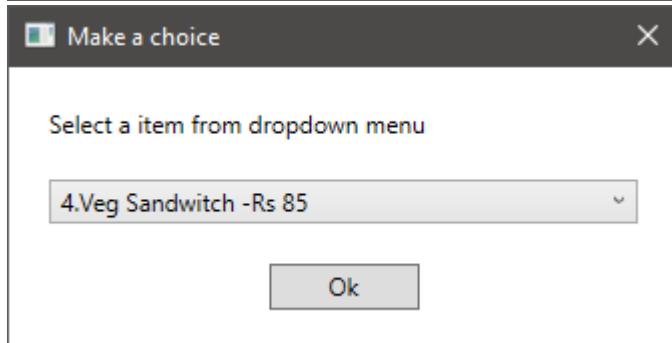
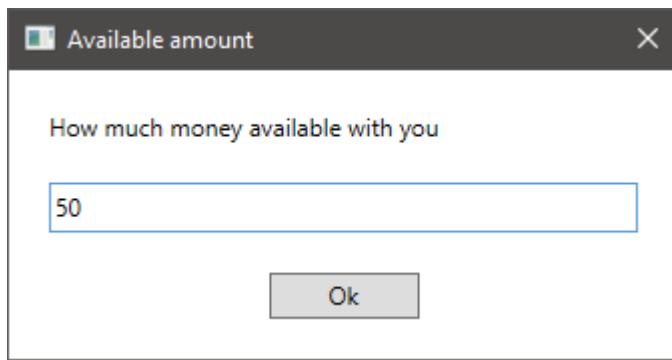
21. Some error in Choice\_State follow the below image  
First create one more Variable and some changes in the Else part



test = productVar.Substring(productVar.Length - 2)  
 productAmt = Convert.ToInt32(test)

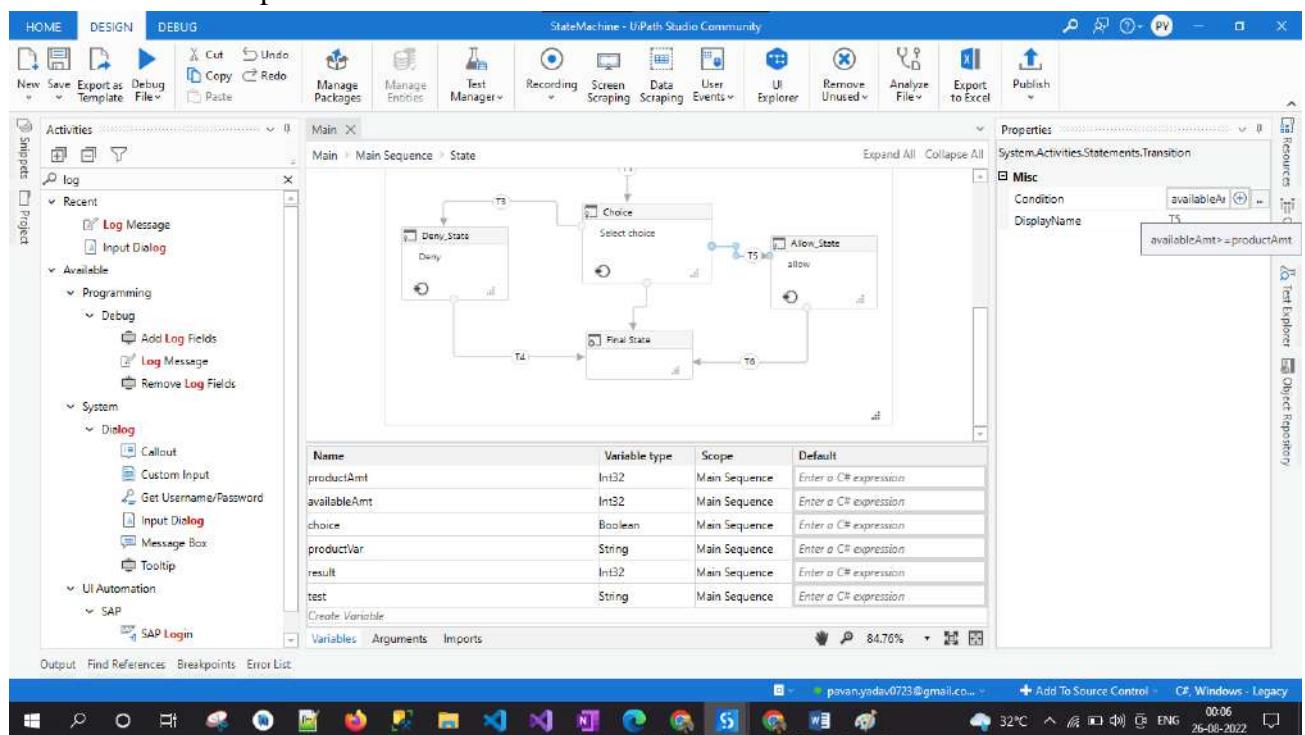
## 22. Output





## Change the Condition of Trigger (T5)

i.e. availableAmt&gt;=productAmt



After the change condition then again Run file the same output is show if availableAmt == productAmt

