

## Practical No: 1

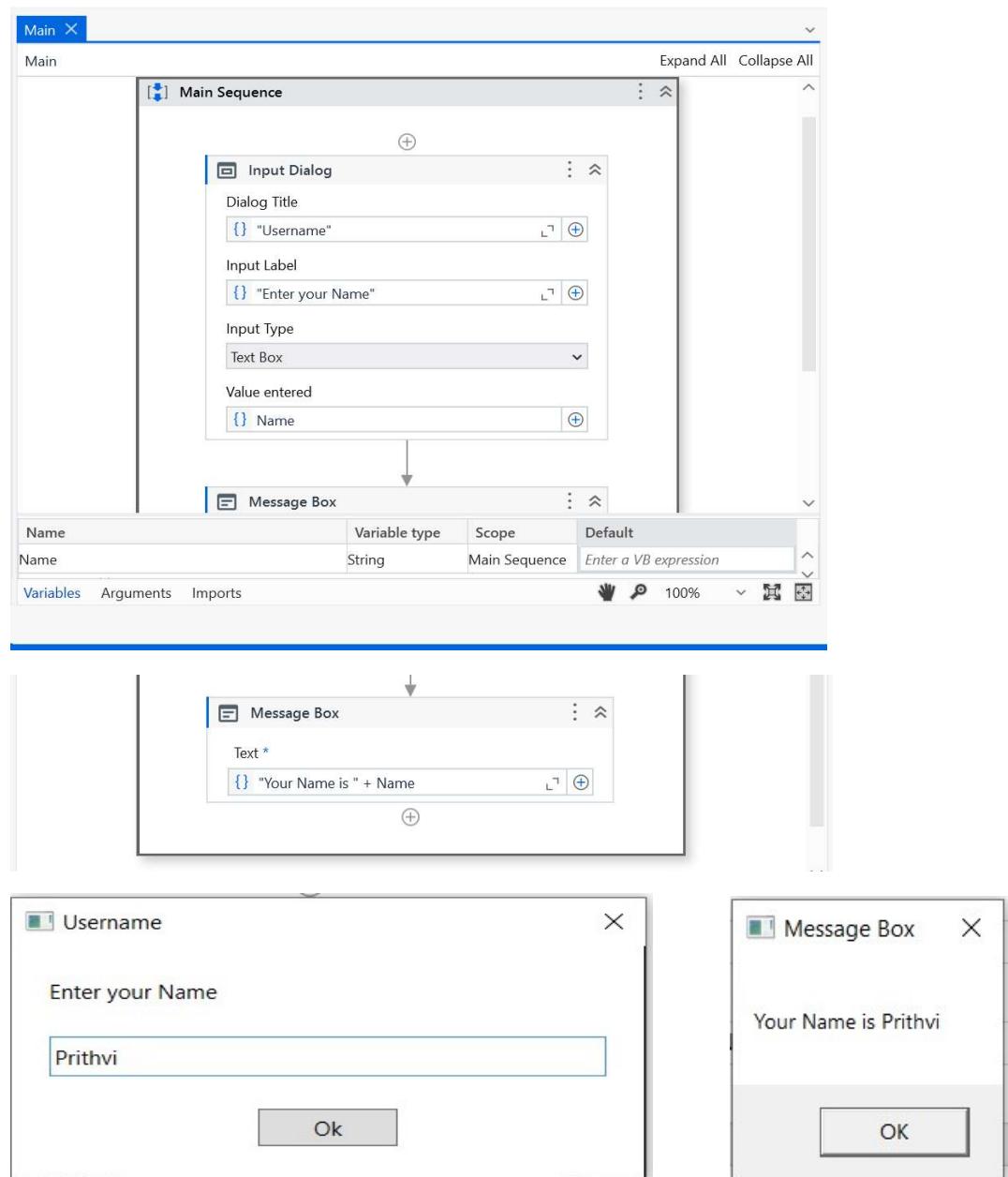
**Aim:** Implement the following:

### A. Create a simple sequence-based project.

**Steps:**

1. Open Project.
2. Select Sequence activity, double click it.
3. Select from activities panel Input dialog and configure it
4. Create a variable Name (string) to hold the output.
5. Select from activities Message Box & configure by tying “Your Name is”+ Name.
6. Run the project.

### Process & Output:

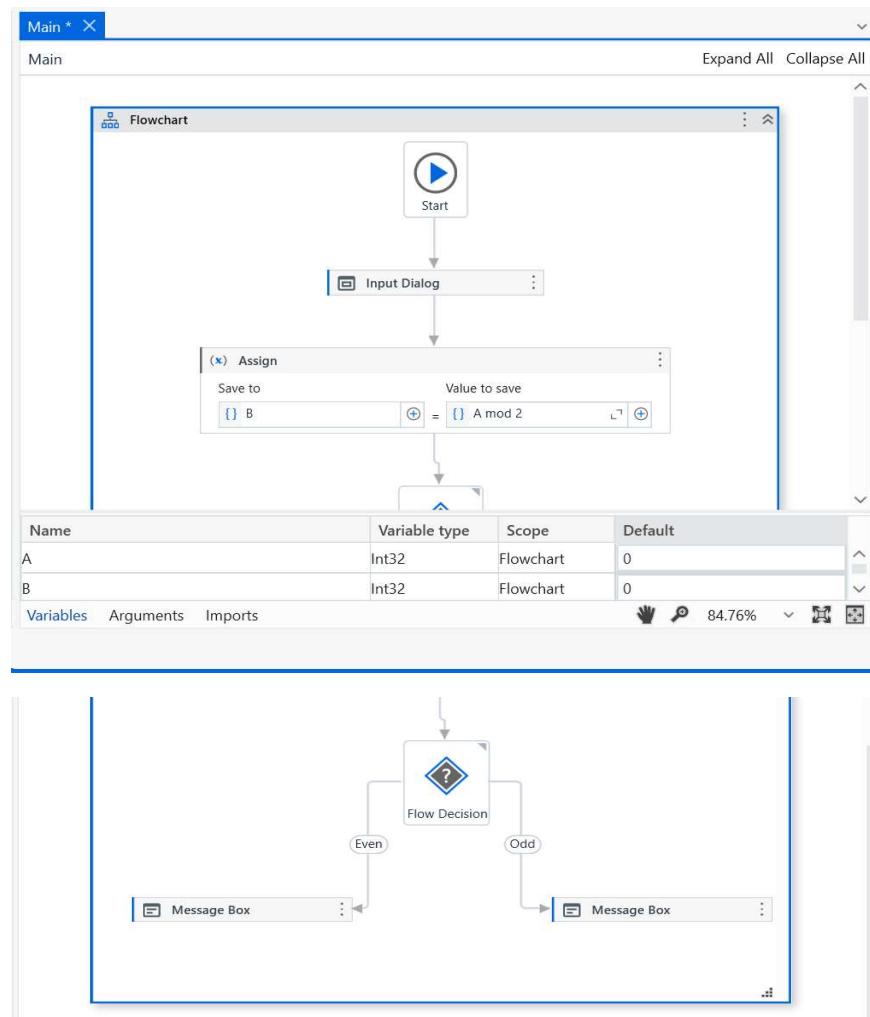


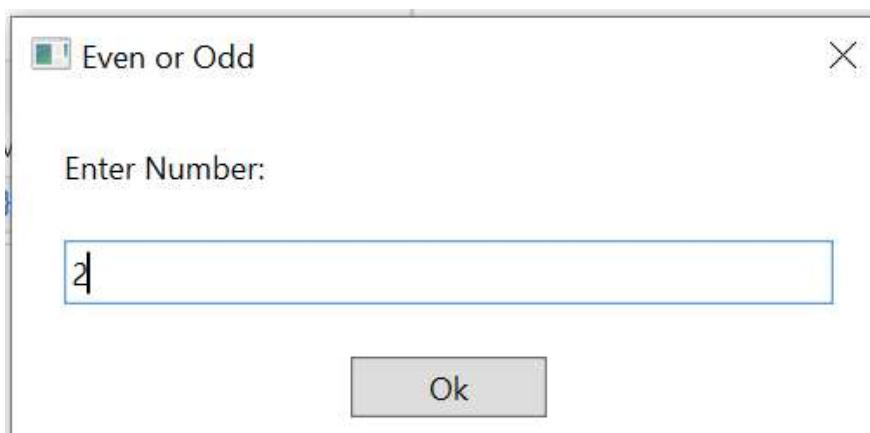
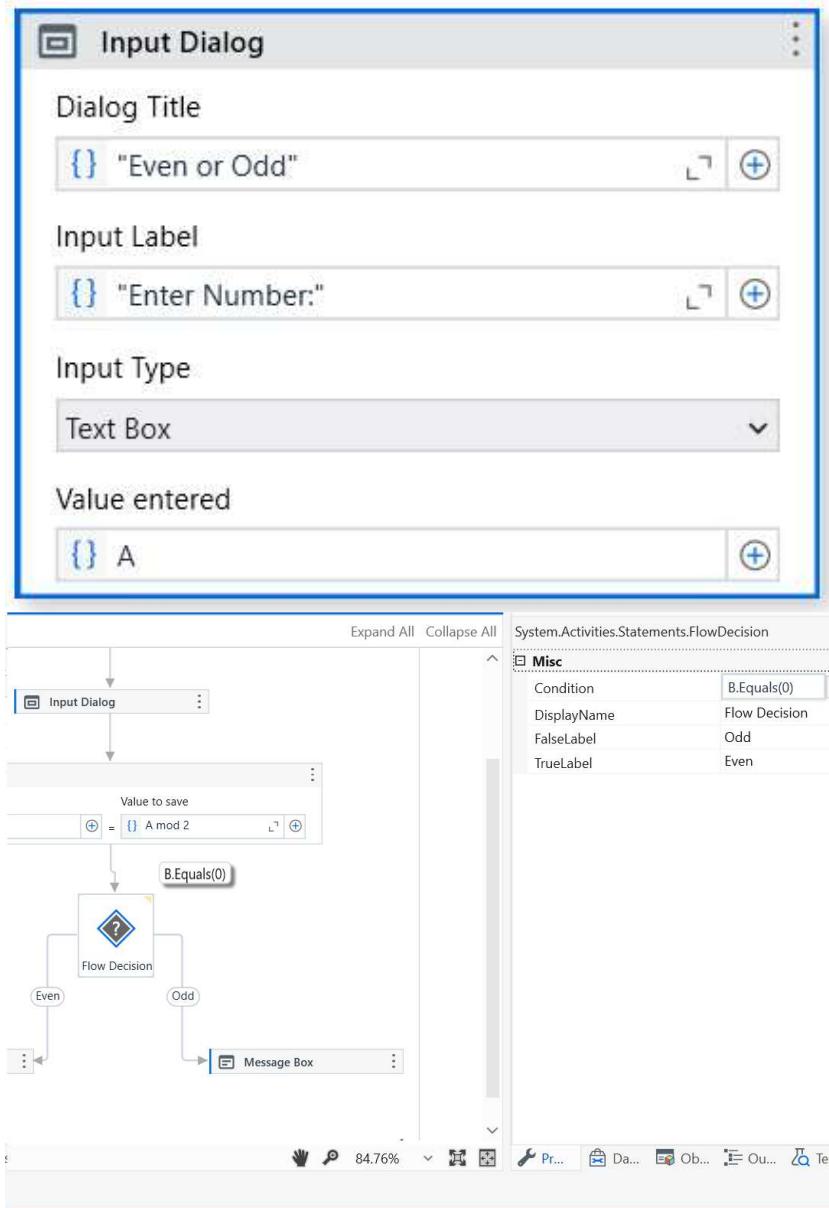
## B. Create a flowchart-based project.

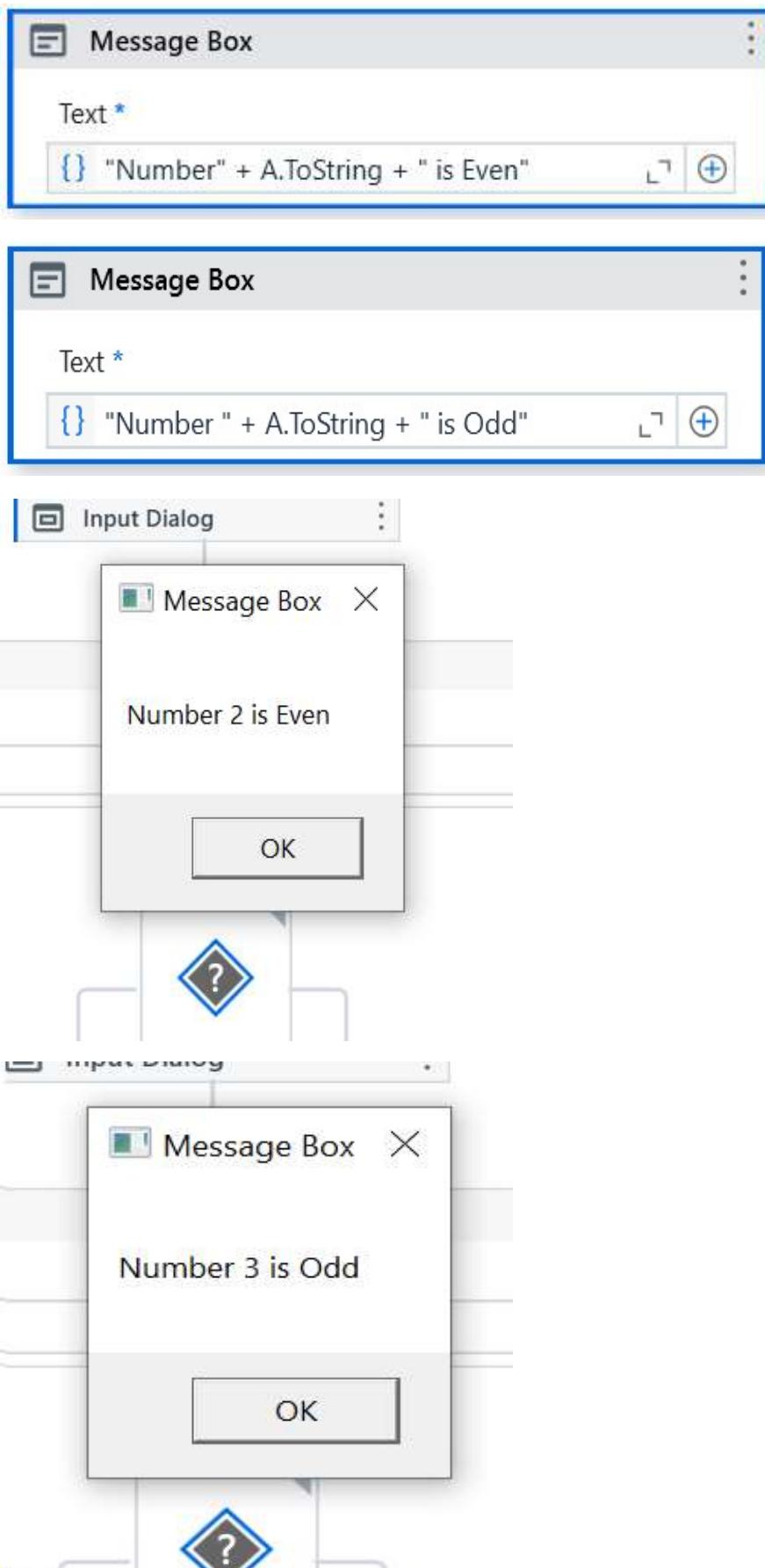
### Steps:

1. Open Project.
2. Select Flowchart activity, double click it.
3. Create two variables A and B (int32).
4. Select from activities panel Input dialog and enter A in Value entered.
5. Select Assign activity and enter “B = A mod 2”.
6. Select from activities panel Flow Decision & type in Condition “B.Equals(0)”.
7. And change False and True labels to Odd and Even.
8. Select two Message box for Odd and Even.
9. And type “Number” + A.ToString “is even.” for even label and “Number” + A.ToString “is odd.” for odd label.
10. Run the project.

### Process & Output:





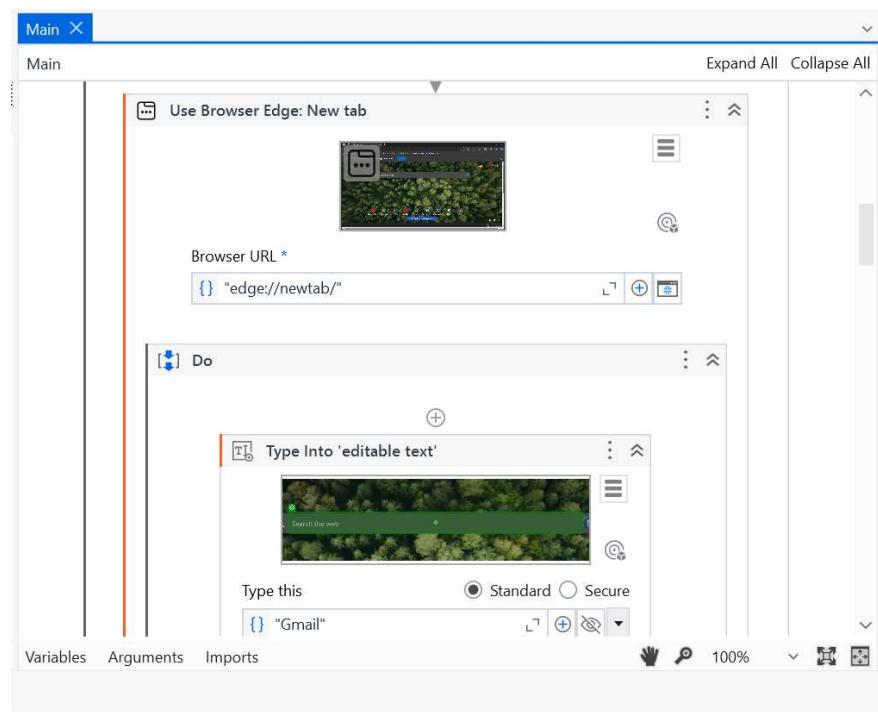


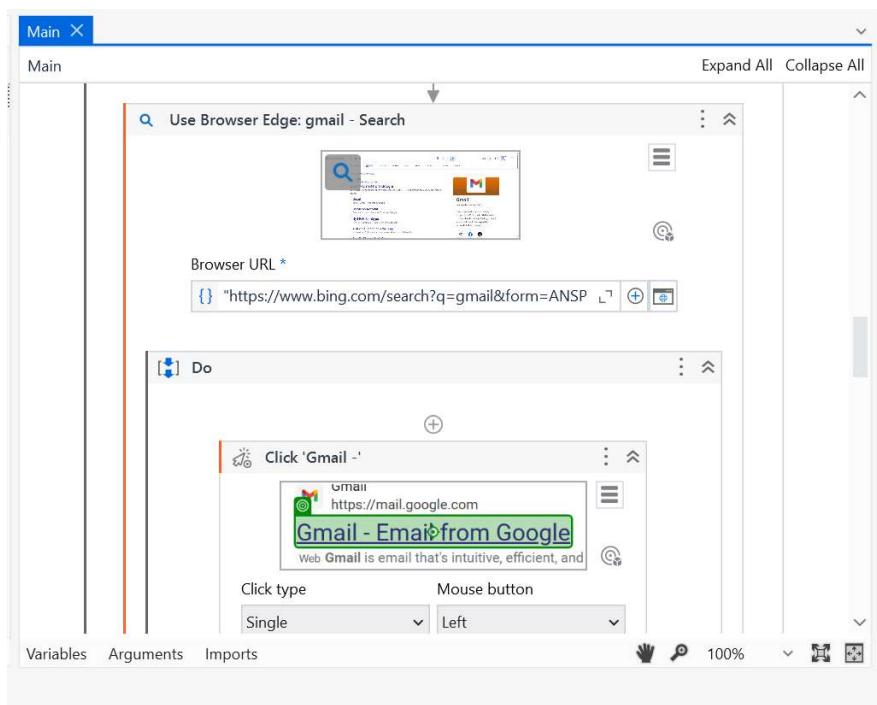
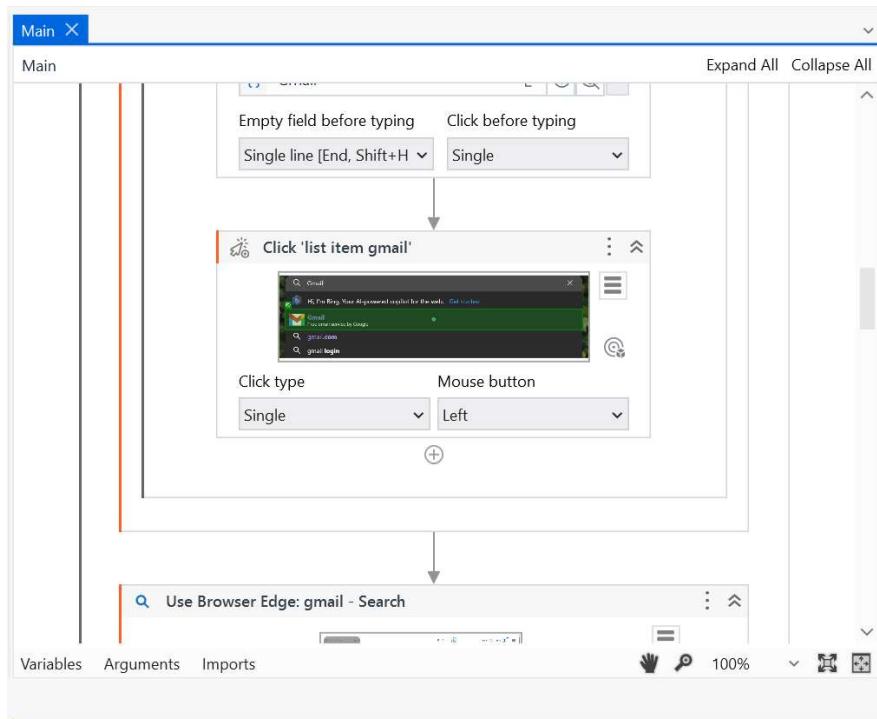
**C. Create an UiPath Robot which can empty a folder in Gmail solely on basis of recording.**

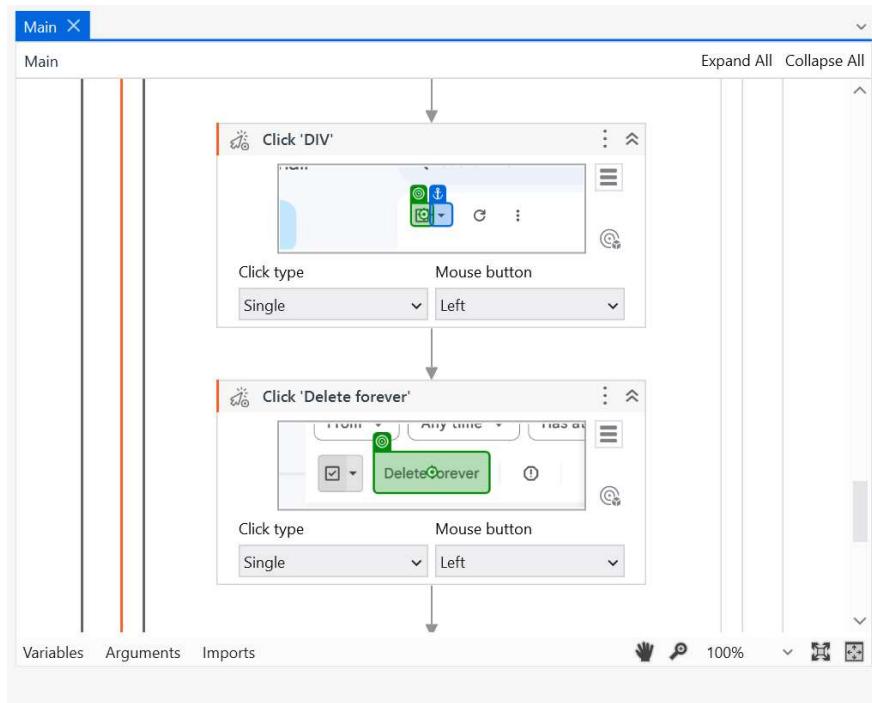
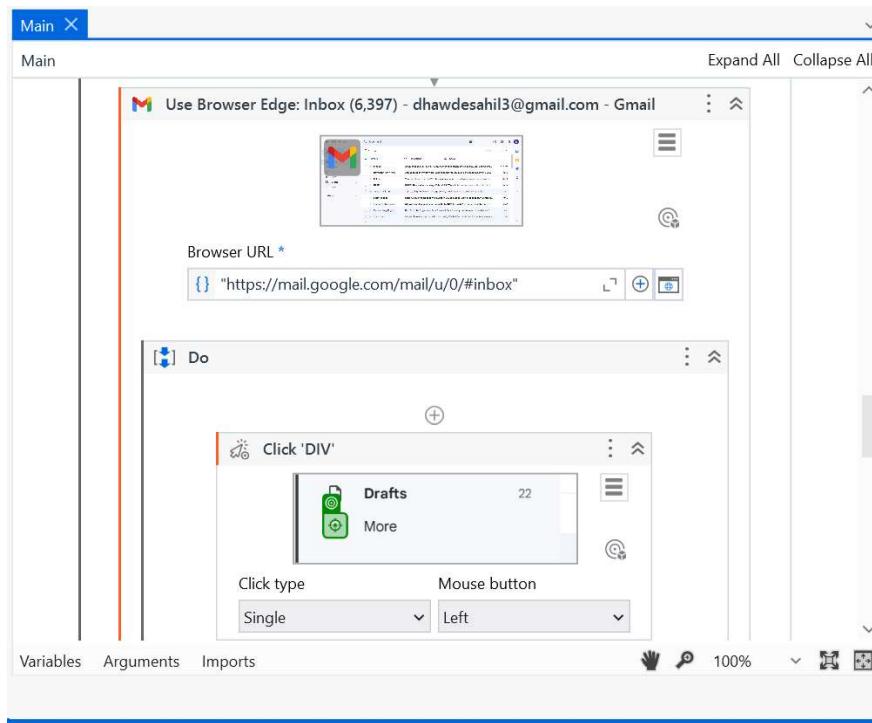
**Steps:**

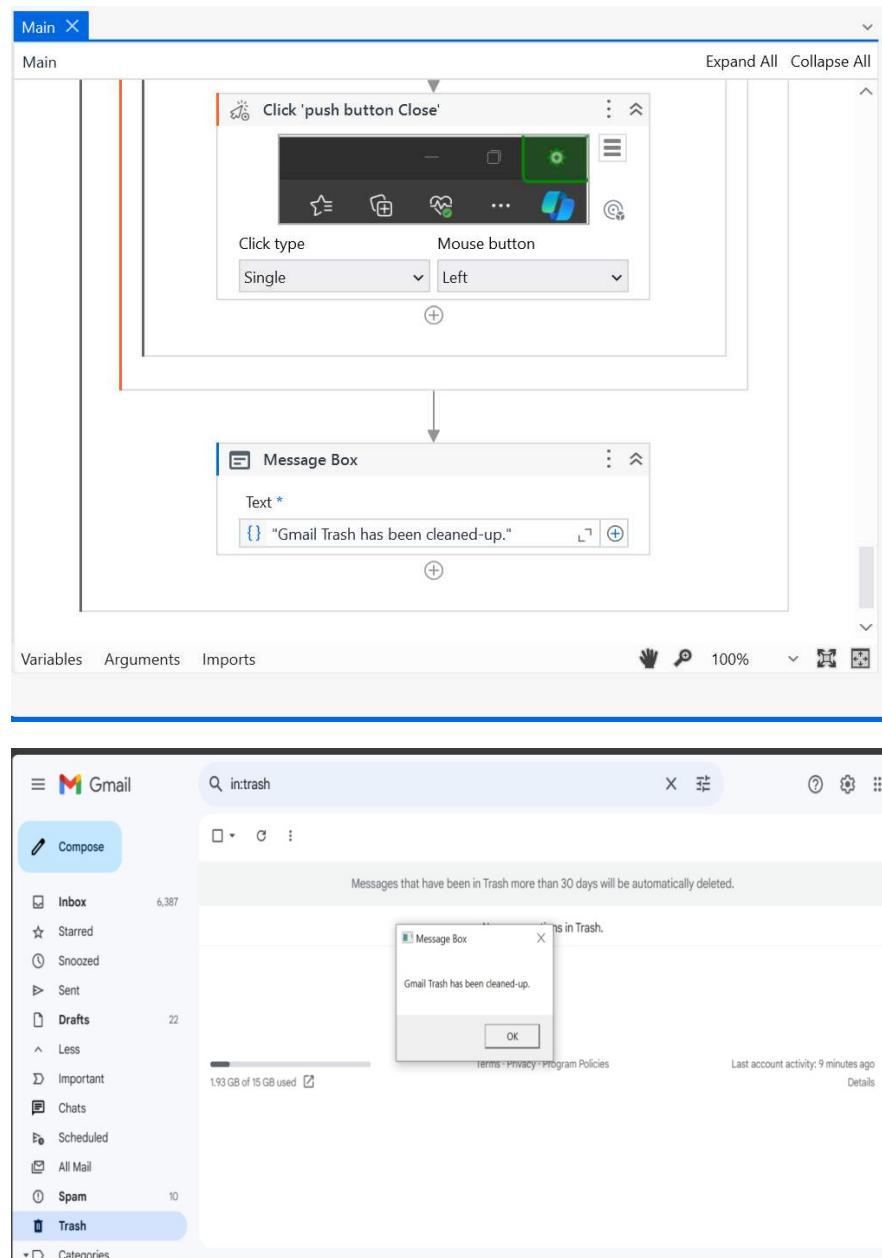
1. Open project.
2. Select Sequence activity.
3. Select App/Web Recorder icon on Ribbon panel of UiPath studio.
4. Select Microsoft Bing icon from task bar and select “Single Click” option.
5. In browser, select search bar with “Single Click” option and select Type Into activity to Type this as “Gmail”.
6. Click “Gmail” on list item.
7. And select first link on browser with “Single Click” options.
8. In Gmail, select Trash that is on left side with “Single Click” options.
9. In Trash, check select all button and select “Delete Forever” button with “Single Click” options.
10. Select close button with “Single Click” options to close the browser.
11. Select from activities panel Message box activity, type “Gmail Trash has been cleaned-up.”
12. Run the project.

**Process & Output:**









## Practical No: 2

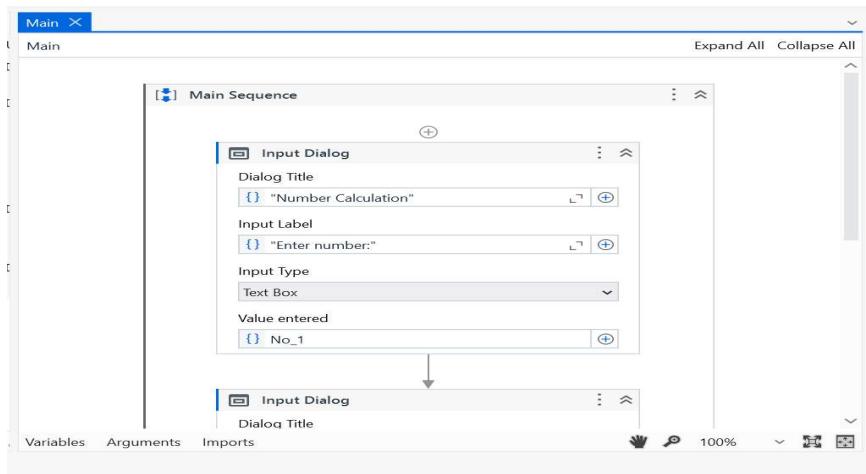
**Aim:** Implement the following:

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

**Steps:**

1. Open Project.
2. Select Sequence activity.
3. Create two integer variables No\_1, No\_2 to hold the output.
4. Select from activities panel two Input dialog and configure it.
5. Select from activities panel Message box.
6. And type  
"Sum of " + No\_1.ToString + " and " + No\_2.ToString + " is " + (No\_1 + No\_2).ToString + vbCrLf +  
"Subtraction of " + No\_1.ToString + " and " + No\_2.ToString + " is " + (No\_1 - No\_2).ToString + vbCrLf +  
"Product of " + No\_1.ToString + " and " + No\_2.ToString + " is " + (No\_1 \* No\_2).ToString + vbCrLf +  
"Division of " + No\_1.ToString + " and " + No\_2.ToString + " is " + (No\_1 / No\_2).ToString".
7. Run the project.

**Process & Output:**



The screenshot displays the configuration and execution of a simple RPA task.

**Main Window:** Shows the "Input Dialog" configuration for a "Number Calculation" dialog. The dialog title is "Number Calculation", the input label is "Enter number:", the input type is "Text Box", and the variable entered is "No\_2". Below this, a table lists variables: No\_1 (Int32, Main Sequence, Default 0) and No\_2 (Int32, Main Sequence, Default 0). A "Create Variable" button is also present.

**Expression Editor:** Shows the expression being built: "Sum of " + No\_1.ToString + " and " + No\_2.ToString + " is " + (No\_1 + No\_2).ToString + vbCrLF + "Subtraction of " + No\_1.ToString + " and " + No\_2.ToString + " is " + (No\_1 - No\_2).ToString + vbCrLF + "Product of " + No\_1.ToString + " and " + No\_2.ToString + " is " + (No\_1 \* No\_2).ToString + vbCrLF + "Division of " + No\_1.ToString + " and " + No\_2.ToString + " is " + (No\_1 / No\_2).ToString

**Message Boxes:** Two instances of the "Number Calculation" message box are shown. Both boxes have the title "Number Calculation" and the instruction "Enter number:". In the first box, the input field contains "6" and the "Ok" button is visible. In the second box, the input field contains "3" and the "Ok" button is visible.

**Result Message Box:** A third message box titled "Number Calculation" displays the results of the calculations: "Sum of 6 and 3 is 9", "Subtraction of 6 and 3 is 3", "Product of 6 and 3 is 18", and "Division of 6 and 3 is 2". An "OK" button is at the bottom.

**B. Create an automation UiPath project using different types of variables (number, datetime, Boolean)**

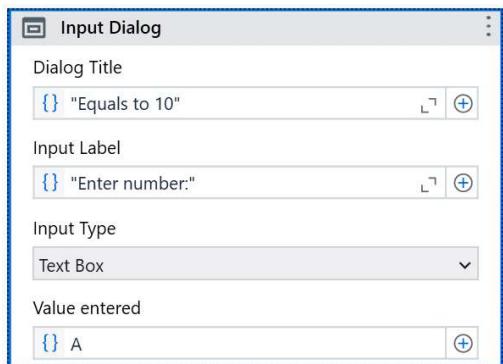
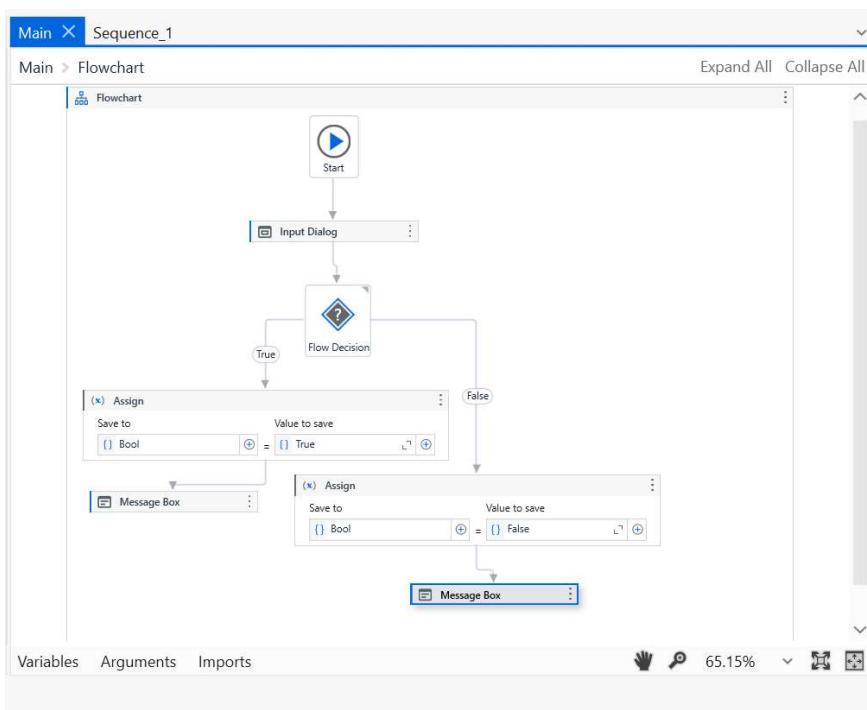
**i. Boolean and Number**

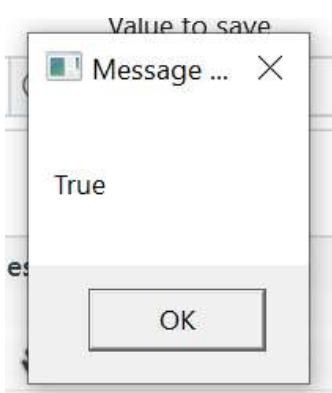
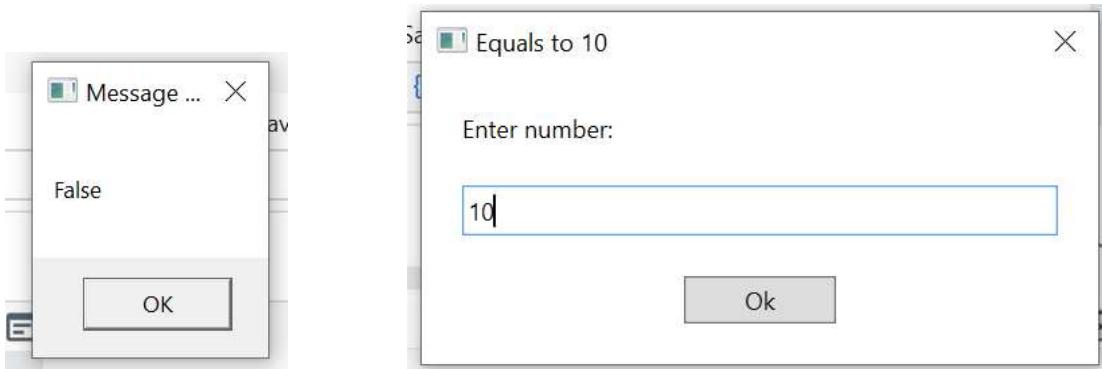
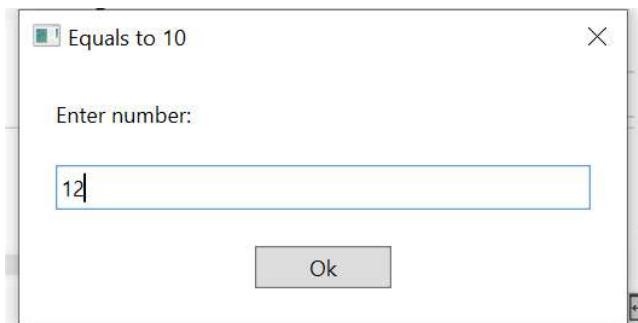
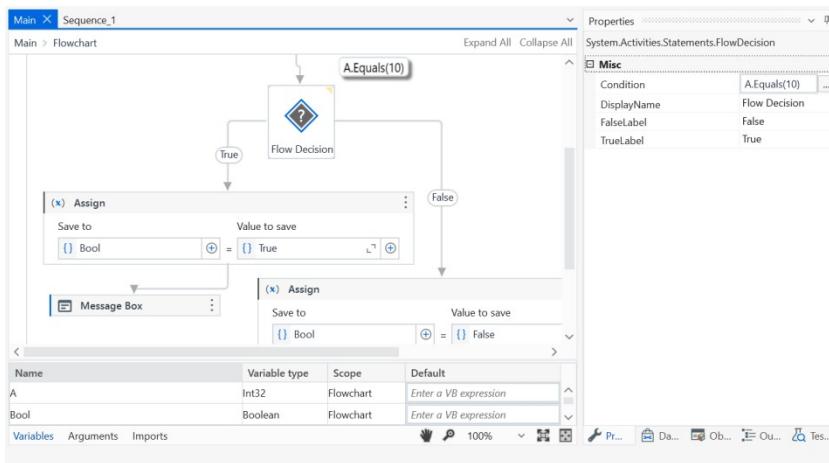
**Steps:**

1. Open Project.
2. Select Flowchart activity, double click it.
3. Create a two variables A (int32) and Bool (Boolean).
4. Select from activities panel Input dialog and enter A in Value entered.
5. Select from activities panel Flow Decision & type in Condition “A.Equals(10)”.
6. Select two Assign activity, one for True and other for False.
7. Assign bool = True for True side and Assign bool = False for False side
8. Select two Message box activity for True and False.
9. And type “bool” for both True label and False label.

**10.** Run the project.

**Process & Output:**



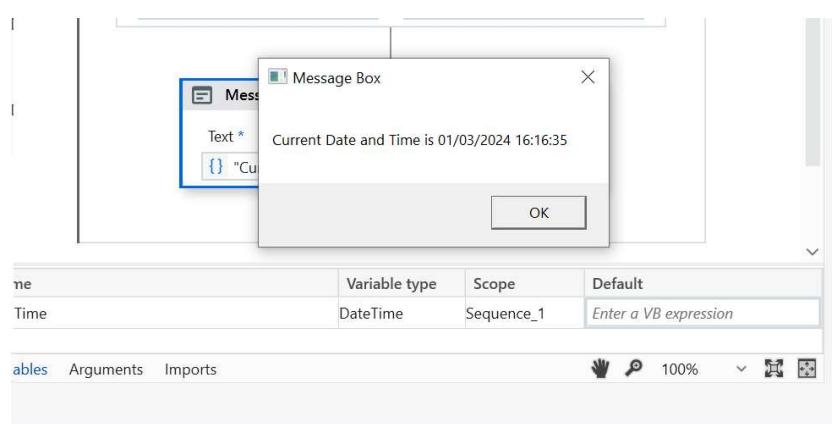
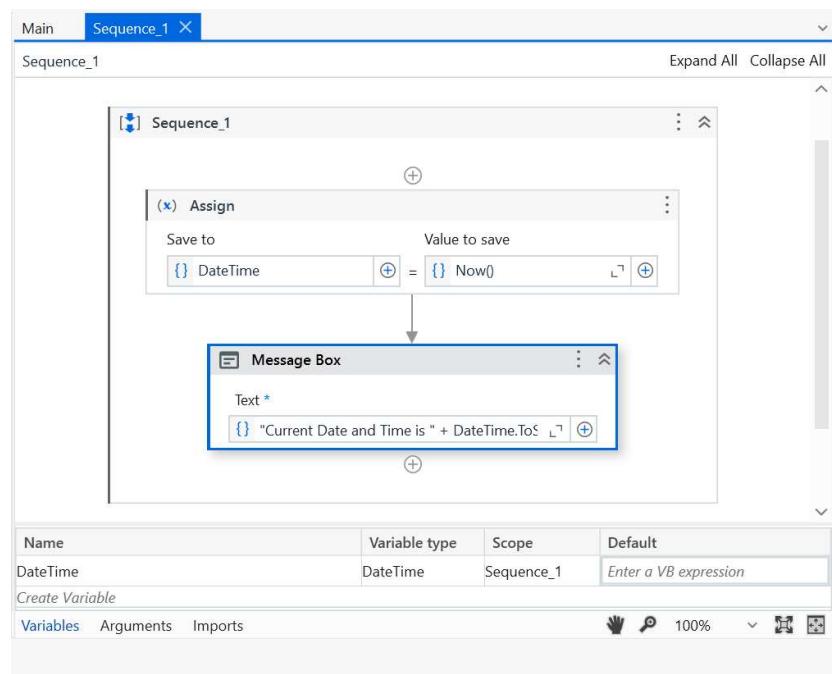


## **ii. Datetime**

### **Steps:**

1. Open Project.
2. Select Sequence activity.
3. Create a variables DateTime of DateTime type.
4. Select Assign activity, assign DateTime = Now().
5. Select from activities panel Message box activity and type “Current Date and Time is ” + DateTime.ToString”.
6. Run the project.

### **Process & Output:**



## Practical No: 3

**Aim:** Implement the following:

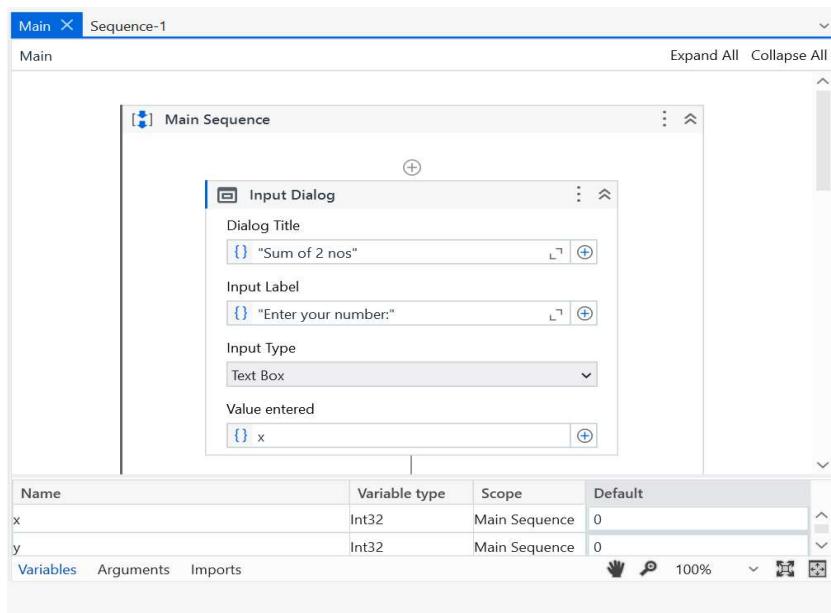
**A. Create an automation UiPath Project using decision statements.**

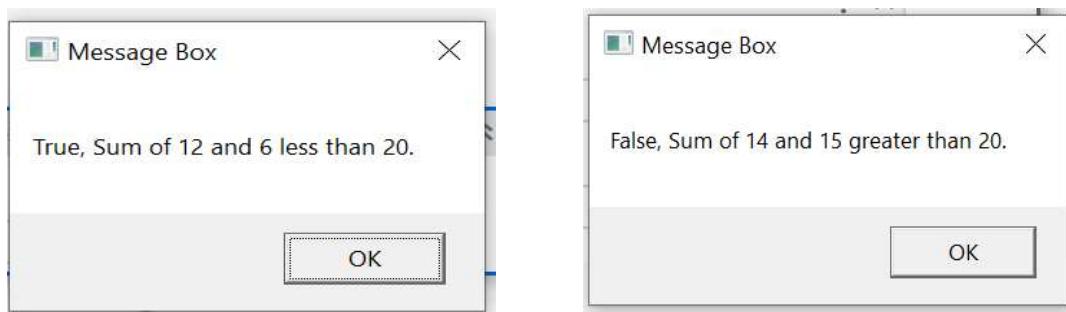
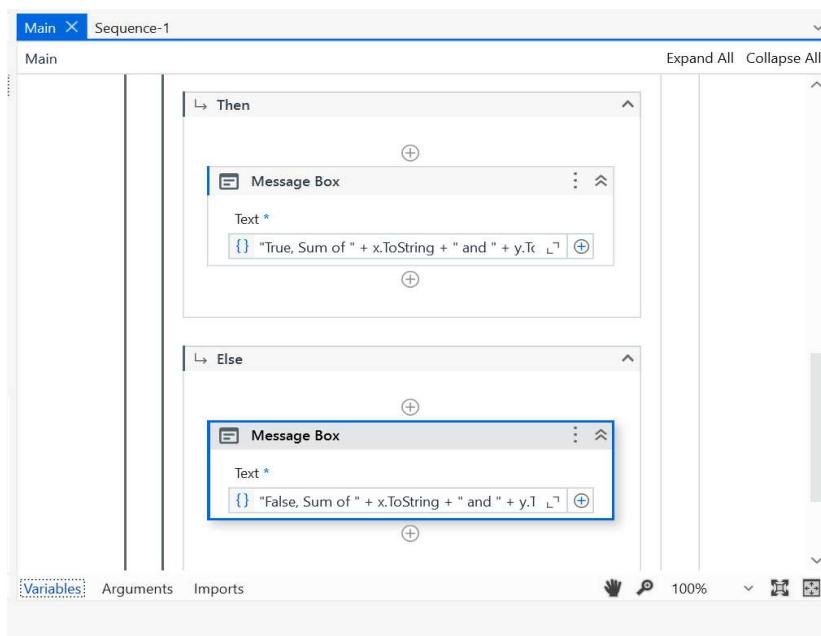
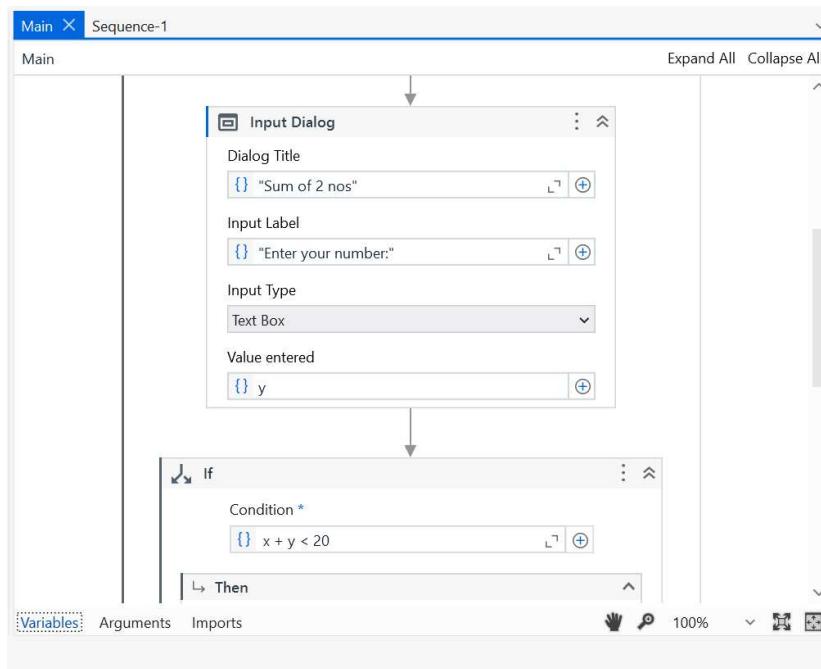
**i. If statement**

**Steps:**

1. Open Project.
2. Select Sequence activity.
3. Select from activities panel two Input dialog and configure it.
4. Create two integer variables x, y to hold the output.
5. Select from activities panel If activity & in condition type  $x + y < 20$ .
6. Drag n Drop a Write line activity to "Then" part & enter text "True, Sum " + x.ToString " and "+ y.ToString + "less than 20".
7. Drag n Drop a Write line activity to "Else" part & enter text "False, Sum " + x.ToString " and "+ y.ToString + " greater than 20".
8. Run the project.

**Process & Output:**



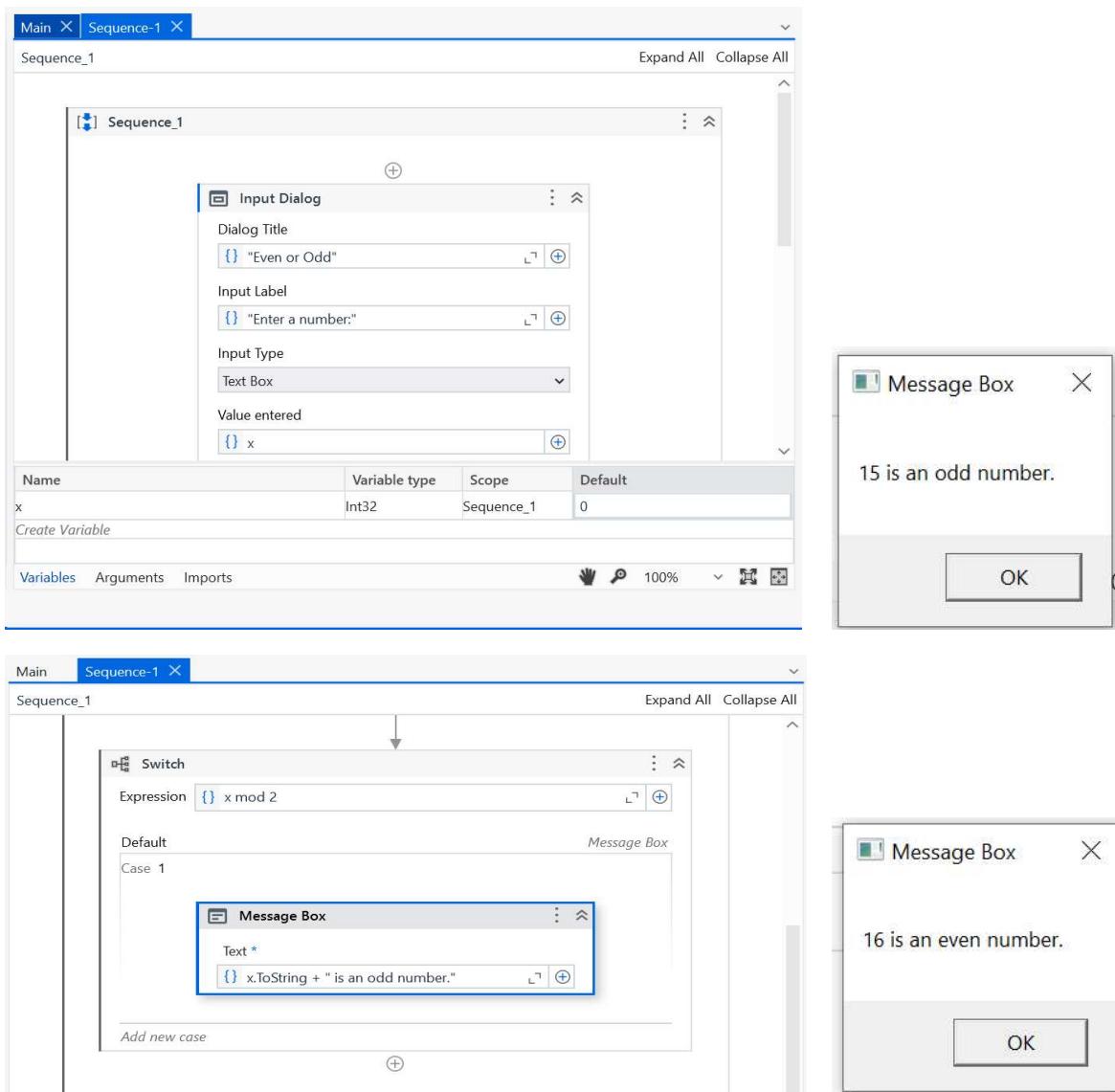


## ii. Switch statement

### Steps:

1. Open Project.
2. Select Sequence activity.
3. Select from activities panel, input dialog, and configure it.
4. Create one integer variables x, to hold the output.
5. Select from activities panel Switch activity.
6. In Expression type "x Mod 2".
7. In Case 0 (default case) Drag n Drop a message Box activity & enter text "x.toString + is an even number".
8. Add Case, In Case 1 Drag n Drop a message Box activity & enter text "x.toString + is an Odd number".
9. Run the project.

### Process & Output:



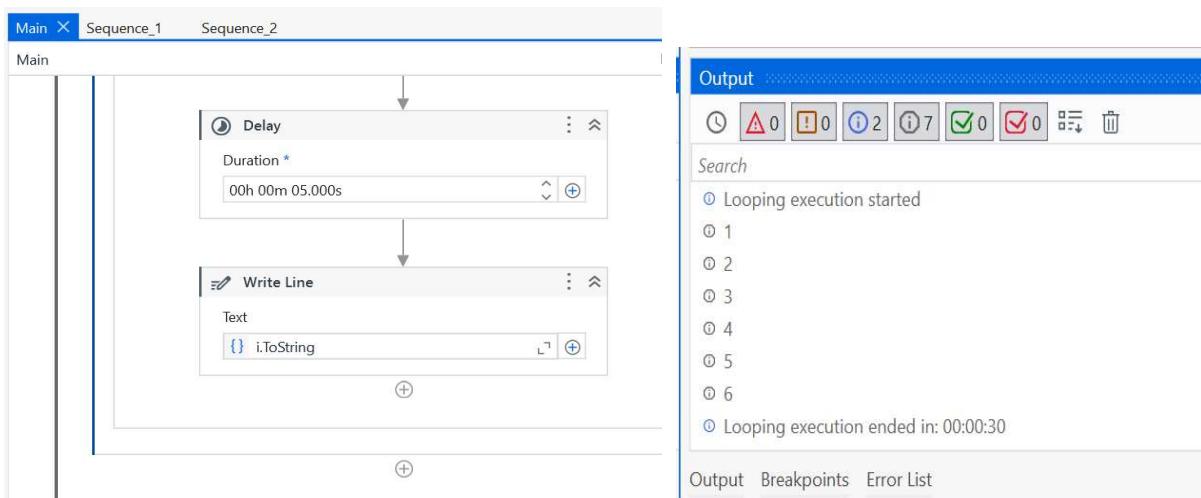
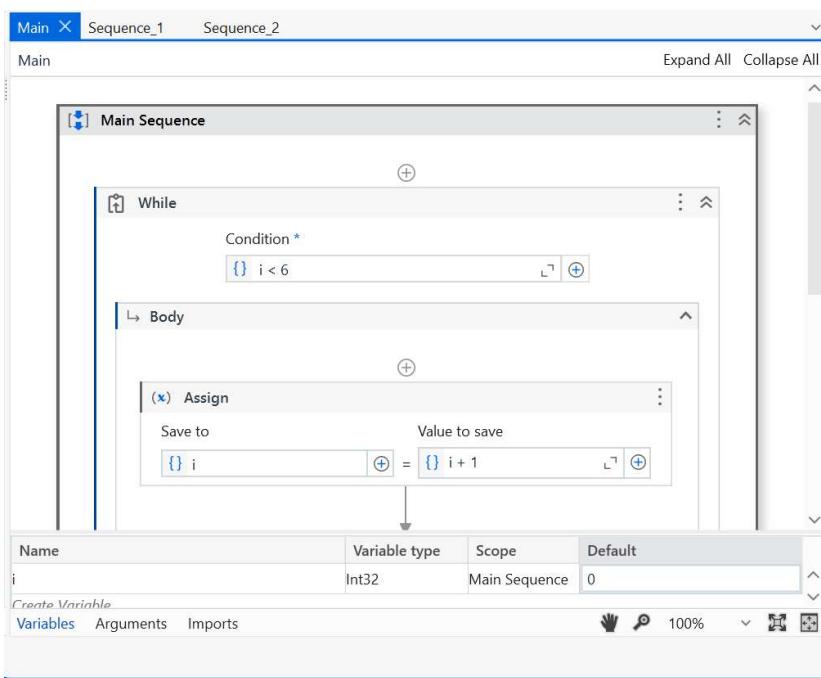
## B. Create an automation UiPath Project using looping statements.

### i. While loop

#### Steps:

1. Open Project.
2. Select the Sequence activity.
3. Create a variable i (int32).
4. Create and assign variable i = 0.
5. Select While activity.
6. In condition type "i < 6"
7. Inside the body of While, select the Assign activity & enter text "i = i+1"
8. Then select Delay activity to delay the output of write line.
9. Now select Write line activity and enter text "i.ToString".
10. Run the project.

#### Process & Output:

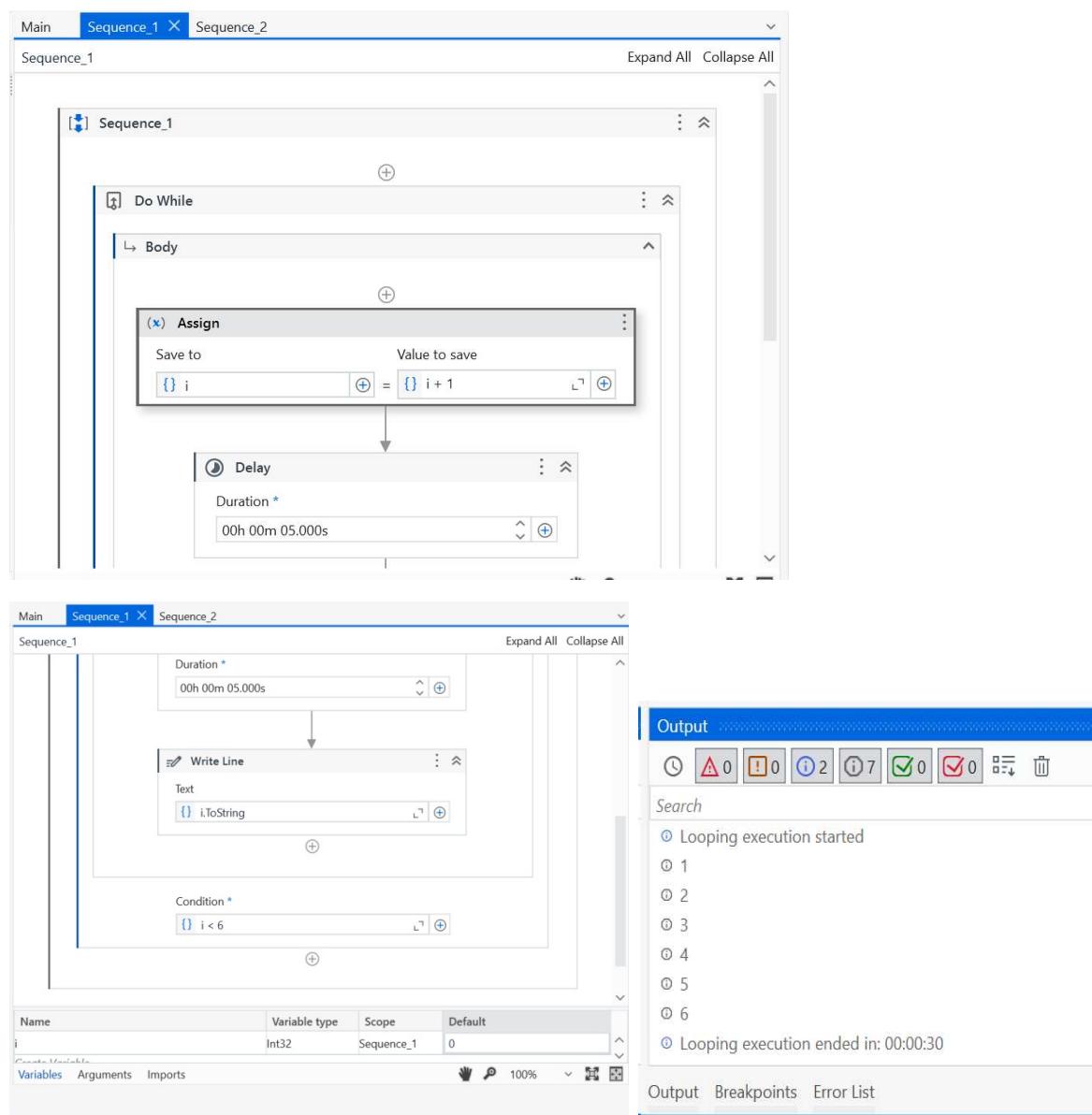


## ii. Do while loop

### Steps:

1. Open Project.
2. Select the Sequence activity.
3. Create a variable i (int32).
4. Create and assign variable i = 0.
5. Select Do While activity.
6. Inside the body of Do while, select the Assign activity & enter text "i = i+1"
7. Then select Delay activity to delay the output of write line.
8. Now select Write line activity and enter text "i.ToString".
9. In condition type "i < 1"
10. Run the project.

### Process & Output:

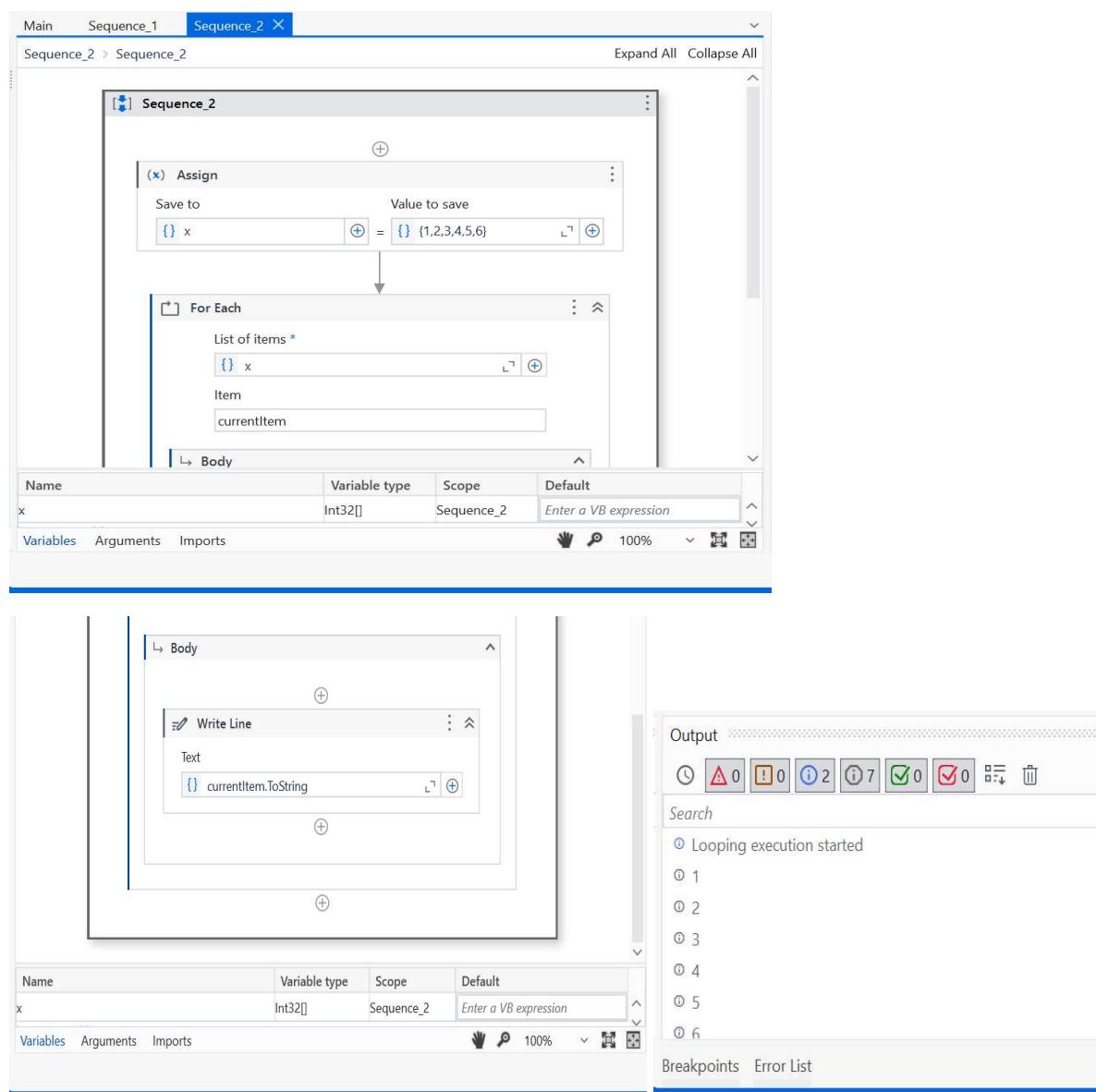


### **iii. For each loop**

**Steps:**

1. Open Project.
2. Select the Sequence activity.
3. Create two variables x (array int32).
4. Select Assign activity & set  $x = \{1,2,3,4,5,6\}$ .
5. Select For Each activity.
6. Set values of List of items as "x".
7. Set values of Item as "currentItem".
8. Inside the Body of For Each.
9. Select the Write line activity & enter text "currentItem.ToString".
10. Run the project.

**Process & Output:**



## Practical No: 4

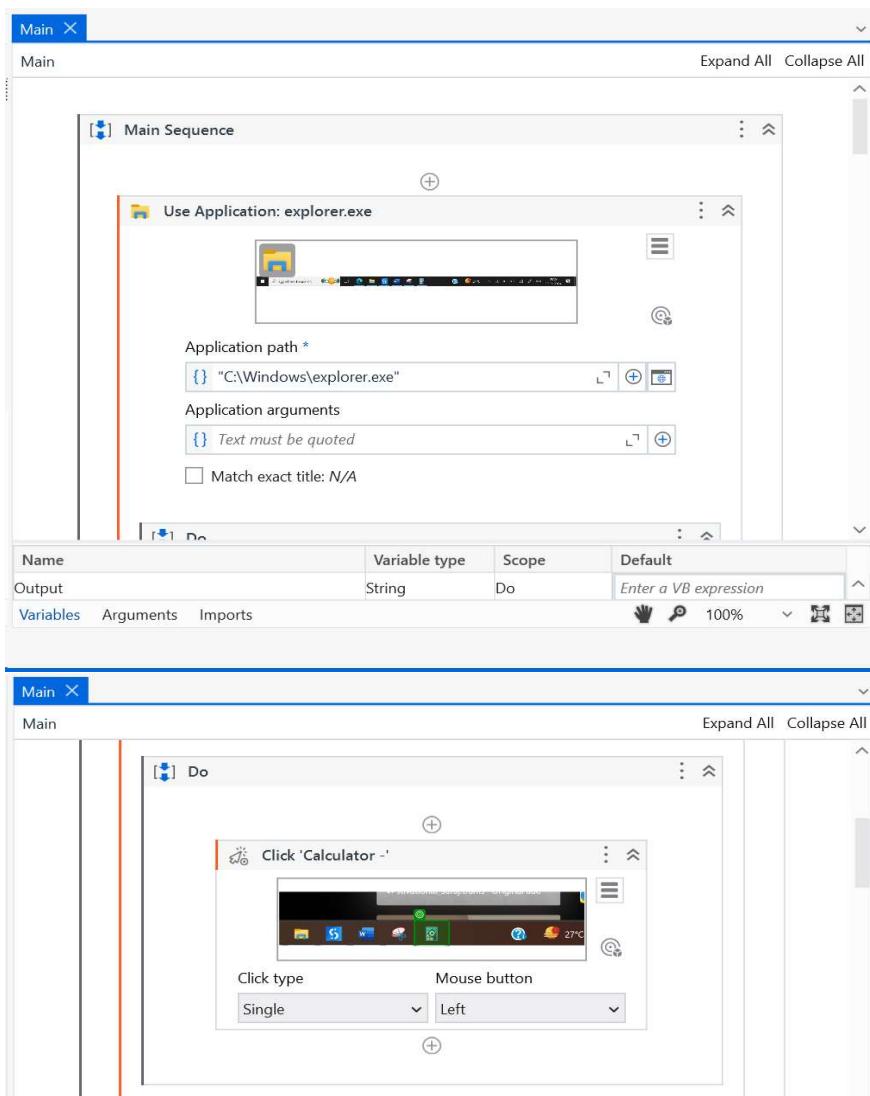
**Aim:** Implement the following:

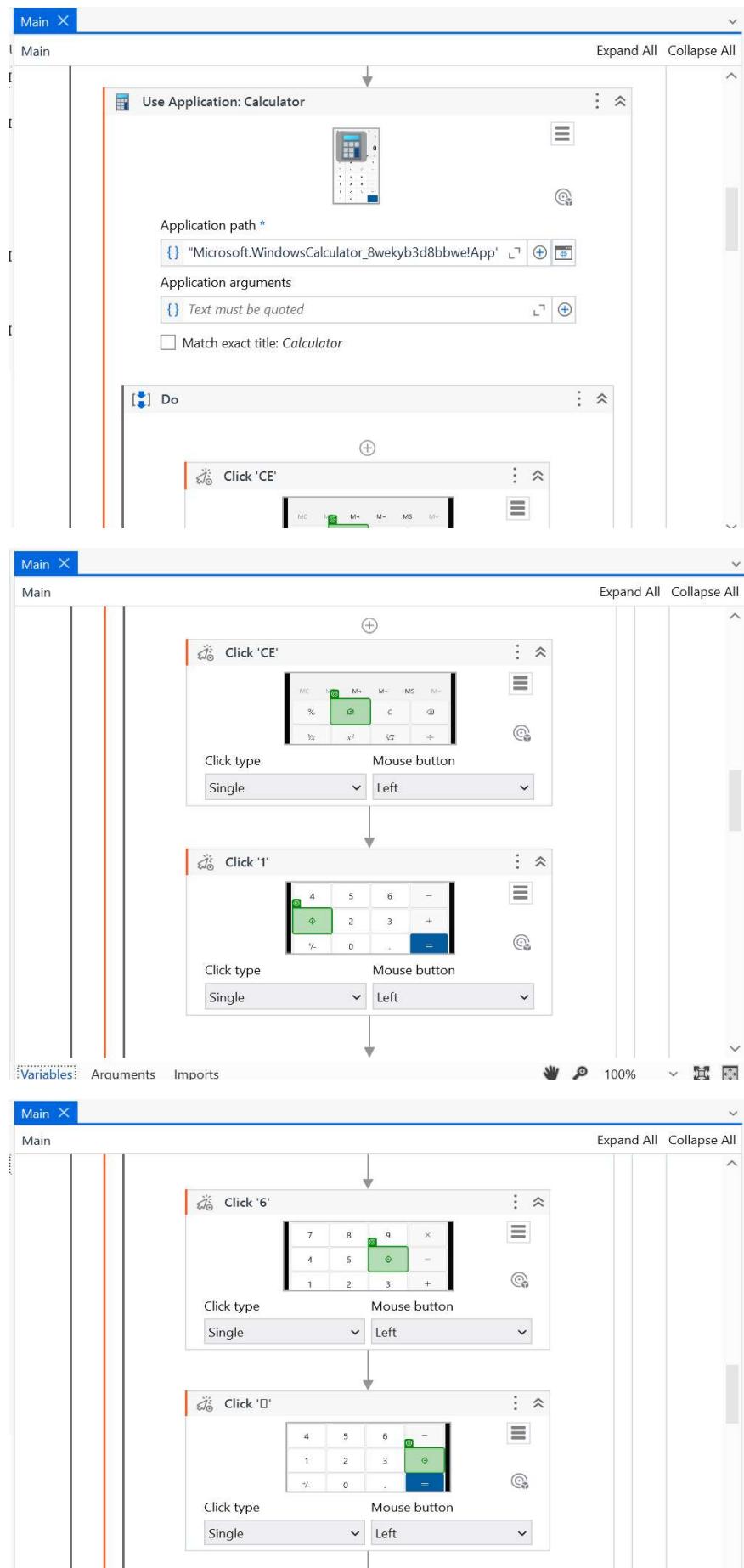
**A. Automate any process using basic recording.**

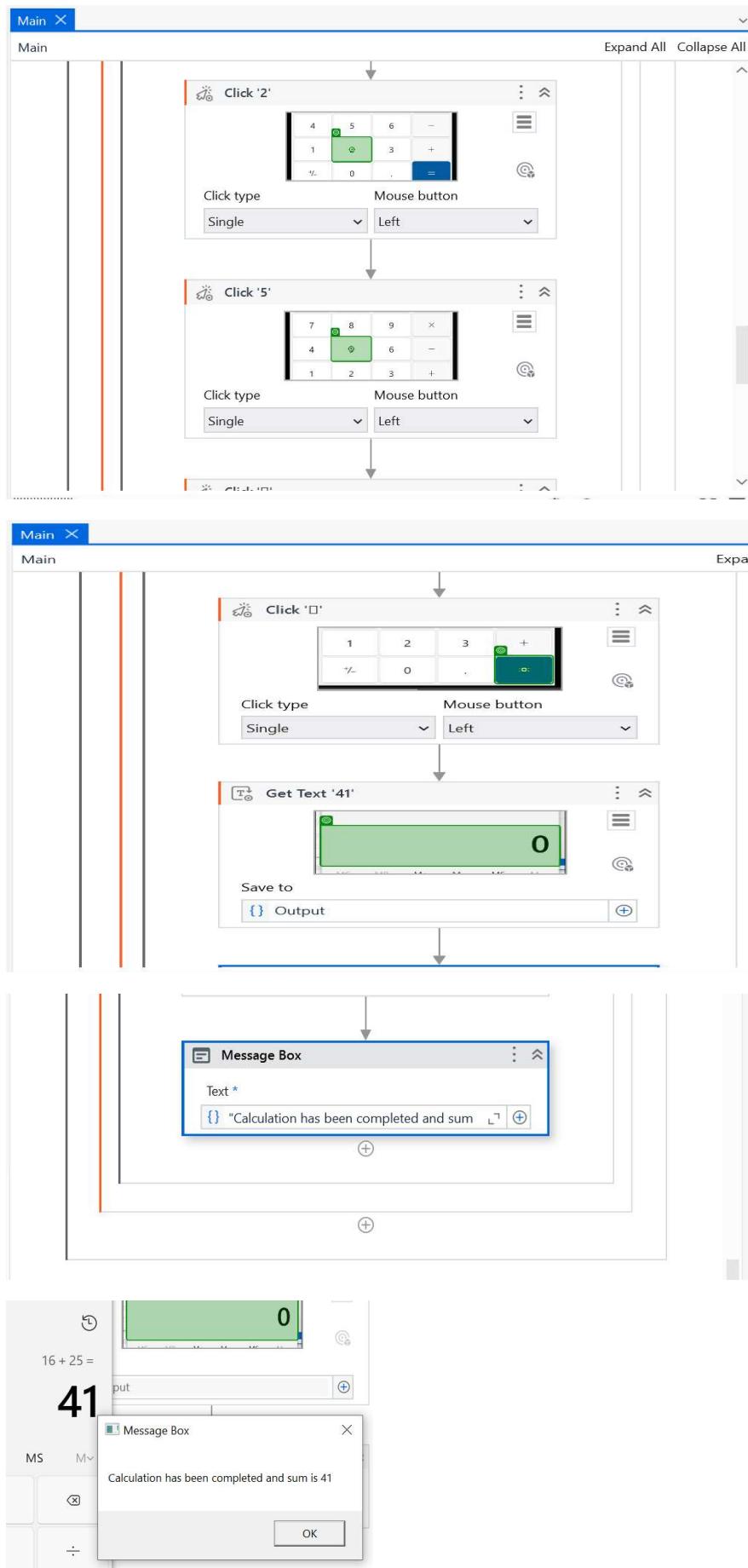
**Steps:**

1. Open project.
2. Select Sequence activity.
3. Select App/Web Recorder icon on Ribbon panel of Uipath studio.
4. Select Calculator icon from task bar and select “Single Click” option.
5. In calculator, select number to calculate with “Single Click” option.
6. Select output display window of calculator and select “Get Text” option.
7. In Get Text activity, save to as “Output.”
8. Select from activities panel Message box activity, type “Calculation has been completed and sum is ” + Output.”
9. Run the project.

**Process & Output:**





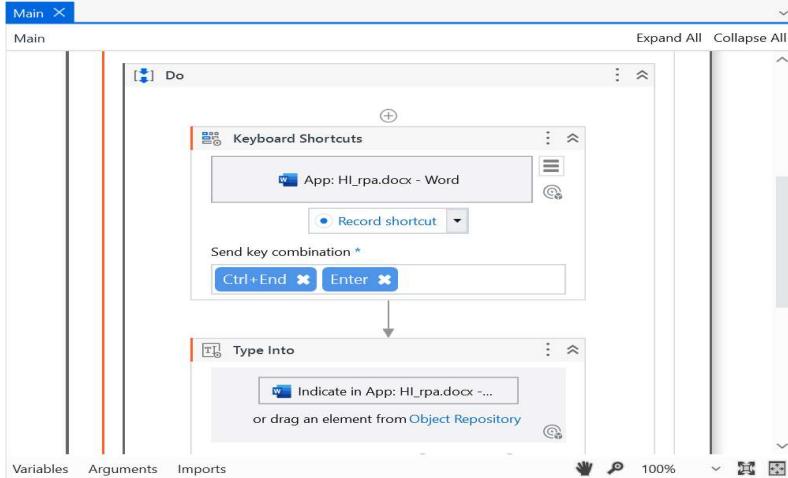
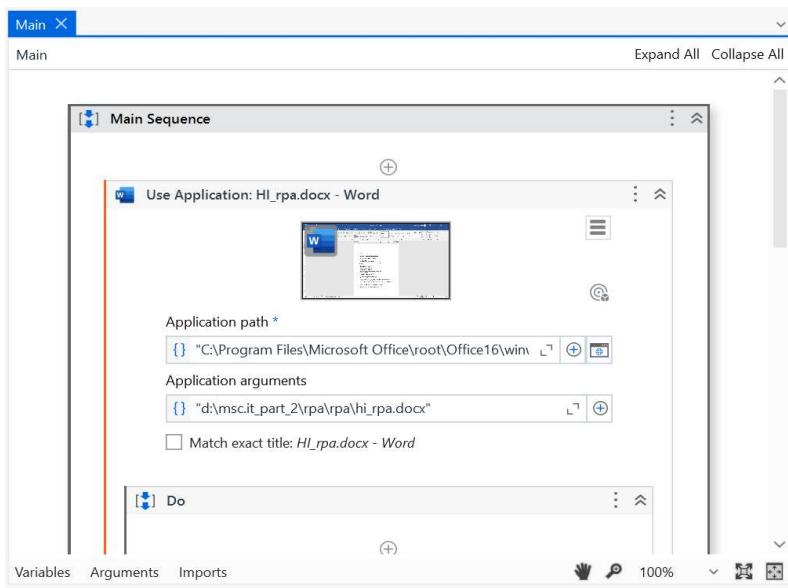


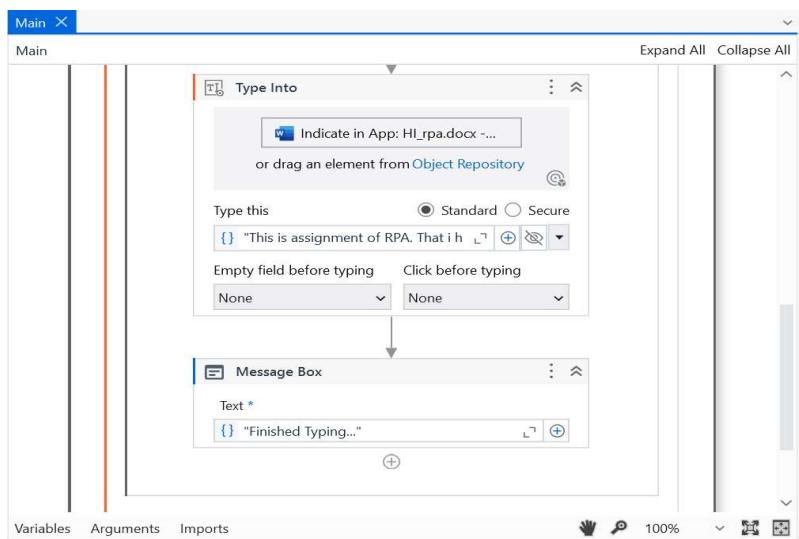
## **B. Automate any process using desktop recording.**

### **Steps:**

1. Open project.
2. Select Sequence activity.
3. Select from activities panel Use Application/Browser activity, and indicate the word file.
4. In Do block, select from activities panel Key Shortcut activity and record shortcut as "Clt + end and Enter" from Keyboard.
5. Select from activities panel Type into activity.
6. In Type this of Type into enter "This is assignment of RPA. That i have completed. ".
7. Select from activities panel Message box activity, type "Finished Typing..."
8. Run the project.

### **Process & Output:**



A screenshot of a Microsoft Word document titled 'HI\_rpa.docx'. The document contains the following text:

3. Explain Recorder in UiPath with respect to the following points:  
a. What is Task Recorder?  
b. Explain Manual & Automatic Recording  
c. What are Recordable & non-recordable actions?

Unit 2 Ch 3: Sequence, Flowchart, and Control Flow

1. What are Sequence & Flowcharts? Explain.
2. What are activities in UiPath? Give examples.
3. What is extracting a workflow in UiPath? Explain with an example of how to build and extract a workflow in UiPath.
4. What is control flow in UiPath Studio?

Unit 2 Ch 4: Data Manipulation

1. What is data scraping? How is a data example?
3. Explain the difference in Write Range & Append activities in UiPath.

This is assignment of RPA. That I have completed.

A 'Message Box' activity is overlaid on the document, displaying the message "Finished Typing..." with an 'OK' button. The Word ribbon is visible at the top, and the status bar shows 'Sahil'.

### **C. Automate any process using web recording.**

#### **Steps:**

1. Open project.
2. Select Sequence activity.
3. Select from activities panel Use Application/Browser activity, and indicate the website of collage.
4. Select Table extraction icon on Ribbon panel of UiPath studio.
5. Select elements on the website to be added as columns in Data Table.
6. Preview data table, make change as per your choice and save it.
7. Select from activities panel Write Range Workbook activity, and give the excel file name, sheet name and cell value as “A1” to write Data Table.
8. Give the content as “ExtractDataTable”.
9. Select Message box and type “Extraction of Data Table has been completed.”.
10. Run the project.

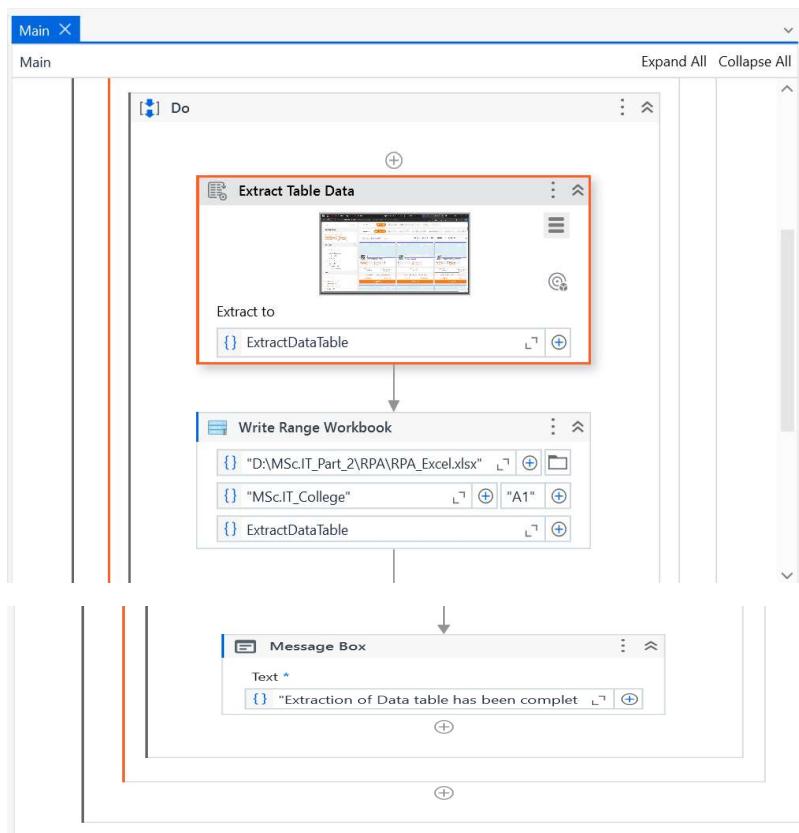
#### **Process & Output:**

The top part of the image shows the UiPath Studio interface. A 'Main Sequence' is open, containing a 'Use Application/Browser' activity. This activity has a 'Browser URL' set to "https://collegedunia.com/msc/mumbai-colleges?custom\_params=%\$view%3Agrid%5D". Below it is an 'Extract Table Data' activity. The bottom part of the image is a screenshot of a web browser window showing a table titled 'Table Extraction'. The table lists various colleges with columns for College Name, Fees, Location, University, Rating, and College Logo Src. The table includes images of the college buildings and their respective ratings and fees.

# M.Sc. (Information Technology) Part II-Sem III

## Robotic Process Automation

Roll No: 16



RPA\_Excel.xlsx - Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	College Name												
2	b. Xavier's College, Mumbai	₹19,600	Mumbai, Maharashtra	UGC	8.2 / 10								
3	D.G. Ruparel College of Arts Science and Commerce	₹30,000	Mumbai, Maharashtra	AICTE, UGC	7.9 / 10								
4	Mithibai College of Arts, Mumbai	₹50,000	Mumbai, Maharashtra	AICTE, UGC	8.2 / 10								
5	Ramnraim Rula Autonomous College, Mumbai	₹37,295	Mumbai, Maharashtra	UGC	7.9 / 10								
6	Jai Hind College - [JHC], Mumbai	₹13,602	Mumbai, Maharashtra		8.5 / 10								
7	Kishanji Patel Chhatram College - [KCC College]	₹50,920	Mumbai, Maharashtra		8.2 / 10								
8	Sophia College for Women, Mumbai	₹30,000	Mumbai, Maharashtra		8.2 / 10								
9	IIT Bombay - Indian Institute of Technology	₹44,300	Mumbai, Maharashtra		8.2 / 10								
10	JBIMS, Mumbai	₹30,000	Mumbai, Maharashtra		8.2 / 10								
11	TISS Tata Institute of Social Sciences, Mumbai	₹35,000	Mumbai, Maharashtra		8.2 / 10								
12	Institute of Chemical Technology (ICT), Mumbai	₹57,200	Mumbai, Maharashtra		7.5 / 10								
13	Aanchal Modi Institute of Financial Management	₹10,220	Mumbai, Maharashtra		8.2 / 10								
14	Seth GS Medical College - [GSMC], Mumbai	₹67,230	Mumbai, Maharashtra		8.2 / 10								
15	Mumbai University - [MU], Mumbai	₹33,895	Mumbai, Maharashtra		8.2 / 10								
16	Kelkar Education Trust's V.G. Vaze College	₹21,267	Mumbai, Maharashtra	UGC	8.3 / 10								
17	Mukt College of Commerce, Mumbai	₹40,215	Mumbai, Maharashtra		7.7 / 10								
18	Wilson College, Mumbai	₹40,465	Mumbai, Maharashtra		7.5 / 10								
19	Dr. BM Patel College of Home Science, Mumbai	₹33,000	Mumbai, Maharashtra	UGC	7.8 / 10								
20	SIES College of Arts Science and Commerce	₹11,575	Mumbai, Maharashtra		7.7 / 10								
21	Ramniranjan Jhunjhunwala College - [R.J.C.]	₹14,865	Mumbai, Maharashtra		8.3 / 10								
22	Chhatrapati Shahuji Maharaj Technological University, Mumbai	₹10,200	Mumbai, Maharashtra	UGC	7.5 / 10								

RPA\_Excel.xlsx - Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M
26	Marine Engineering And Research Institute - [MERI]	₹18,000	Mumbai, Maharashtra	UGC	8.8 / 10								
27	The Seawise Maritime Institute, Mumbai	---	Mumbai, Maharashtra										
28	Amrapali Institute of Technology, Mumbai	---	Mumbai, Maharashtra	AICTE	6.8 / 10								
29	Maharshi Dayanand College of Arts Sciences	₹12,025	Mumbai, Maharashtra	UGC	6.8 / 10								
30	NG Adya and DK Marathe College of Arts, Mumbai	---	Mumbai, Maharashtra		6.7 / 10								
31	Ruru College of Arts Science and Commerce	₹15,500	Mumbai, Maharashtra		7.6 / 10								
32	PTVA'S Sathaye College, Mumbai	---	Mumbai, Maharashtra		7.5 / 10								
33	Bhavan's College, Mumbai	₹12,651	Mumbai, Maharashtra		8.1 / 10								
34	Guru Nanak Khalsa College of Arts, Science & Commerce	₹27,760	Mumbai, Maharashtra	UGC	7.2 / 10								
35	Guru Nanak Khalsa College of Arts, Science & Commerce	₹10,621	Mumbai, Maharashtra		7.5 / 10								
36	Mr. D. B. Deo College of Arts and Science	₹10,621	Mumbai, Maharashtra		7.7 / 10								
37	Nagnladas Bhandwala College, Mumbai	₹14,601	Mumbai, Maharashtra		7.7 / 10								
38	Sir Sitaram and Lady Shantabai Patkar College	---	Mumbai, Maharashtra	AICTE	7.3 / 10								
39	Vivekanand Education Society's College of Arts	₹11,730	Mumbai, Maharashtra	UGC	8.1 / 10								
40	Vikas Night College of Arts Science and Commerce	---	Mumbai, Maharashtra		6.3 / 10								
41	Rachna Sansad School of Design, Mumbai	₹1,00,000	Mumbai, Maharashtra	AICTE, NBA	6 / 10								
42	National Institute of Research in Reproductive Health, Mumbai	₹1,18,000	Mumbai, Maharashtra	UGC	8.7 / 10								
43	TD Institute of Technology, Mumbai	₹1,18,000	Mumbai, Maharashtra		8.0 / 10								
44	Bunni Savitri E.S.M. Higher College of Science, Mumbai	₹50,000	Mumbai, Maharashtra	AICTE	8.2 / 10								
45	Tata Memorial Centre - [TMC], Mumbai	₹50,000	Mumbai, Maharashtra	MCI	9.8 / 10								
46	Topiwala National Medical College - [TNMC]	₹65,500	Mumbai, Maharashtra	MCI	8.1 / 10								
47	Amritkumar Modh School of Commerce, Mumbai	₹2,000	Mumbai, Maharashtra	AICTE	7.6 / 10								

## Practical No: 5

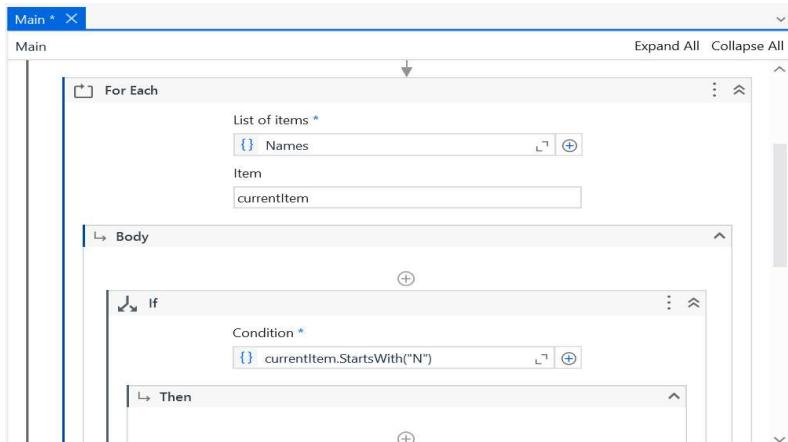
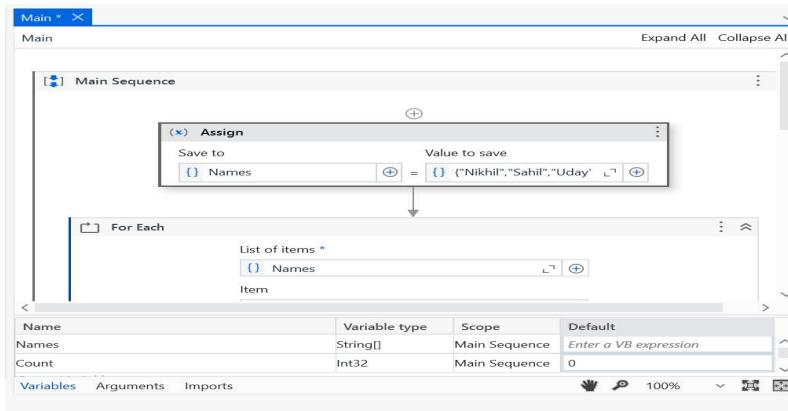
**Aim:** Implement the following:

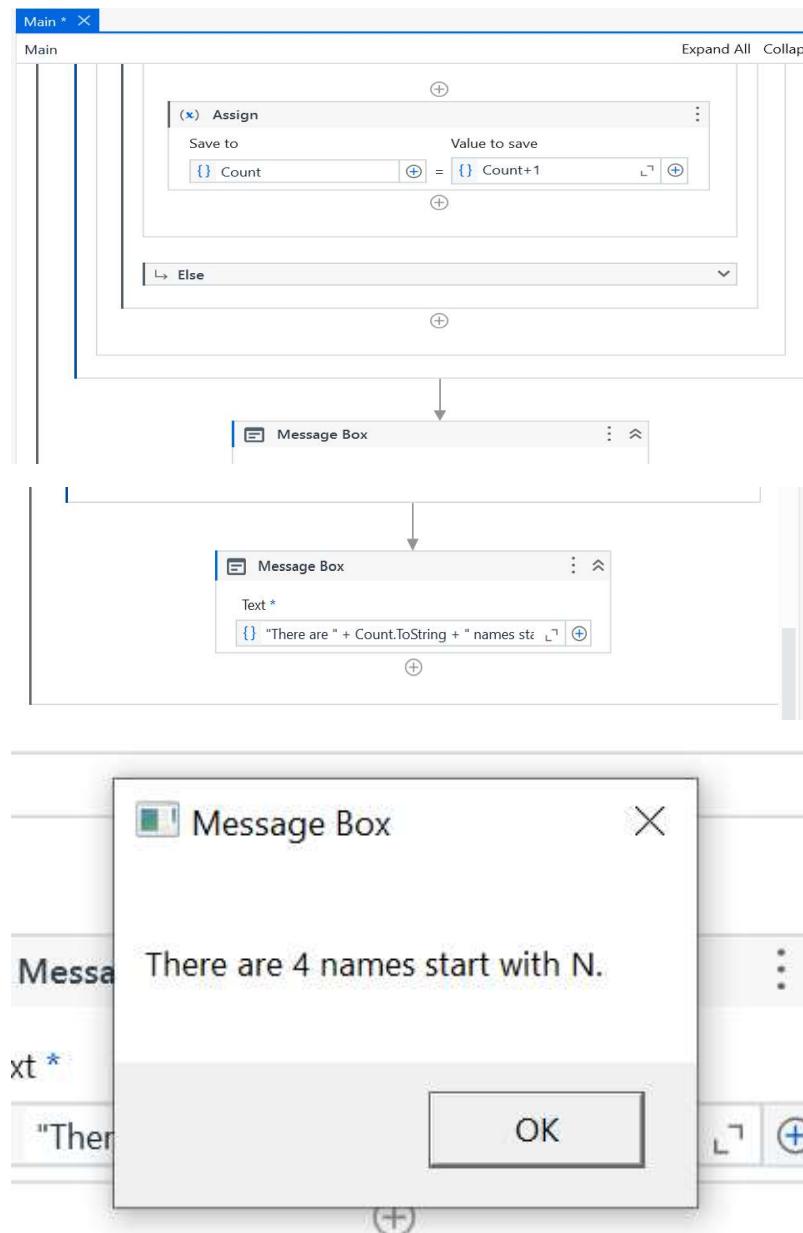
**A.** Consider an array of names. We have to find out how many of them start with the letter "N". Create an automation where the number of names starting with "N" is counted and the result is displayed.

**Steps:**

1. Open Project.
2. Select Sequence activity.
3. Create two variables' Names (array of string) and count (int32).
4. Select from activities panel Assign activity, and assign Names = { "Nikhil", "Sahil", "Uday", "Nihal", "Nicks", "Nikita", "Anuj" }.
5. Select from activities panel For Each activity.
6. In For Each, set values of List of items as "Names".
7. Set values of Item as "currentItem"
8. Inside the Body of For Each
9. Select the If activity.
10. In If activity, type condition as "currentItem.StartsWith("N")"
11. In Then block, select Assign activity to assign "count = count +1".
12. Run the project.

**Process & Output:**





## Practical No: 6

**Aim:** Implement the following:

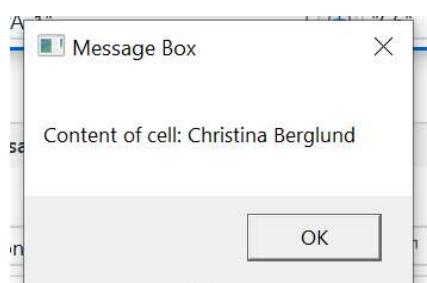
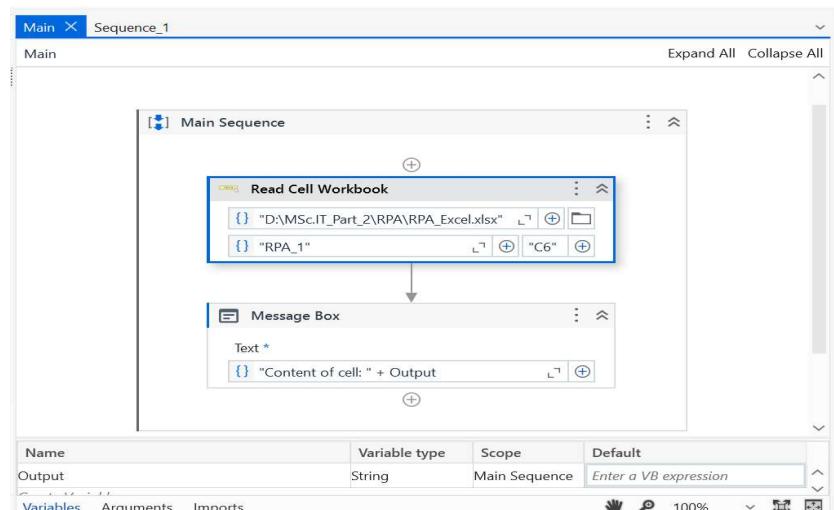
**A. Create an application automating the read, write and append operation on excel file.**

**i. Read Cell**

**Steps:**

1. Open Project.
2. Select Sequence activity.
3. Create variable Output (string).
4. Select from activities panel Read Cell Workbook activity, and give the excel file name, sheet name and cell value that you have to read.
5. Select from activities panel Message box activity, type “Content of cell: + Output”.
6. Run the project.

**Process & Output:**



	A	B	C	D	E	F	G
1	CustomerID	CustomerName	ContactName	Address	City	PostalCode	Country
2	Alfreds Futterkiste	Maria Anders		Obere Str. 57	Berlin	12209	Germany
3	Ana Trujillo Empa	Ana Trujillo		Avda. de la Cor	México D.F.	05021	Mexico
4	Antonio Moreno	Antonio Moreno		Mataderos 231	México D.F.	05023	Mexico
5	Around the Horn	Thomas Hardy		120 Hanover St	London	WA1 1DP	UK
6	Berglunds snabbköp	Christina Berglund		Berguvsvägen 8	Luleå	S-958 22	Sweden
7							

## **ii. Write Cell**

### **Steps:**

1. Open Project.
2. Select Sequence activity.
3. Select from activities panel Write Cell Workbook activity, and give the excel file name, sheet name and cell value on which you have to write the content.
4. Write the content in Content box.
5. Select from activities panel Message box activity, type “Content has been written in cell”.
6. Run the project.

### **Process & Output:**

The screenshot shows the RPA software interface. At the top, there is a navigation bar with tabs: Main, Sequence\_1 (selected), and a close button. Below the navigation bar is a tree view of the sequence structure under 'Sequence\_1'. The 'Sequence\_1' node contains two main activities: 'Write Cell Workbook' and 'Message Box'. The 'Write Cell Workbook' activity is configured to write to an Excel file named 'RPA\_Excel.xlsx' on the 'RPA\_2' sheet at cell 'B7' with the value 'Anuj Baniya'. The 'Message Box' activity has a single text entry: 'Content has been written in cell.' At the bottom of the interface, there are tabs for 'Variables', 'Arguments', and 'Imports', along with zoom and search tools. Below the interface is a message box window titled 'Message Box' with the text 'Content has been written in cell.' and an 'OK' button. At the very bottom is a screenshot of an Excel spreadsheet titled 'RPA\_Excel.xlsx - Excel'. The spreadsheet contains a table with columns: CustomerID, CustomerName, ContactName, Address, City, PostalCode, and Country. The data includes rows for various customers like Alfréd Futterkiste, Ana Trujillo Emparedados, and Thomas Hardy, along with their respective addresses and contact details.

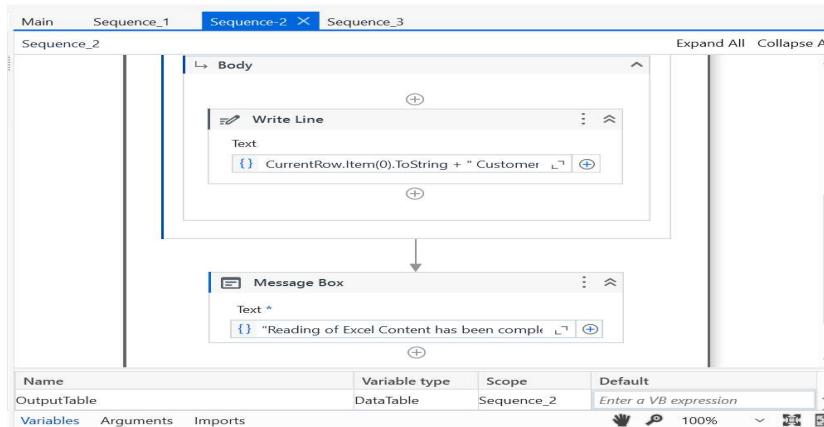
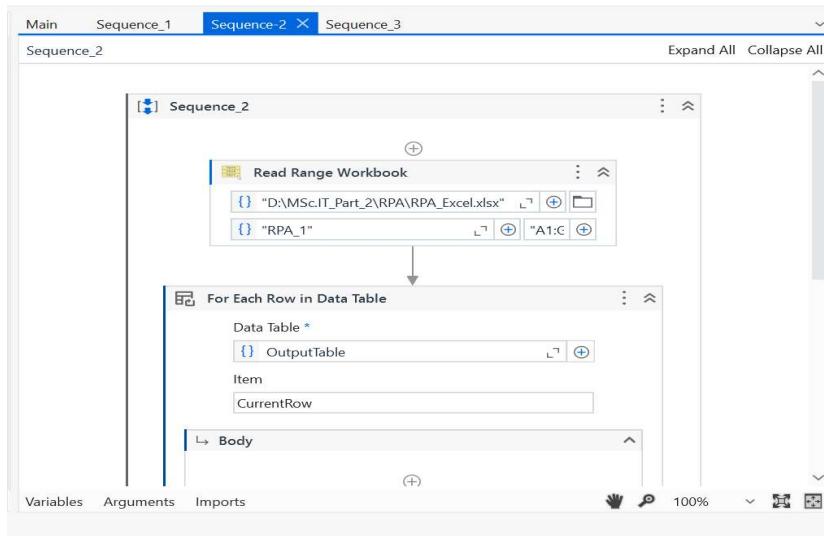
CustomerID	CustomerName	ContactName	Address	City	PostalCode	Country
1	Alfreds Futterkiste	Maria Anders	Obere Str. 57	Berlin	12209	Germany
2	Ana Trujillo Emparedados	Ana Trujillo	Avda. de la Constitución 2	México D.F.	05021	Mexico
3	Antonio Moreno Taquero	Antonio Moreno	Mataderos 2312	México D.F.	05023	Mexico
4	Around the Horn	Thomas Hardy	120 Hanover Sq.	London	WA1 1DP	UK
5	Berglunds snabbköp	Christina Berglund	Berguvsvägen 8	Luleå	S-958 22	Sweden
6	Anuj Baniya					

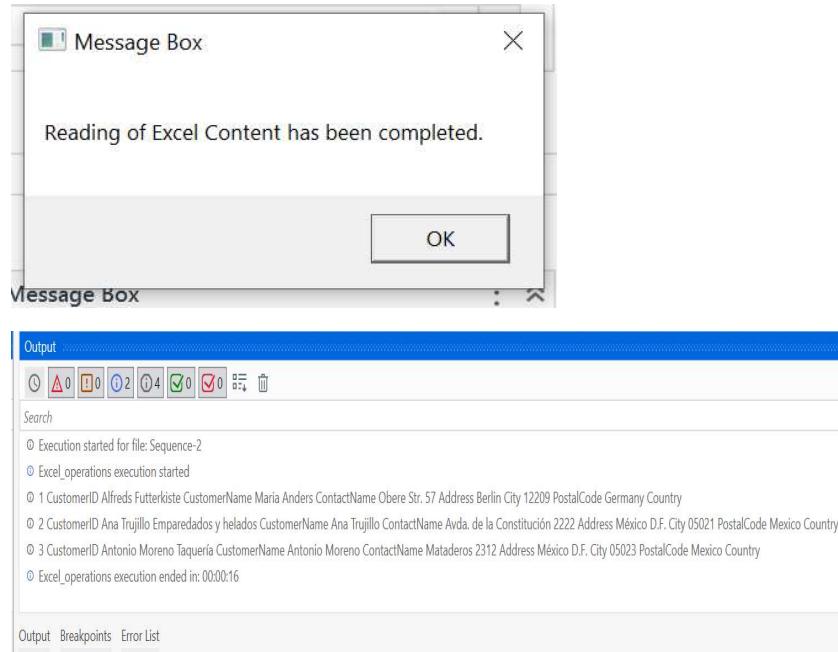
### **iii. Read Range**

#### **Steps:**

1. Open Project.
2. Select Sequence activity.
3. Select from activities panel Read Range Workbook activity, and give the excel file name, sheet name and cell value as “A1:G7” to read whole table.
4. Create OutputTable variable as DataTable.
5. Select For Each in Data Table activity.
6. Set values of List of items as “OutputTable”.
7. Set values of Item as “CurrentRow”.
8. Inside the Body of For Each in DataTable.
9. Select the Write line activity & enter text "CurrentRow.Item(0).ToString + " CustomerID " + CurrentRow.Item(1).ToString + " CustomerName " + CurrentRow.Item(2).ToString + " ContactName " + CurrentRow.Item(3).ToString + " Address " + CurrentRow.Item(4).ToString + " City " + CurrentRow.Item(5).ToString + " PostalCode " + CurrentRow.Item(6).ToString + " Country "".
10. Select Message box and type “Reading of Excel Content has been completed.”.
11. Run the project.

#### **Process & Output:**





#### **iv. Write Range**

##### **Steps:**

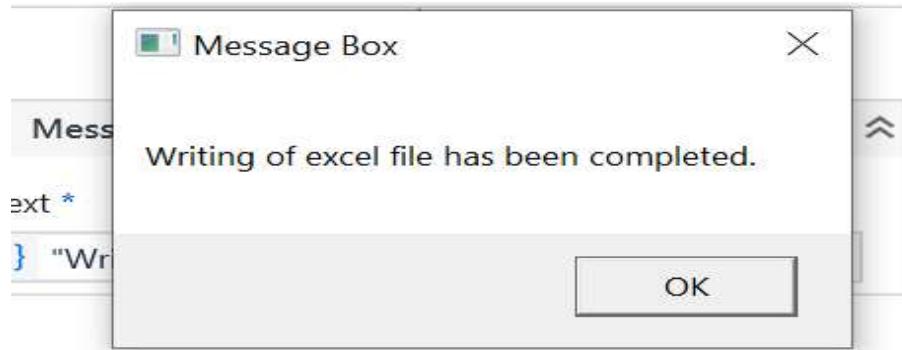
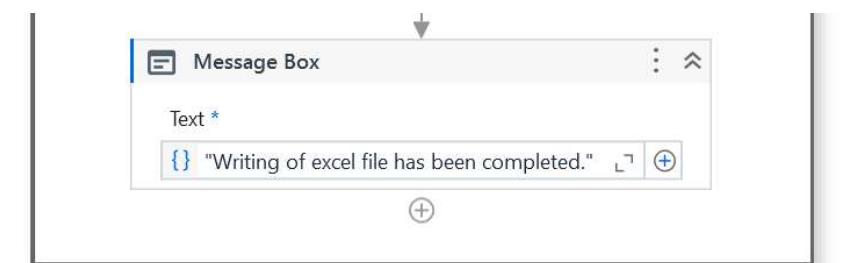
1. Open Project.
2. Select Sequence activity.
3. Select from activities panel Build Data Table activity, and create a Data Table.
4. Create OutputTable variable as DataTable.
5. Select from activities panel Write Range Workbook activity, and give the excel file name, sheet name and cell value as “A1” to write Data Table.
6. Give the content as “OutputTable”.
7. Select Message box and type “Writing of excel file has been completed.”.
8. Run the project.

#### **Process & Output:**

The screenshot shows the RPA software interface with the following components:

- Sequence View:** The main window displays a sequence named "Sequence\_3". It contains three activities connected sequentially:
  - Build Data Table:** This activity is configured to create a **DataTable...**.
  - Write Range Workbook:** This activity is configured to write to an Excel file named "D:\MSc.IT\_Part\_2\RPA\RPA\_Excel.xlsx" at sheet "RPA\_3" and cell "A1". It also receives the **datatable** variable as input.
  - Message Box:** This activity is used to display a message box with the text "Writing of excel file has been completed.".
- Variables View:** A table showing the variable "Datatable" defined with a **DataTable** type, scope **Sequence\_3**, and default value set to "Enter a VB expression".
- Build Data Table Dialog:** A detailed view of the "Build Data Table" activity, showing a grid with columns for Name (String), Roll No (Int32), and Course (String). The data is as follows:

Name (String)	Roll No (Int32)	Course (String)
Anuj	1	M.Com
Sarvadnya	2	MBA
Sarvesh	3	M.Sc
Siddhesh	4	MCA
Aniket	5	B.Tech
Uday	6	M.Sc It
Sahil	7	M.Sc It

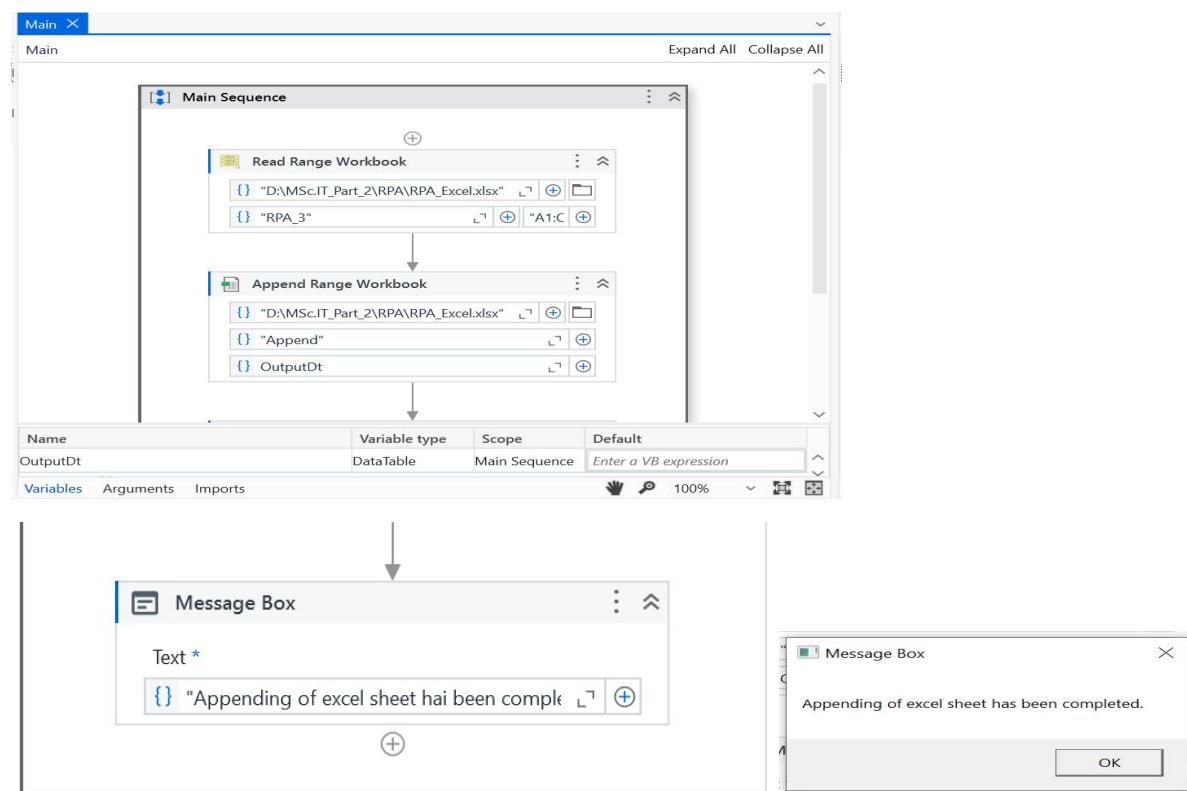
|  | A | B | C | D | E | F |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Name | Roll No | Course |  |  |  |
| 2 | Anuj | 1 | M.Com |  |  |  |
| 3 | Sarvadnya | 2 | MBA |  |  |  |
| 4 | Sarvesh | 3 | M.Sc |  |  |  |
| 5 | Siddhesh | 4 | MCA |  |  |  |
| 6 | Aniket | 5 | B.Tech |  |  |  |
| 7 | Uday | 6 | M.Sc It |  |  |  |
| 8 | Sahil | 7 | M.Sc It |  |  |  |
| 9 |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |
| 13 |  |  |  |  |  |  |
| 14 |  |  |  |  |  |  |
| 15 |  |  |  |  |  |  |
| 16 |  |  |  |  |  |  |
| 17 |  |  |  |  |  |  |
| 18 |  |  |  |  |  |  |
| 19 |  |  |  |  |  |  |
| 20 |  |  |  |  |  |  |
| 21 |  |  |  |  |  |  |
| 22 |  |  |  |  |  |  |

## v. Append Range

### Steps:

1. Open Project.
2. Select Sequence activity.
3. Select from activities panel Read Range Workbook activity, and give the excel file name, sheet name and cell value as “A1:G7” to read whole table.
4. Create OutputTable variable as DataTable.
5. Select Append activity from activities panel.
6. Give the excel file name, sheet name and DataTable as “OutputTable” to append the Data Table.
7. Select Message box and type “Appending of excel sheet has been completed”.
8. Run the project.

### Process & Output:



A screenshot of Microsoft Excel showing a table with data. The columns are labeled 'CustomerID', 'CustomerName', 'ContactName', 'Address', 'City', 'PostalCode', and 'Country'. The data includes rows for customers like 'Alfreds', 'Ana Trujillo', 'Antonio', 'Around the Horn', 'Berglunds', 'Anuj', 'Sarvadnya', 'Sarvesh', 'Siddhesh', 'Aniket', 'Uday', 'Sahil', and others, along with their respective contact details and location information.

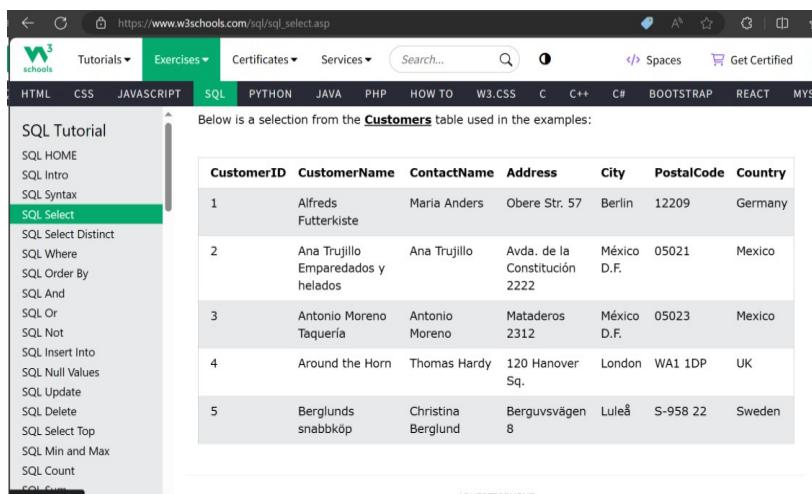
**B. Automate the process to extract data from an excel file into a data table and vice versa**

**i. Extract Data Table from web to excel file**

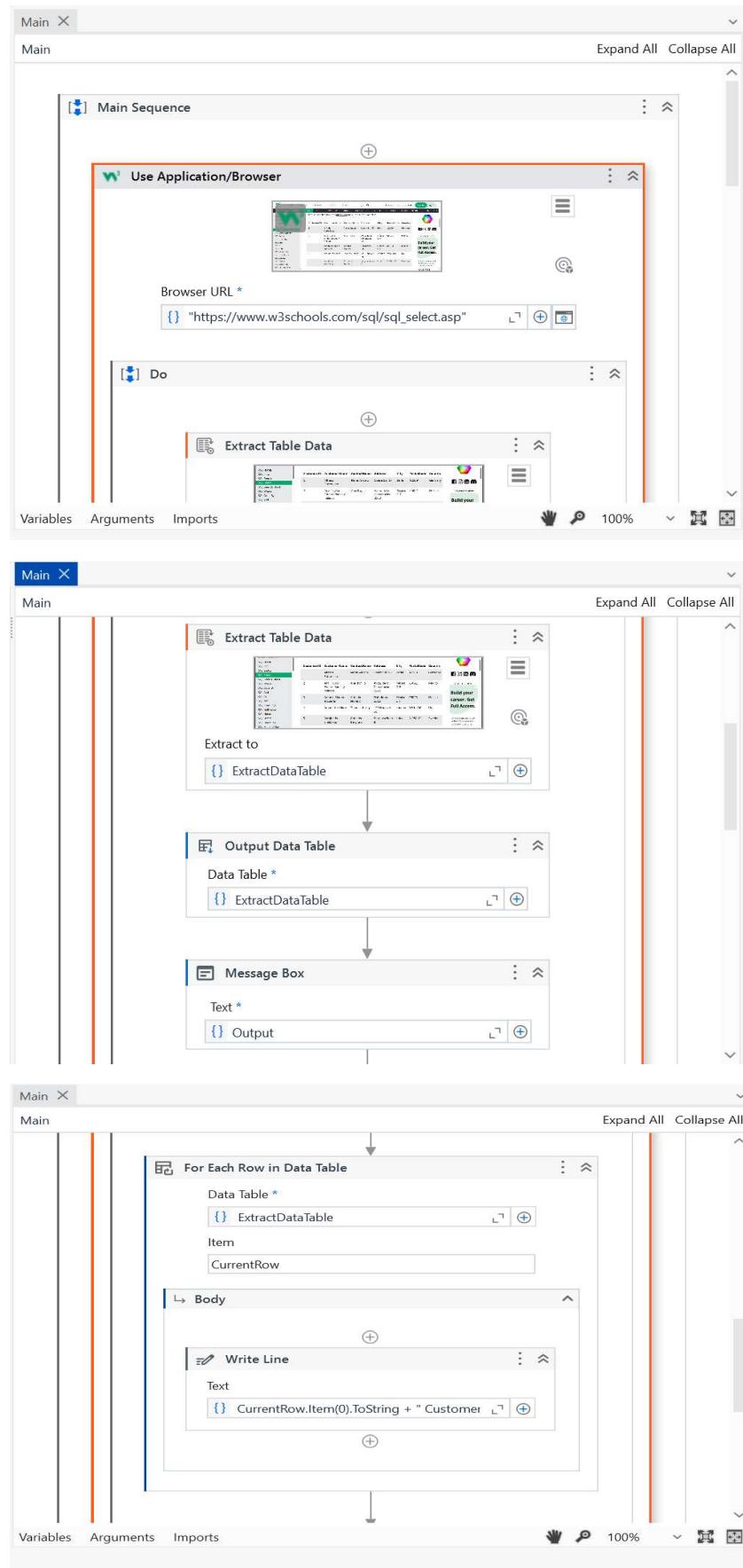
**Steps:**

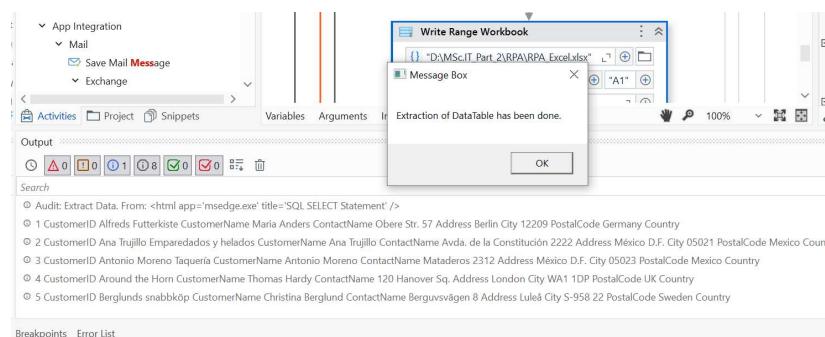
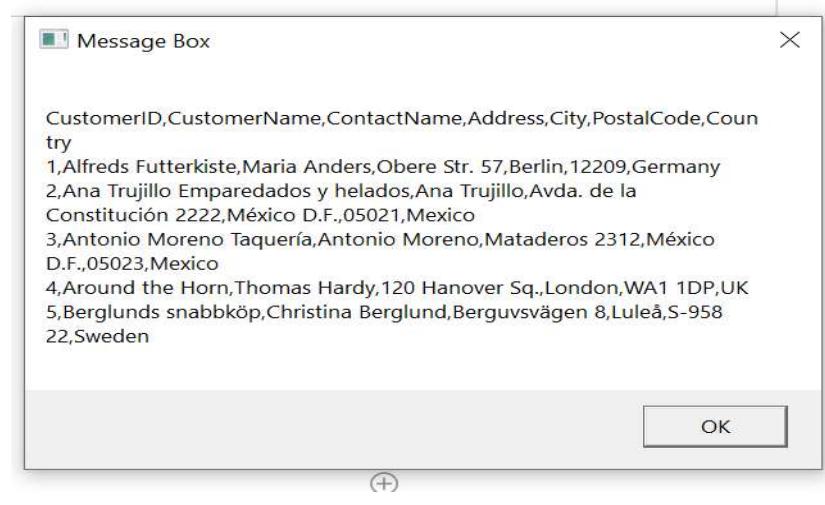
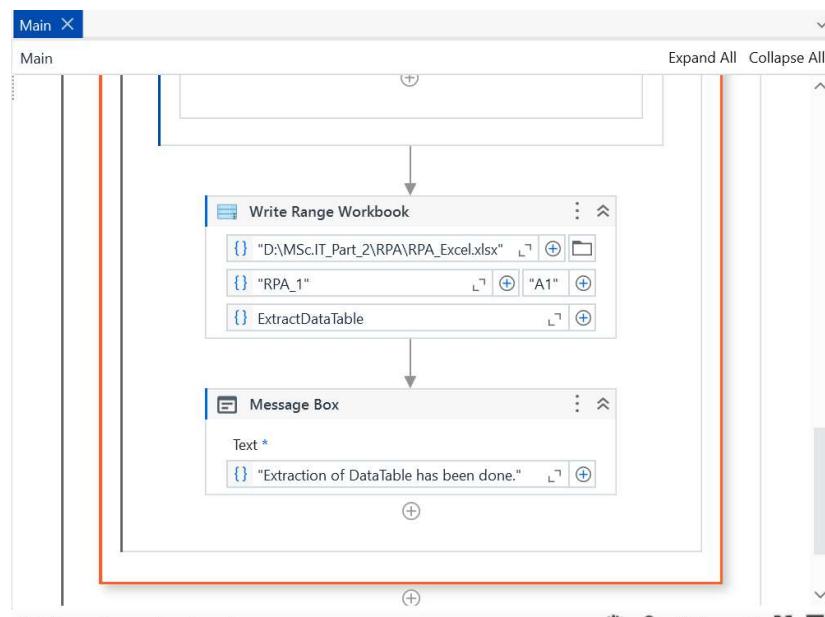
1. Open project.
2. Select Sequence activity.
3. Select Table extraction icon on Ribbon panel of Uipath studio.
4. Select the cell of table which do you want to extract.
5. Edit it if you want and save.
6. Select from activities panel Output Data Table activity.
7. Create Output variable as String.
8. Enter input as “ExtractDataTable” and output as “Output” .
9. Select Message box and enter “Output.”.
10. Select For Each in Data Table activity.
11. Set values of List of items as “ExtractDataTable”.
12. Set values of Item as “CurrentRow”.
13. Inside the Body of For Each in DataTable.
14. Select the Write line activity & enter text "CurrentRow.Item(0).ToString + " CustomerID " + CurrentRow.Item(1).ToString + " CustomerName " + CurrentRow.Item(2).ToString + " ContactName " + CurrentRow.Item(3).ToString + " Address " + CurrentRow.Item(4).ToString + " City " + CurrentRow.Item(5).ToString + " PostalCode " + CurrentRow.Item(6).ToString + " Country "".
15. Select from activities panel Write Range Workbook activity, and give the excel file name, sheet name and cell value as “A1” to write Data Table.
16. Give the content as “ExtractDataTable”.
17. Select Message box and type “Extraction of Data Table has been done.”.
18. Run the project.

**Process & Output:**



CustomerID	CustomerName	ContactName	Address	City	PostalCode	Country
1	Alfreds Futterkiste	Maria Anders	Obere Str. 57	Berlin	12209	Germany
2	Ana Trujillo Emparedados y helados	Ana Trujillo	Avda. de la Constitución 2222	México D.F.	05021	Mexico
3	Antonio Moreno Taquería	Antonio Moreno	Mataderos 2312	México D.F.	05023	Mexico
4	Around the Horn	Thomas Hardy	120 Hanover Sq.	London	WA1 1DP	UK
5	Berglunds snabbköp	Christina Berglund	Berguvsvägen 8	Luleå	S-958 22	Sweden





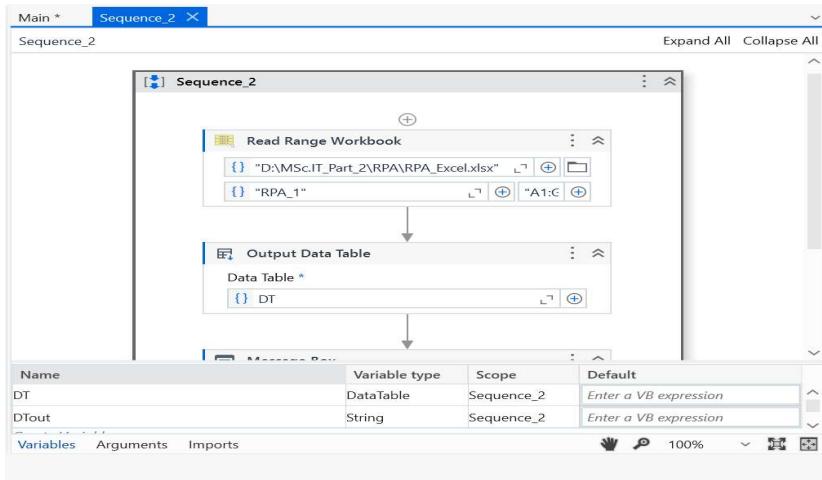
	A	B	C	D	E	F	G	H
1	CustomerID	CustomerName	ContactName	Address	City	PostalCode	Country	
2	1	Alfreds Futterkiste	Maria Anders	Obere Str. 57	Berlin	12209	Germany	
3	2	Aña Trujillo Emparedados y helados	Aña Trujillo	Avda. de la Constitución 2222	México D.F.	05021	Mexico	
4	3	Antonio Moreno Taquería	Antonio Moreno	Mataderos 2312	México D.F.	05023	Mexico	
5	4	Around the Horn	Thomas Hardy	120 Hanover Sq.	London	WA1 1DP	UK	
6	5	Berglunds snabbköp	Christina Berglund	Berguvsvägen 8	Luleå	S-958 22	Sweden	

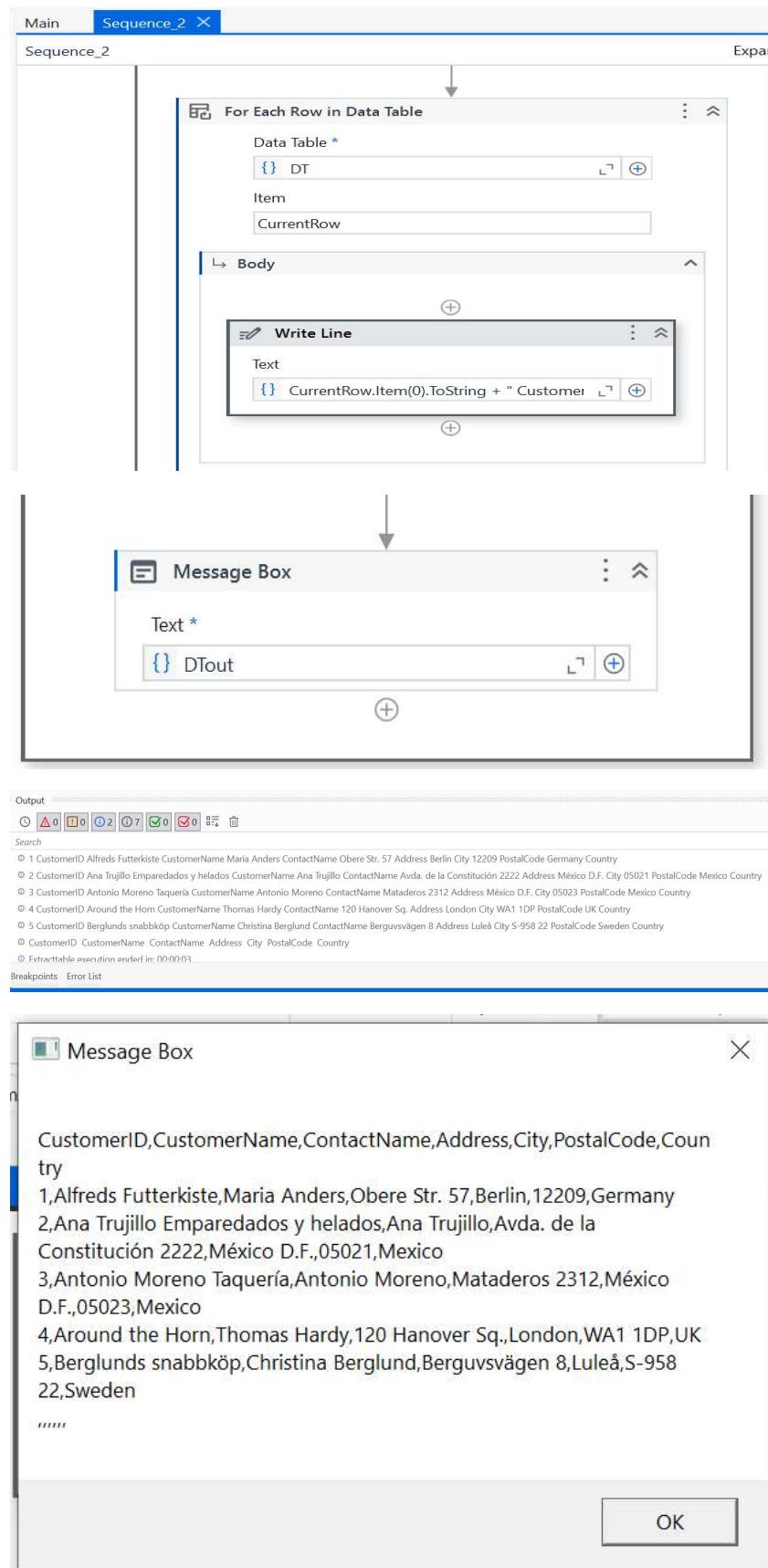
**ii. Extract Data from an excel file into a Data Table**

**Steps:**

1. Open Project.
2. Select Sequence activity.
3. Select from activities panel Read Range Workbook activity, and give the excel file name, sheet name and cell value as “A1:G7” to read whole table.
4. Create DT variable as DataTable.
5. Select from activities panel Output Data Table activity.
6. Create DTout variable as String.
7. Enter input as “DT” and output as “DTout” .
8. Select For Each in Data Table activity.
9. Set values of List of items as “DT”.
10. Set values of Item as “CurrentRow”.
11. Inside the Body of For Each in DataTable.
12. Select the Write line activity & enter text "CurrentRow.Item(0).ToString + " CustomerID " + CurrentRow.Item(1).ToString + " CustomerName " + CurrentRow.Item(2).ToString + " ContactName " + CurrentRow.Item(3).ToString + " Address " + CurrentRow.Item(4).ToString + " City " + CurrentRow.Item(5).ToString + " PostalCode " + CurrentRow.Item(6).ToString + " Country "".
13. Select Message box and enter “DTout”.
14. Run the project.

**Process & Output:**





## Practical No: 7

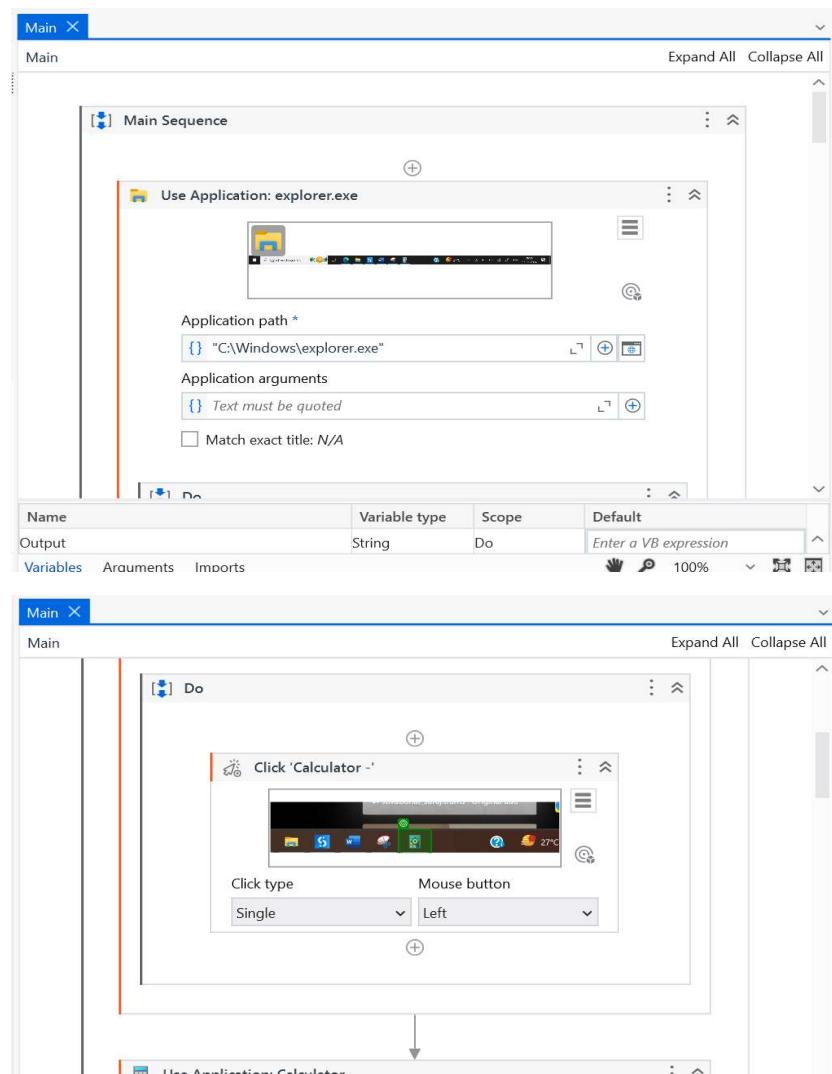
**Aim:** Implement the following:

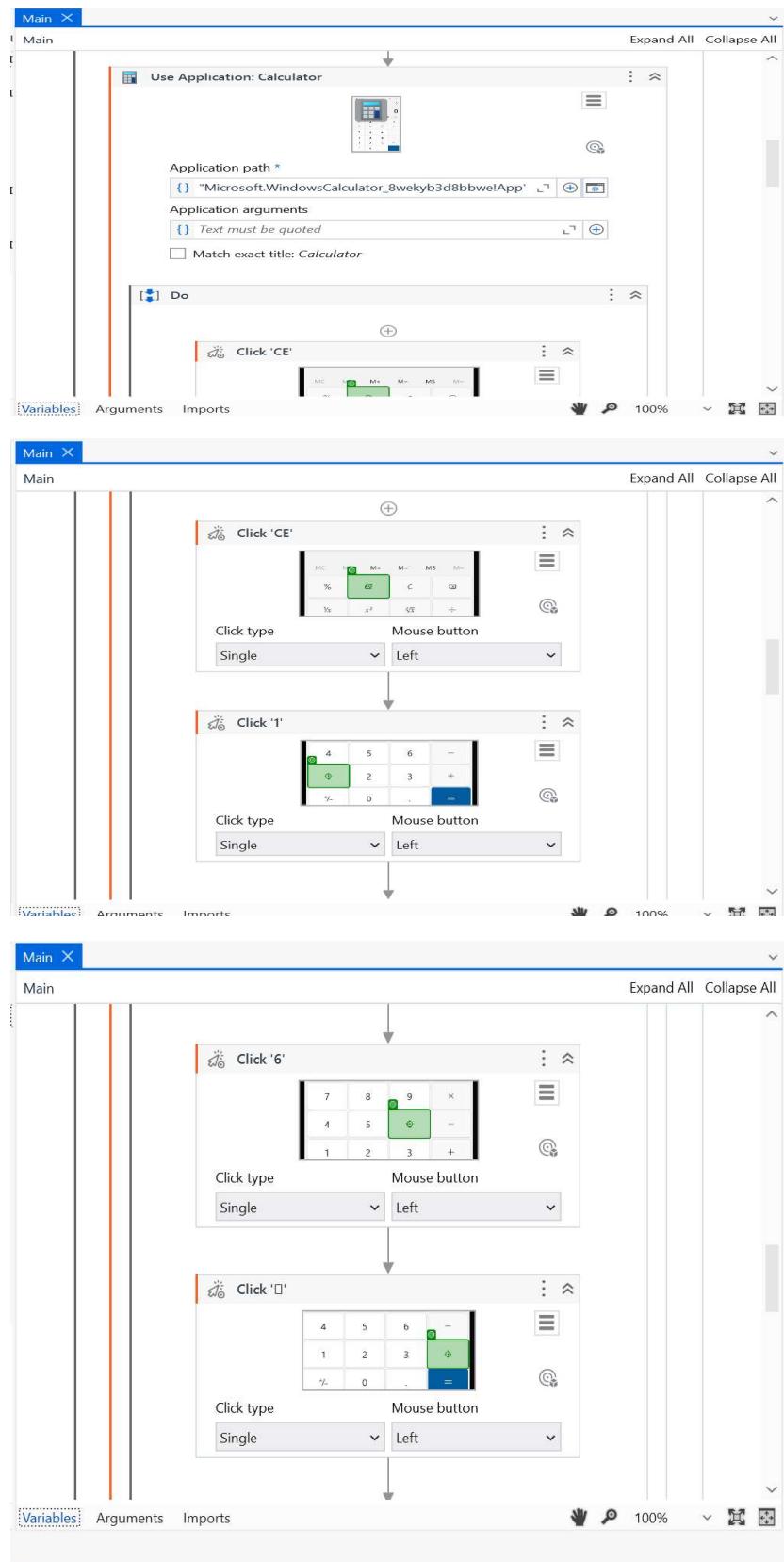
### A. Implement the attach window activity.

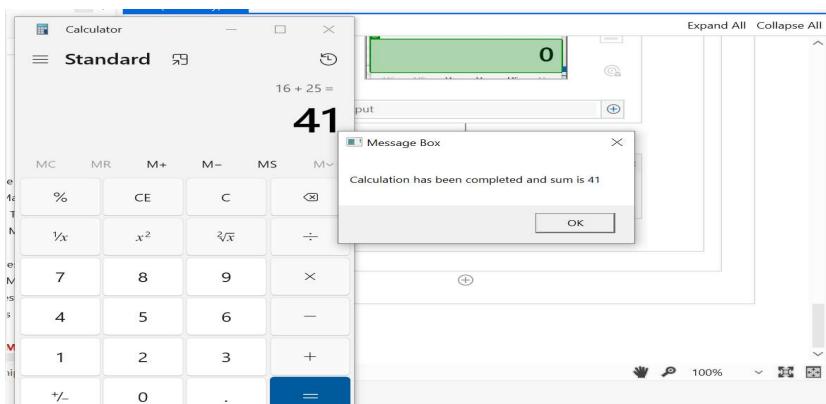
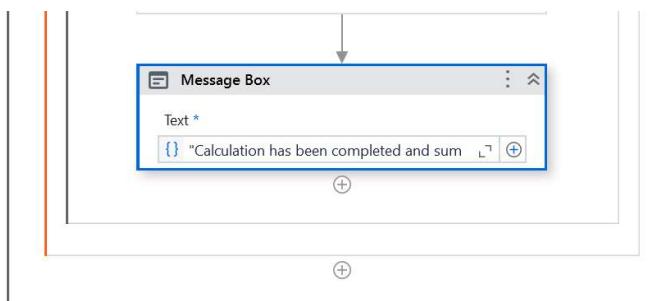
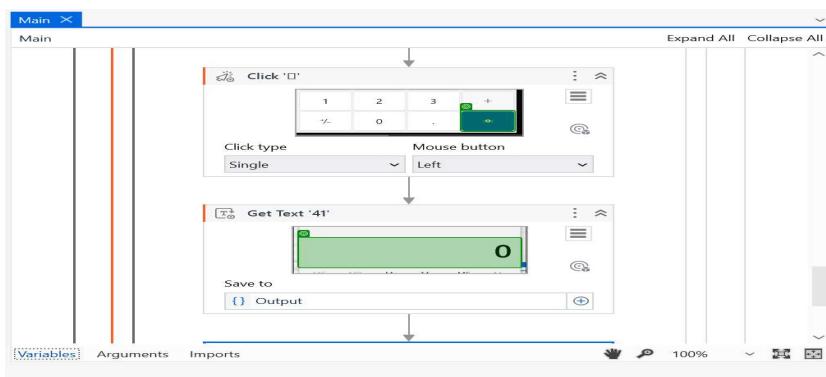
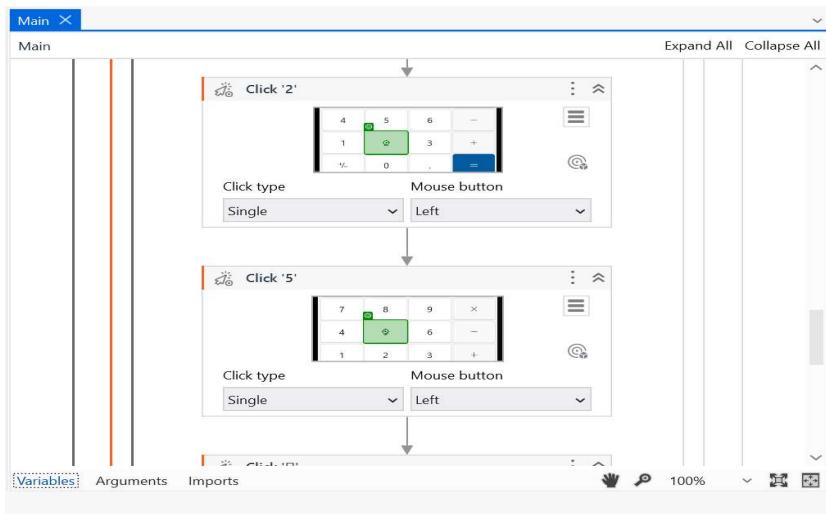
**Steps:**

1. Open project.
2. Select Sequence activity.
3. Select App/Web Recorder icon on Ribbon panel of UiPath studio.
4. Select Calculator icon from task bar and select “Single Click” option.
5. In calculator, select number to calculate with “Single Click” option.
6. Select output display window of calculator and select “Get Text” option.
7. In Get Text activity, save to as “Output.”
8. Select from activities panel Message box activity, type “Calculation has been completed and sum is ” + Output.”
9. Run the project.

**Process & Output:**







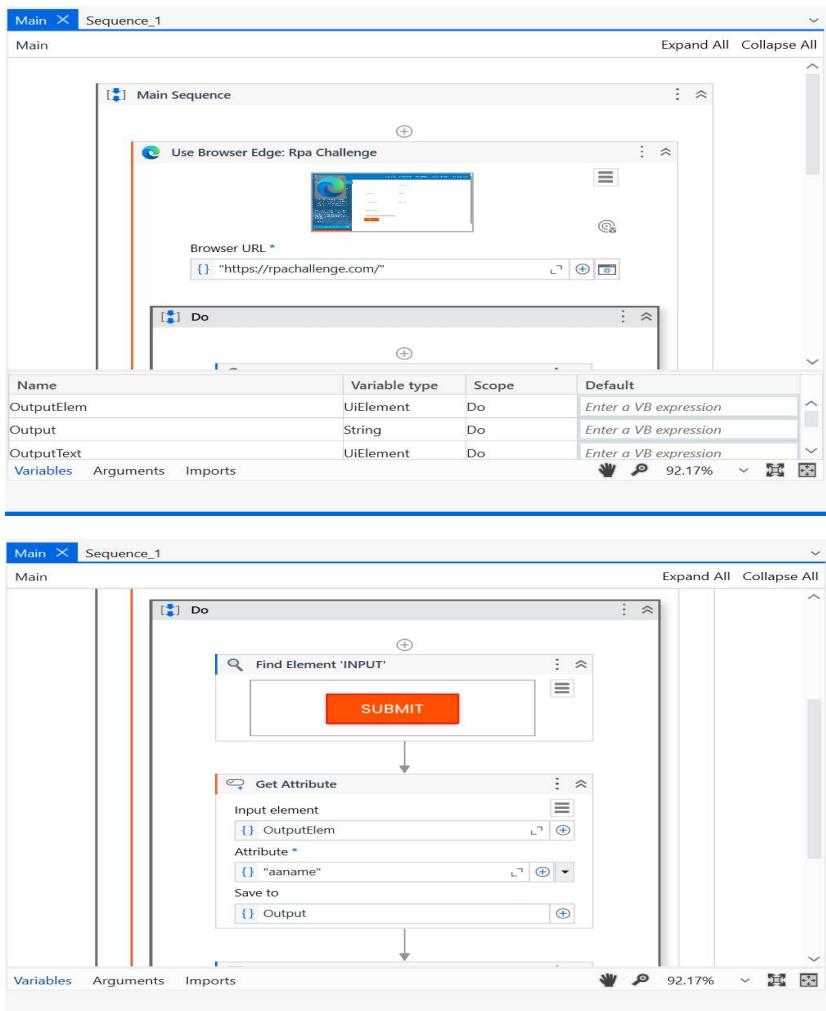
## B. Find different controls using UiPath.

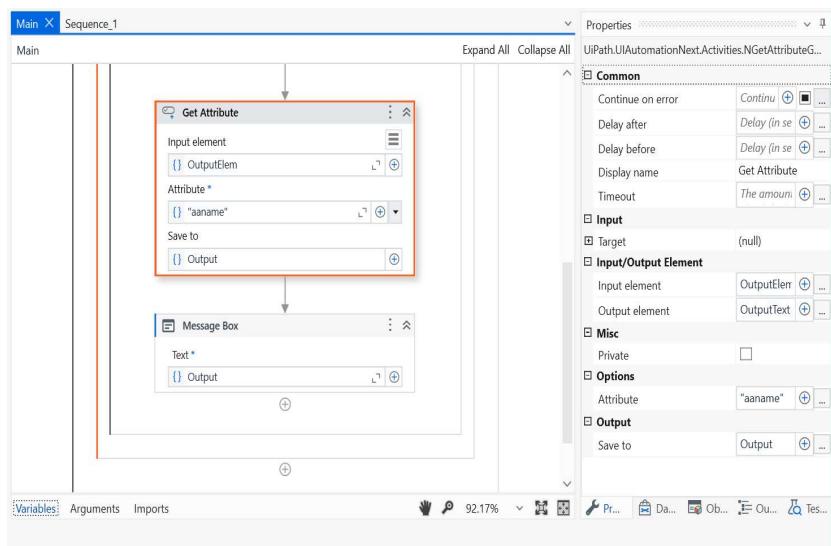
### i. Find Element

#### Steps:

1. Open project.
2. Select Sequence activity.
3. Select from activities panel Use Application/Browser activity, and indicate the website screen.
4. Select from activities panel Find Element activity and indicate element on the screen to find.
5. Create OutputElem variable in FoundElement.
6. Select Get Attribute activity.
7. Set values of input element as "OutputElem".
8. Set values of Attribute as "aaname".
9. Create Output variable as String.
10. Set values of Save to as "Output".
11. Select Message box and enter "Output".
12. Run the project.

#### Process & Output:





**RPA Challenge**

**Instructions** EN

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

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

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

Good luck!

Email  
First Name  
Phone Number

Company Name  
Address  
Name

Role in Company

Message ... X  
Submit  
OK

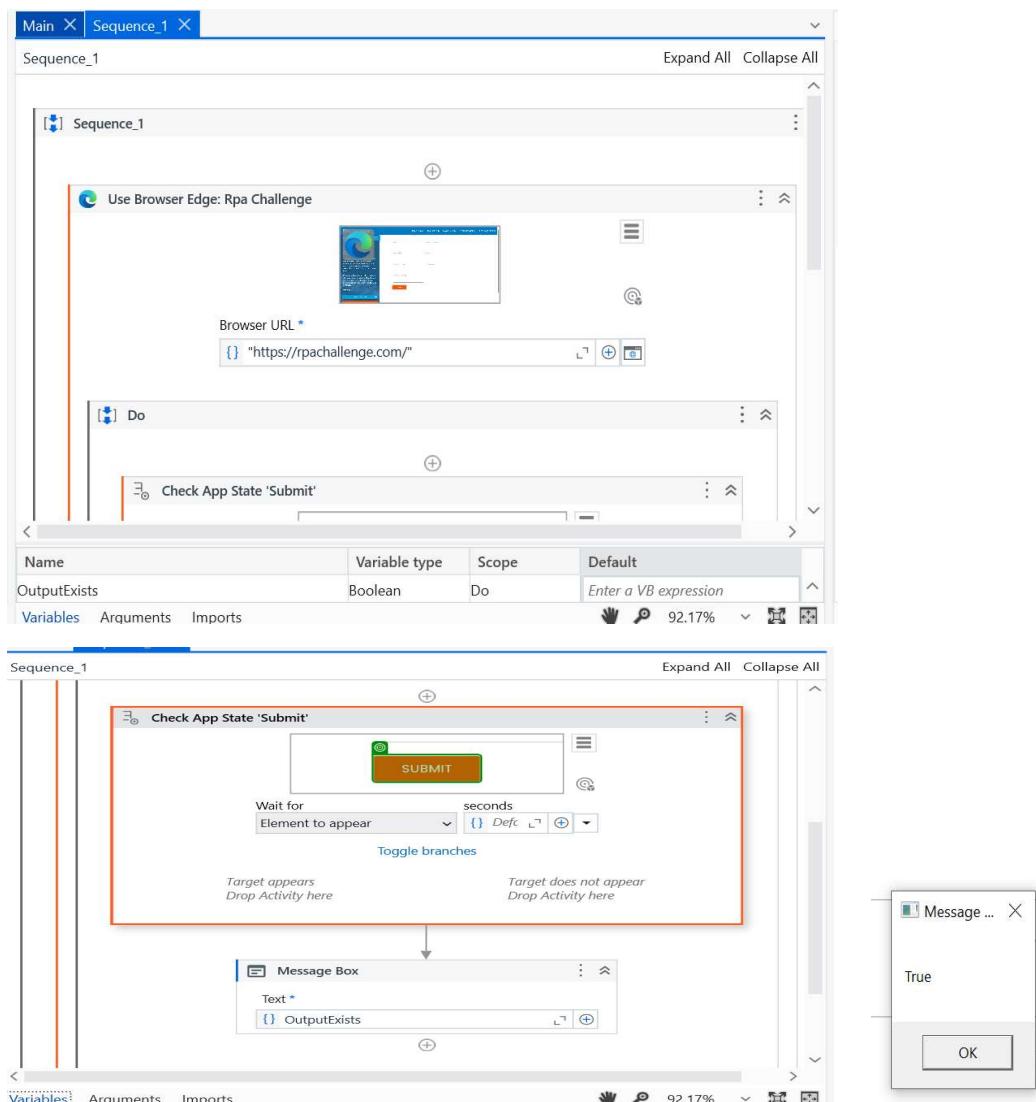
SUBMIT

## **ii. Element Exist**

### **Steps:**

1. Open project.
2. Select Sequence activity.
3. Select from activities panel Use Application/Browser activity, and indicate the website screen.
4. Select from activities panel Check App State (new version) activity and indicate element on the screen to find.
5. Create OutputExist variable in result.
6. Select Message box and enter "OutputExist".
7. Run the project.

### **Process & Output:**

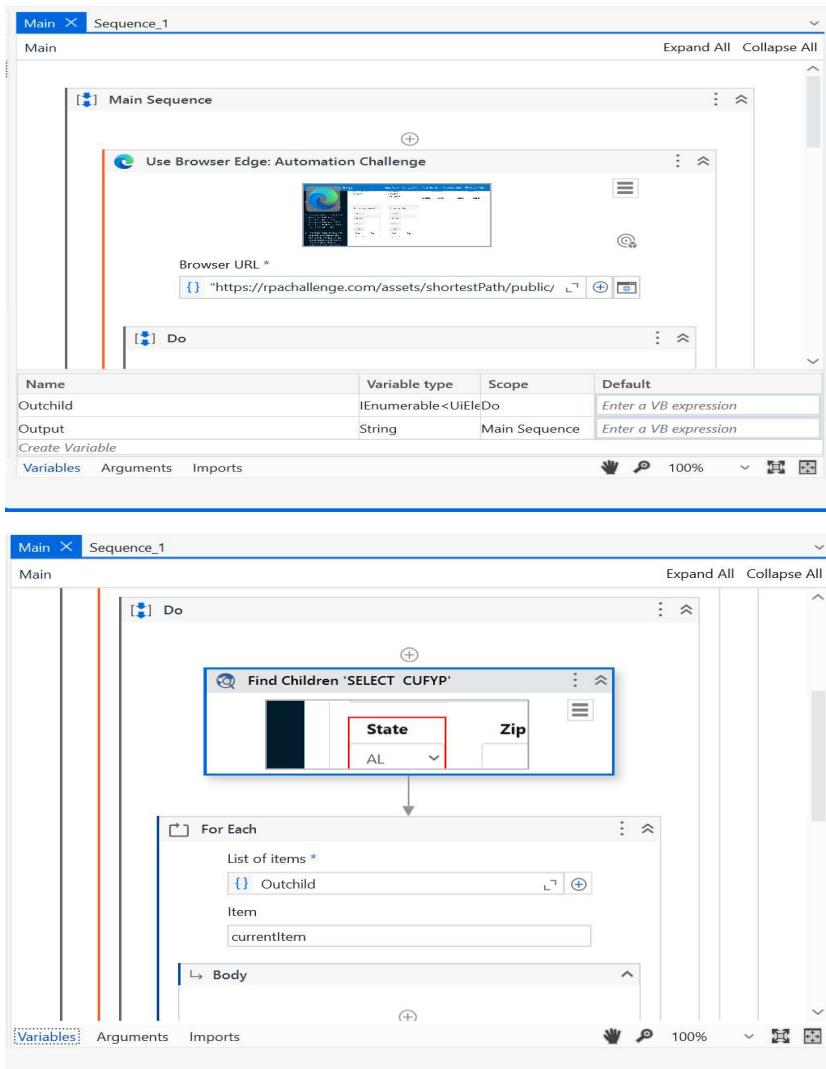


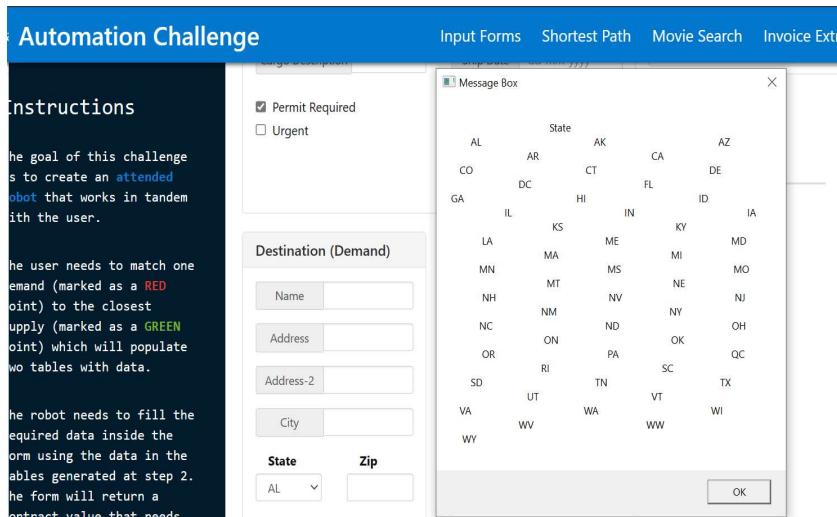
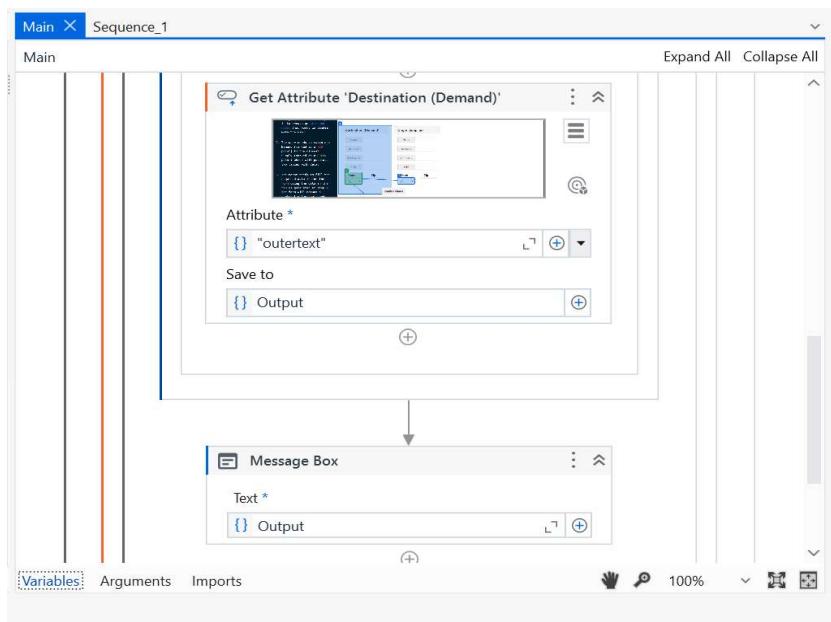
### **iii. Get Children**

#### **Steps:**

1. Open project.
2. Select Sequence activity.
3. Select from activities panel Use Application/Browser activity, and indicate the website screen.
4. Select from activities panel Get Children activity and indicate element on the screen to get children.
5. Create Outchild variable in Children.
6. Select Get Attribute activity.
7. Set values of input element as "Outchild".
8. Set values of Attribute as "outertext".
9. Create Output variable as String.
10. Set values of Save to as "Output".
11. Select Message box and enter "Output".
12. Run the project.

#### **Process & Output:**



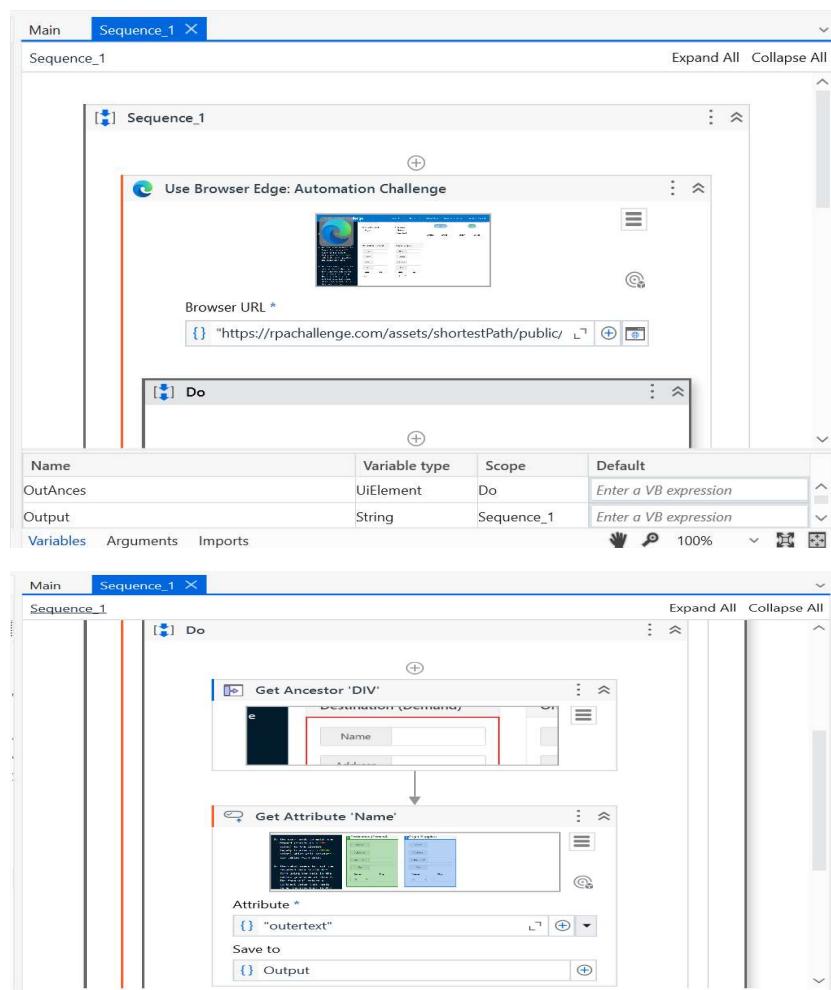


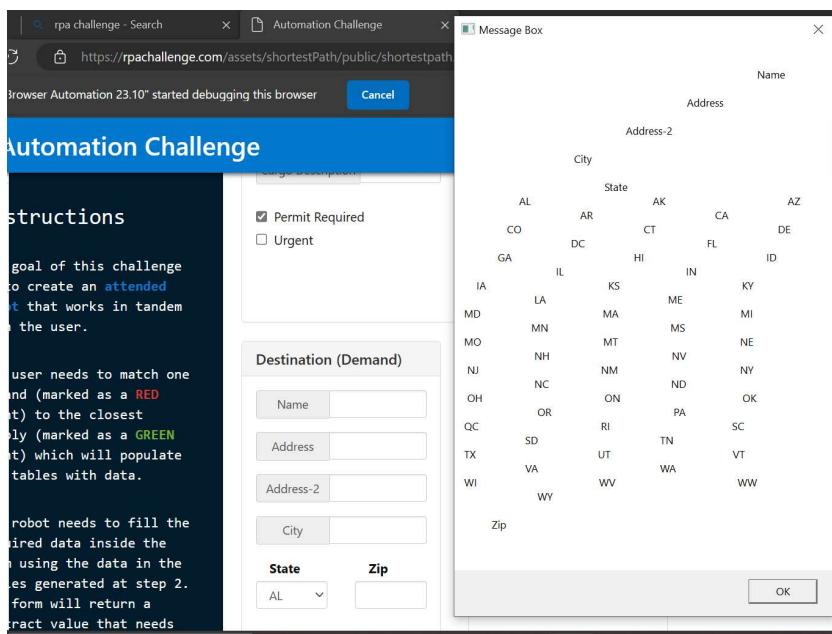
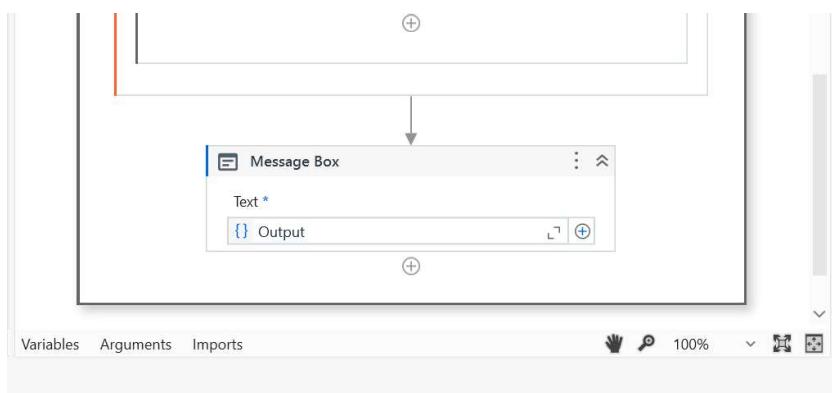
#### **iv. Get Ancestor**

##### **Steps:**

1. Open project.
2. Select Sequence activity.
3. Select from activities panel Use Application/Browser activity, and indicate the website screen.
4. Select from activities panel Get Ancestor activity and indicate element on the screen to get ancestor.
5. Create OutAnes variable in Ancestor.
6. Select Get Attribute activity.
7. Set values of input element as "OutAnes".
8. Set values of Attribute as "outerText".
9. Create Output variable as String.
10. Set values of Save to as "Output".
11. Select Message box and enter "Output".
12. Run the project.

##### **Process & Output:**





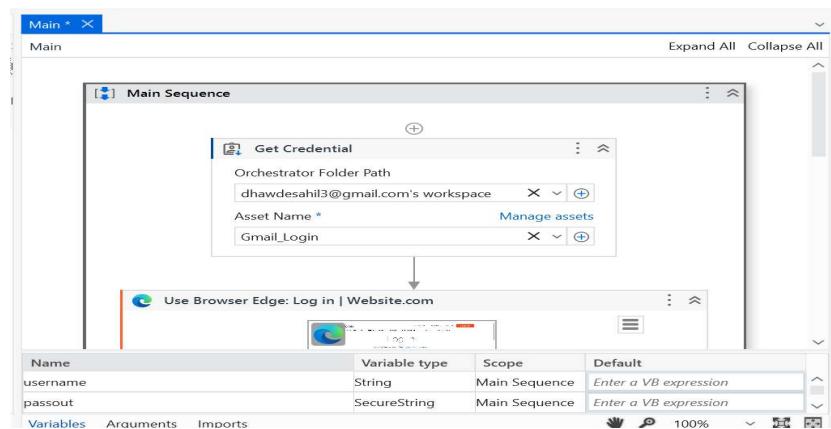
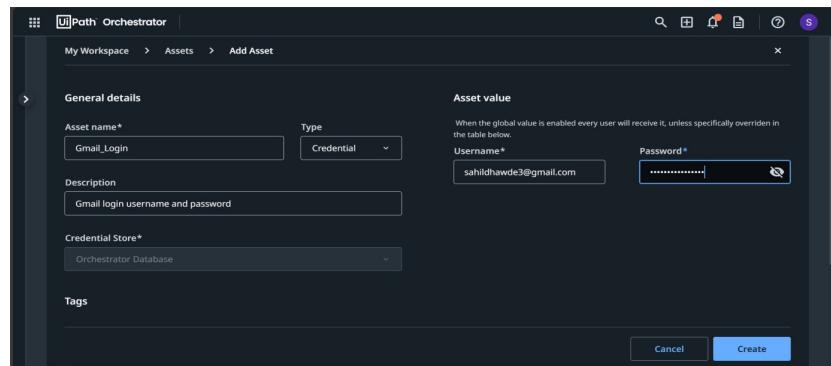
**C. Demonstrate the following activities in UiPath:**

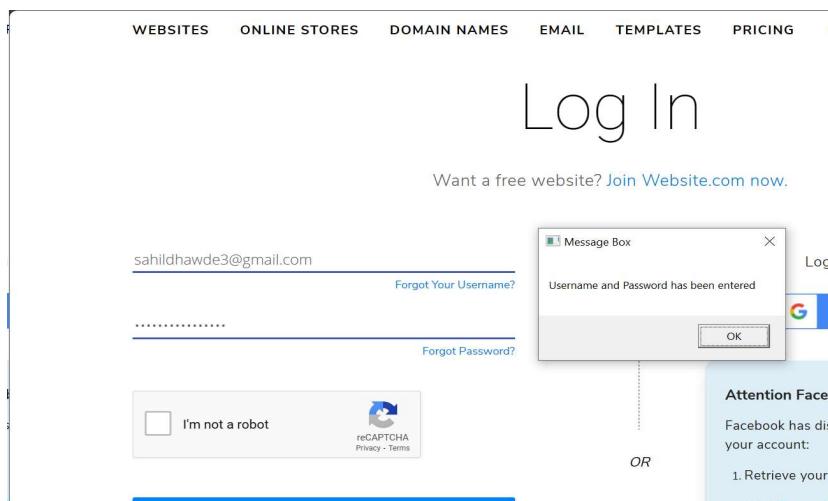
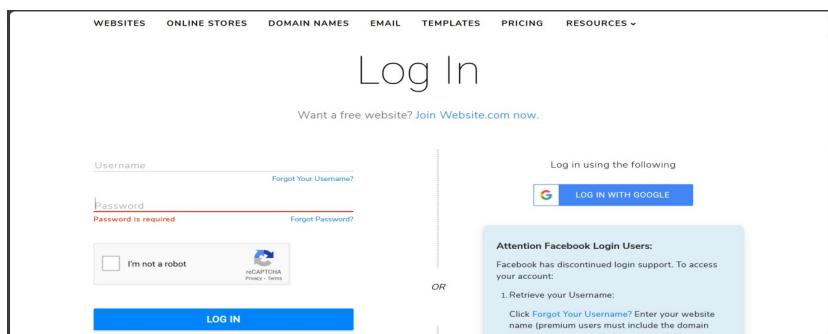
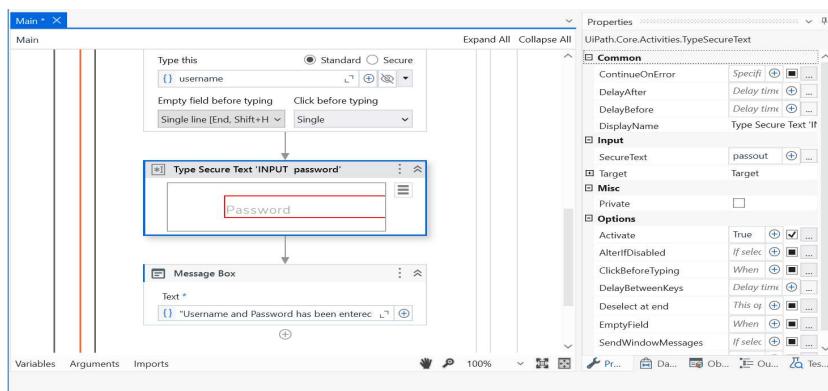
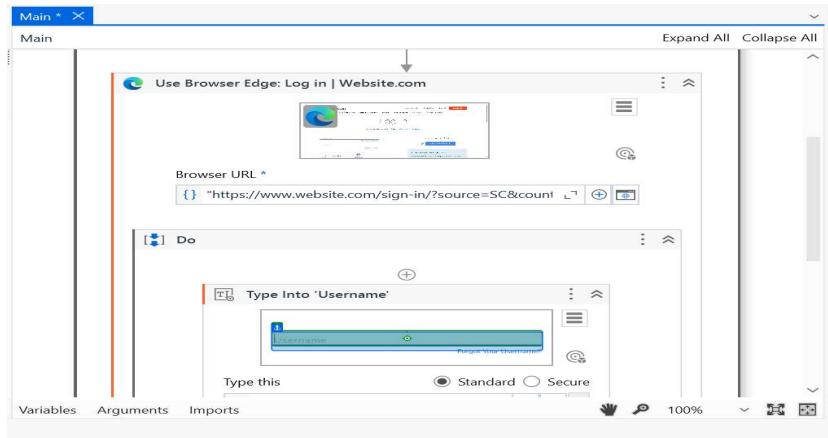
**i. Type Secure text**

**Steps:**

1. Create an Asset in UiPath Orchestrator of type “Credential.”
2. Open Project.
3. Select Sequence activity.
4. Select Get Credential activity from activities panel.
5. In Get Credential activity, select orchestrator folder place as your workspace and enter the Asset Name that created earlier.
6. Create two variables as Username and Passout.
7. Select from activities panel Use Application/Browser activity, and indicate the browser on the screen.
8. Select from activities panel Type into activity and indicate the input dialog of username of the website.
9. In Type this of Type into enter “Username”.
10. Select from activities panel Type Secure Text activity and indicate the input dialog of password of the website.
11. In Securetext of Type secure Text enter “Passout”.
12. Select Message box and type “Username and Password has been entered”.
13. Run the project.

**Process & Output:**





## Practical No: 8

**Aim:** Implement the following:

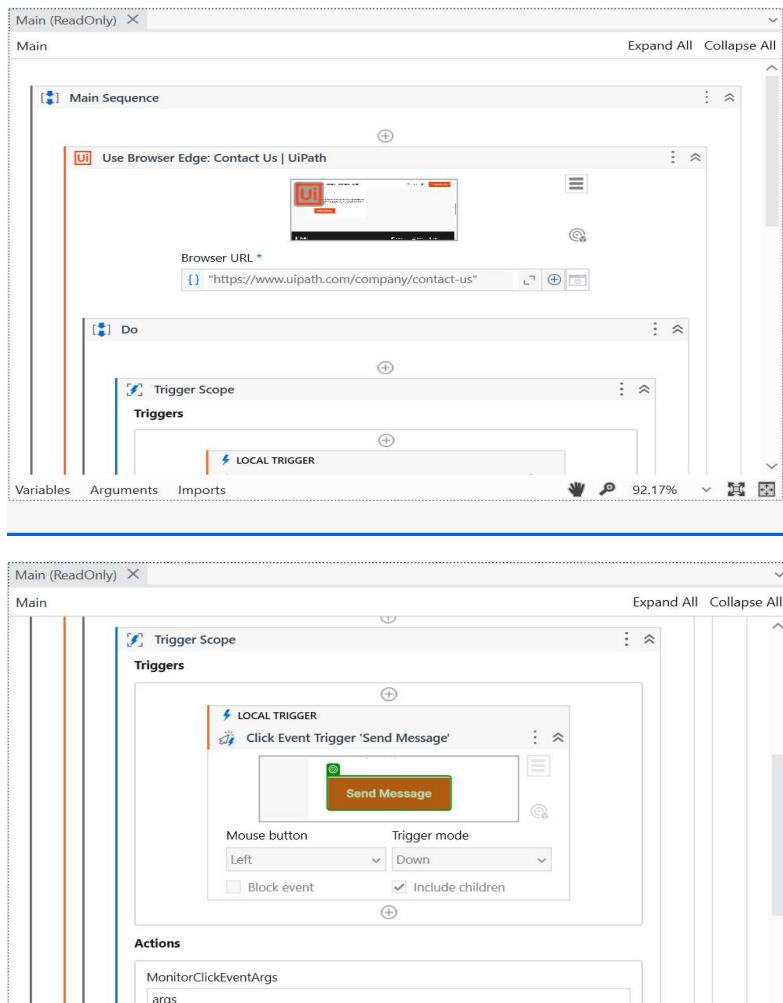
**A. Demonstrate the following events in UiPath:**

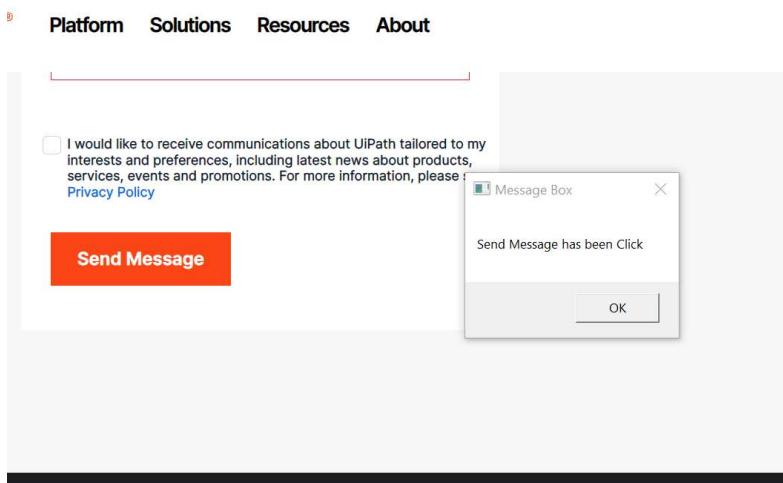
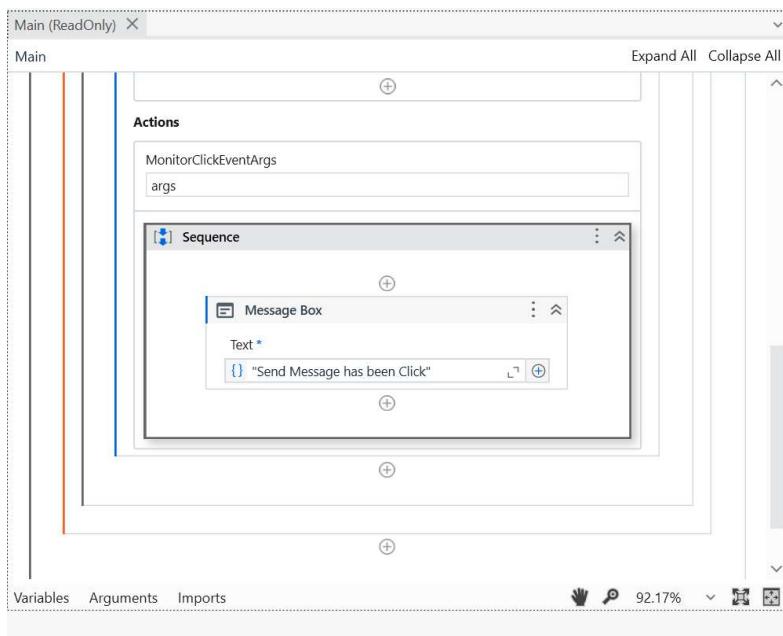
i. Element triggering event

**Steps:**

1. Open project.
2. Select Sequence activity.
3. Select from activities panel Use Application/Browser activity, and indicate the website screen.
4. Select from activities panel Trigger Scope activity.
5. In Trigger block, select from activities panel Click Event Trigger activity and indicate element on the screen to be triggered.
6. Enter Mouse Button as “LEFT” and Trigger mode as “Down”.
7. In Action block, select Message box and type “Send message has been clicked”.
8. Run the project.

**Process & Output:**



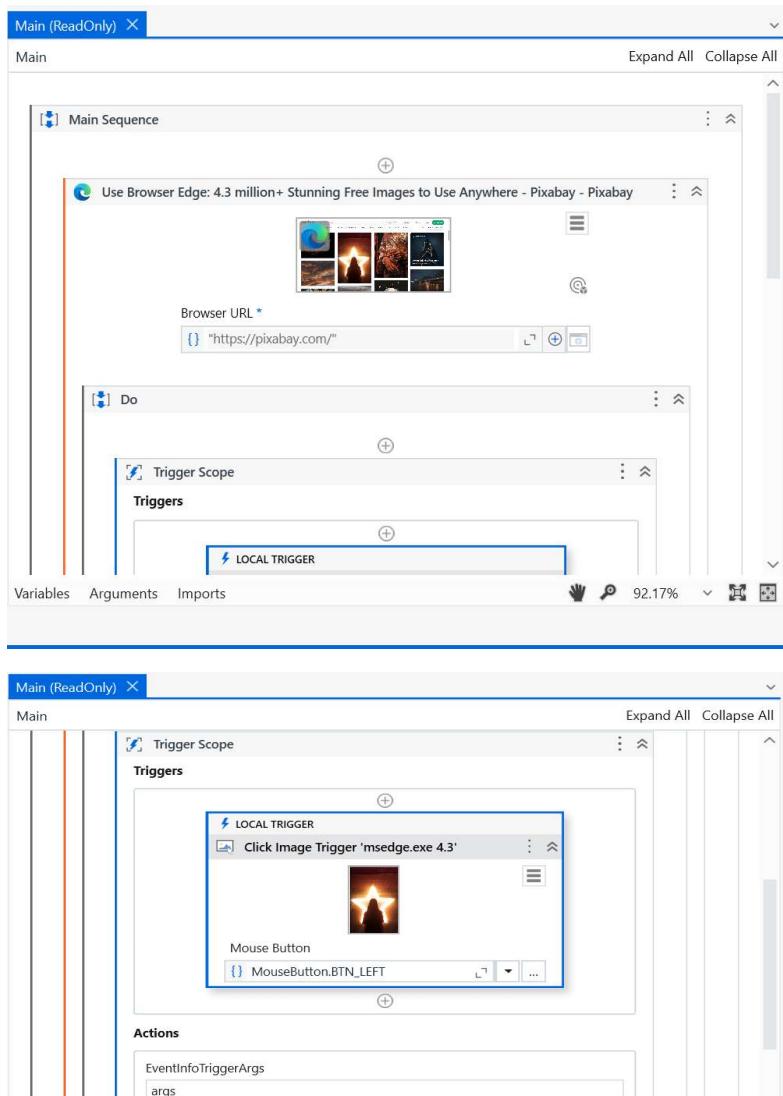


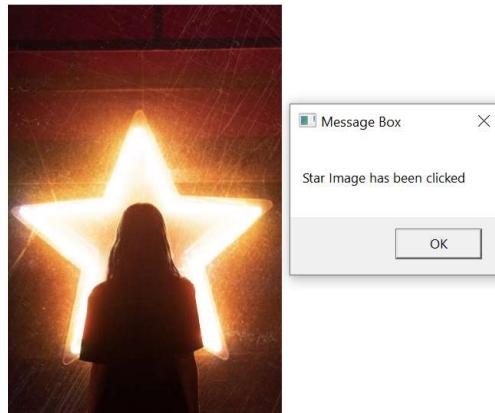
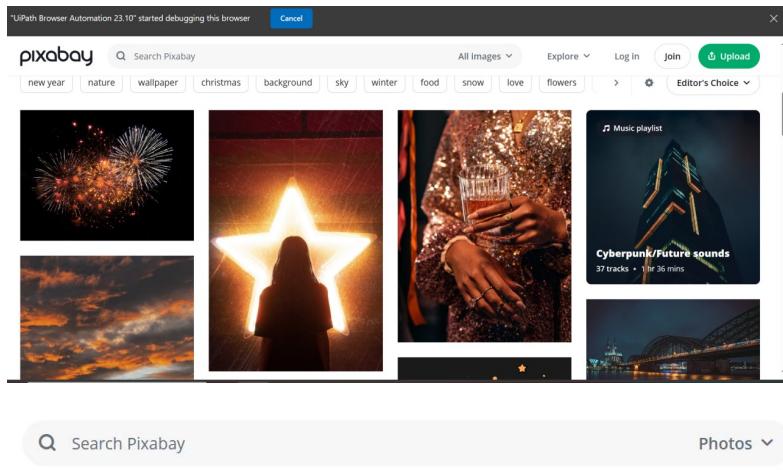
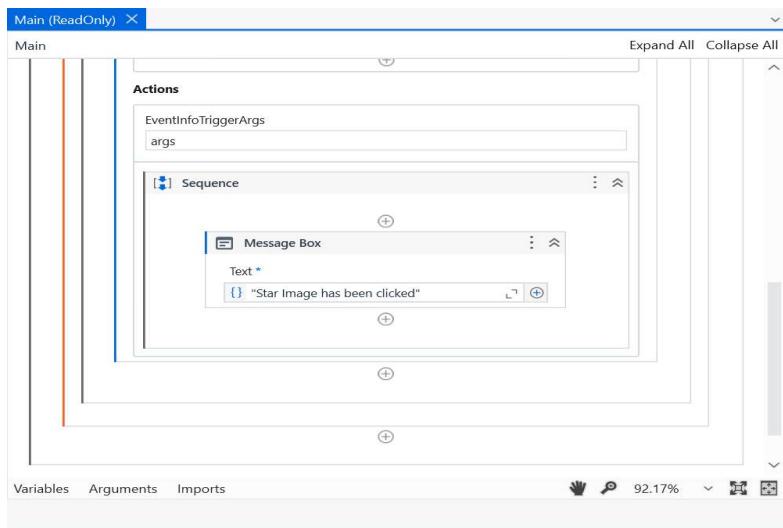
## **ii. Image triggering event**

### **Steps:**

1. Open project.
2. Select Sequence activity.
3. Select from activities panel Use Application/Browser activity, and indicate the website screen.
4. Select from activities panel Trigger Scope activity.
5. In Trigger block, select from activities panel Click Image Trigger activity and indicate image on the screen to be triggered.
6. Enter Mouse Button as “MouseButton.BTN\_LEFT”.
7. In Action block, select Message box and type “Star Image has been clicked”.
8. Run the project.

### **Process & Output:**



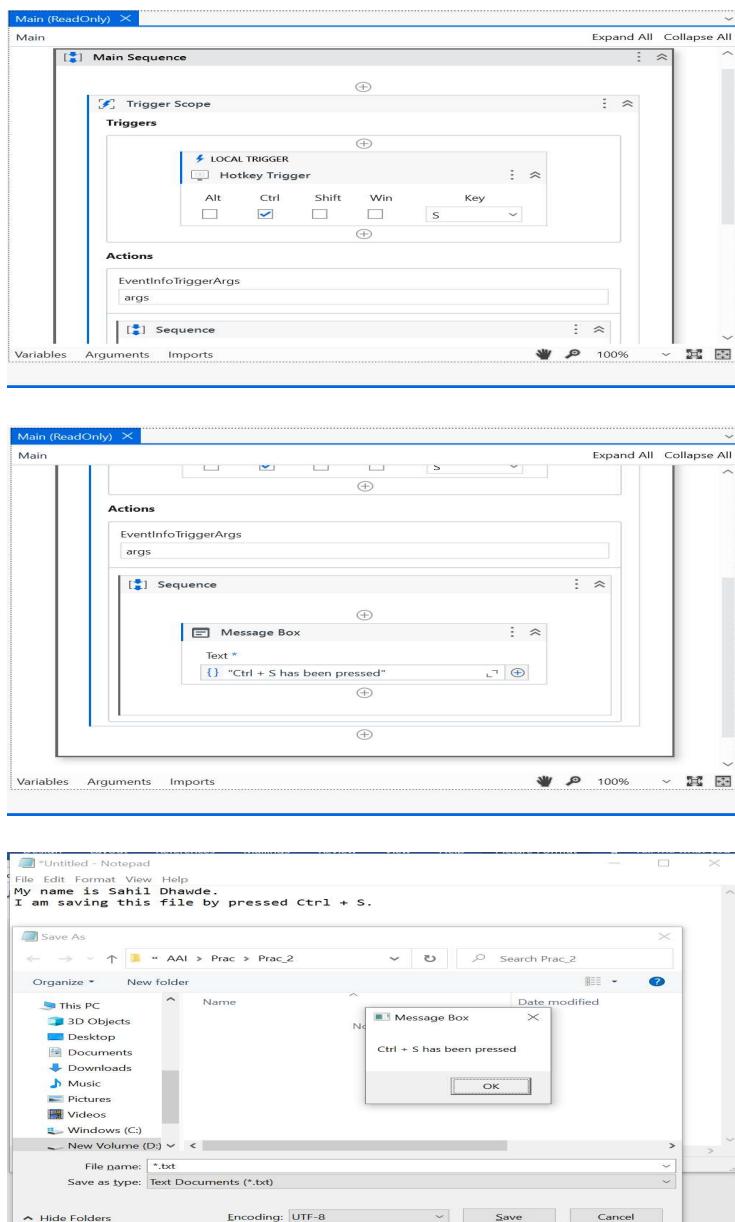


### iii. System Triggering Event Hotkey Trigger

#### Steps:

1. Open project.
2. Select Sequence activity.
3. Select from activities panel Trigger Scope activity.
4. In Trigger block, select from activities panel Hotkey Trigger activity and check for “Ctrl” and enter Key as “S”.
5. In Action block, select Message box and type “Ctrl + S has been pressed”.
6. Run the project.

#### Process & Output:

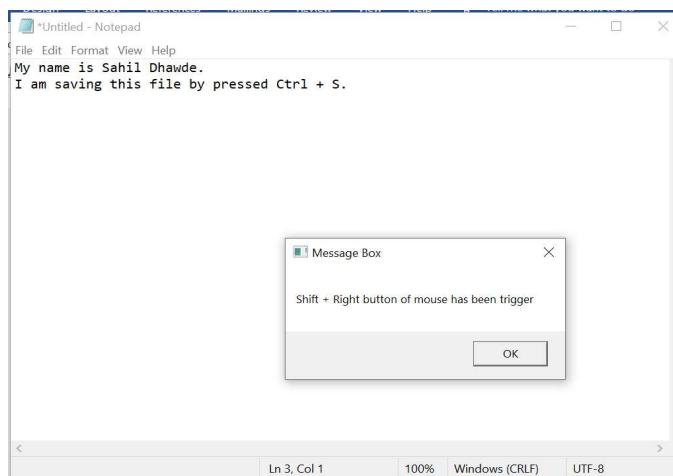
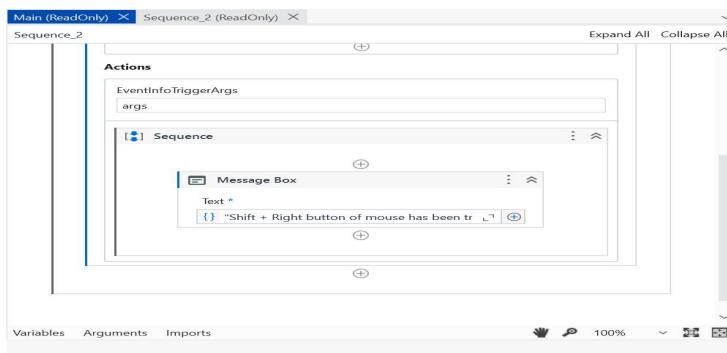
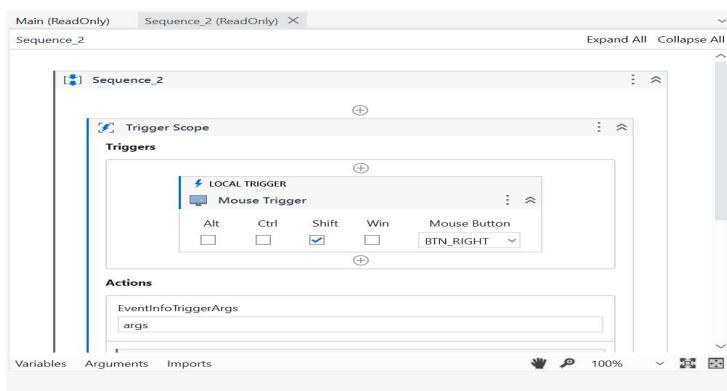


## Mouse Trigger

### Steps:

1. Open project.
2. Select Sequence activity.
3. Select from activities panel Trigger Scope activity.
4. In Trigger block, select from activities panel Mouse Trigger activity and check for “Shift” and enter Mouse Button as “Btn\_Right”.
5. In Action block, select Message box and type “Shift + Right button of mouse has been trigger”.
6. Run the project.

### Process & Output:

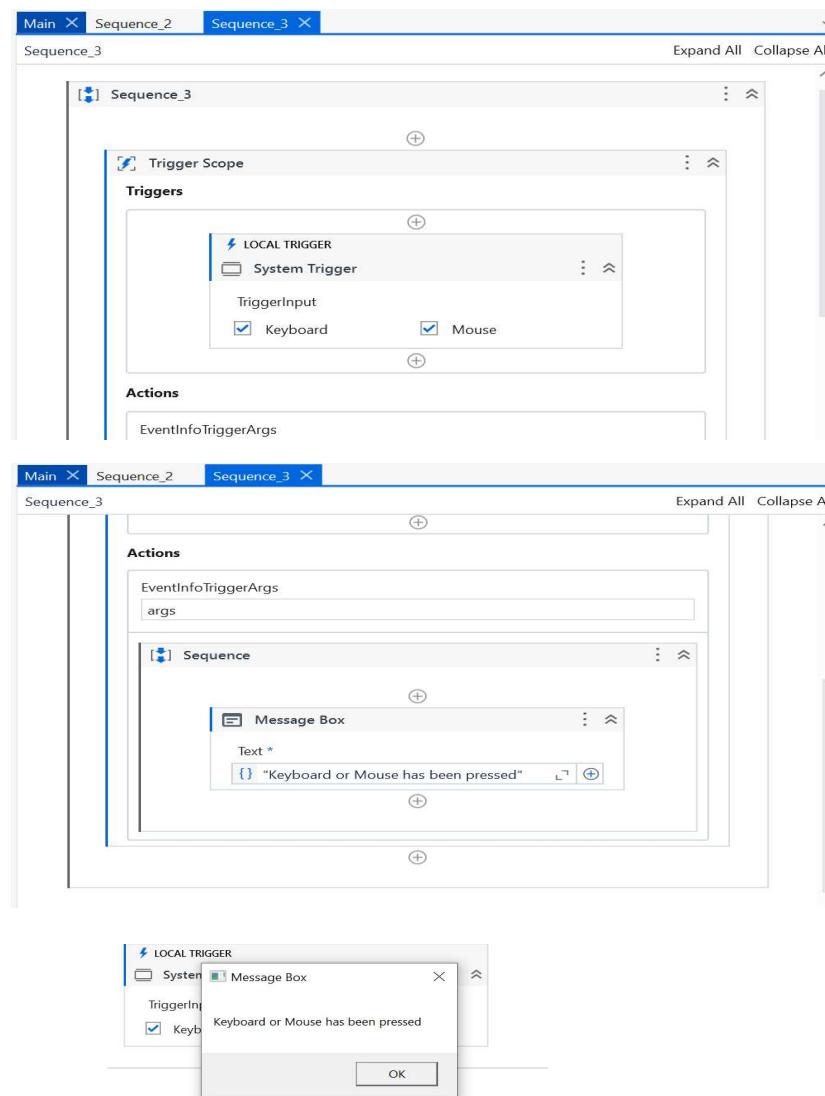


## System Trigger

### Steps:

1. Open project.
2. Select Sequence activity.
3. Select from activities panel Tigger Scope activity.
4. In Trigger block, select from activities panel System Tigger activity and check for both “Keyboard” and “Mouse”.
5. In Action block, select Message box and type “Keyboard or Mouse has been pressed”.
6. Run the project.

### Process & Output:



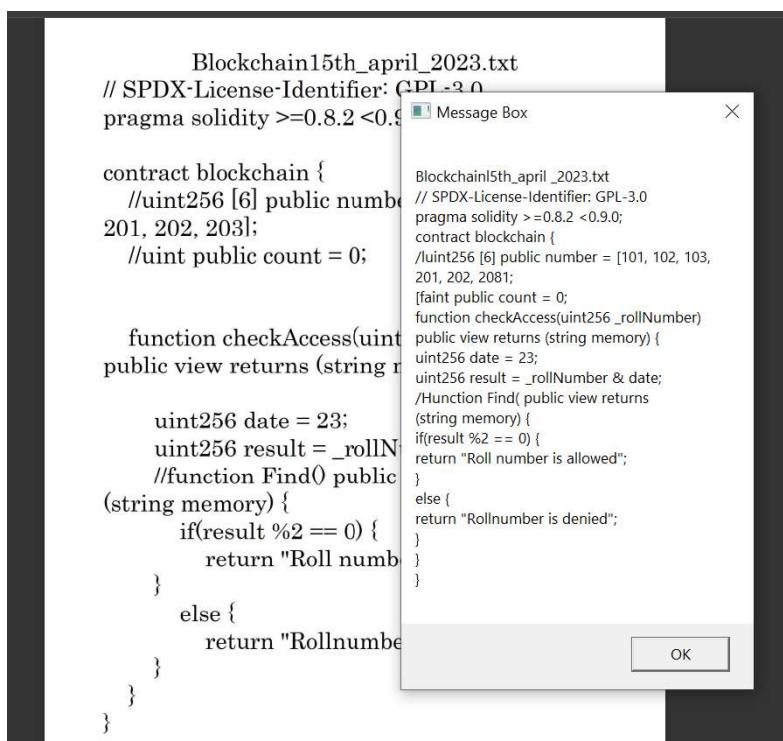
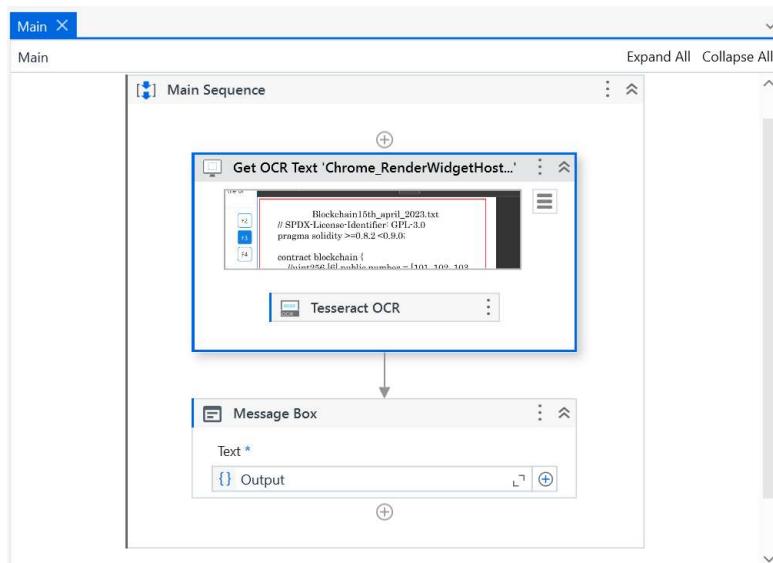
**B. Automate the following screen scraping methods using UiPath**

i. **OCR**

**Steps:**

1. Open project.
2. Select Sequence activity.
3. Select from activities panel Get OCR Text activity, and indicate to the file to get text.
4. Search and Drag n Drop Tesseract OCR from activities panel.
5. Create Output variable as String.
6. Select Message box and enter "Output".
7. Run the project.

**Process & Output:**



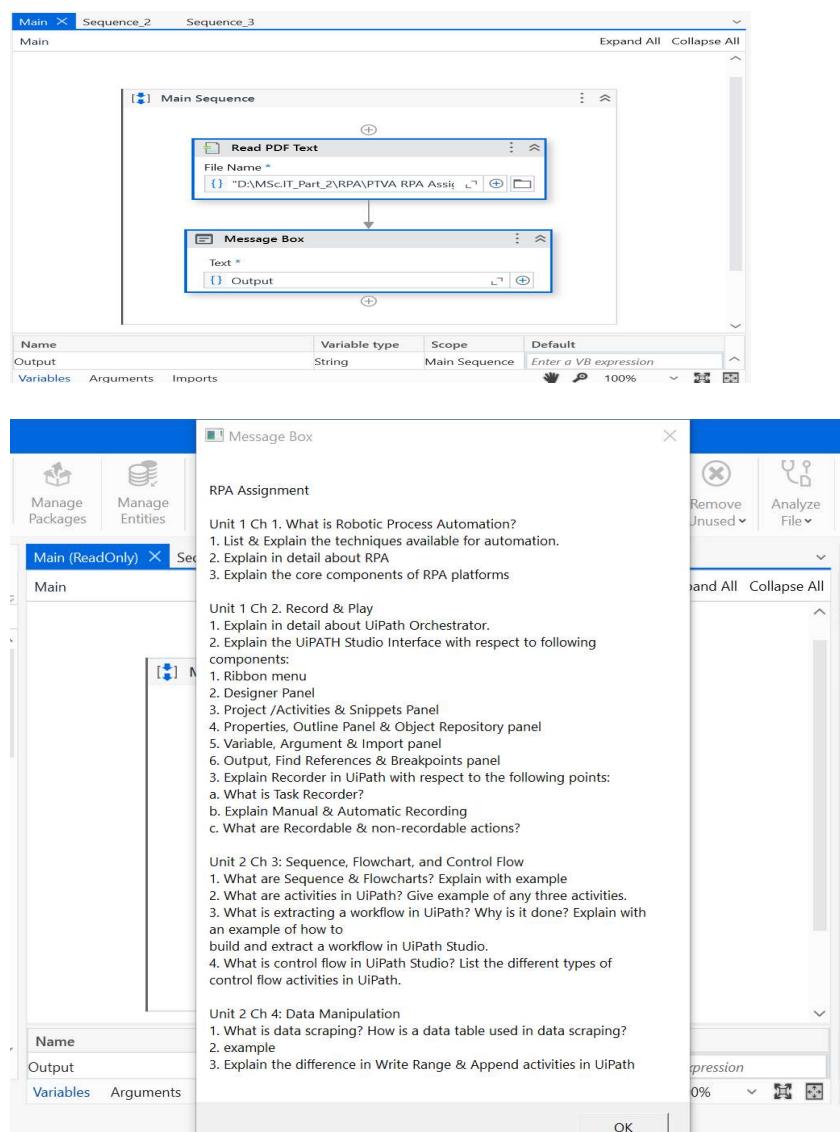
**C. Install and automate any process using UiPath with the following plug-ins:**

**i. PDF Plugin**

**Steps:**

1. Open project.
2. Select Sequence activity.
3. Download PDF plugin from Manage Packages icon on Ribbon panel of UiPath studio.
4. Select from activities panel Get PDF Text activity and give file name from which we have to get text.
5. Create Output variable as String.
6. Select Message box and enter "Output".
7. Run the project.

**Process & Output:**

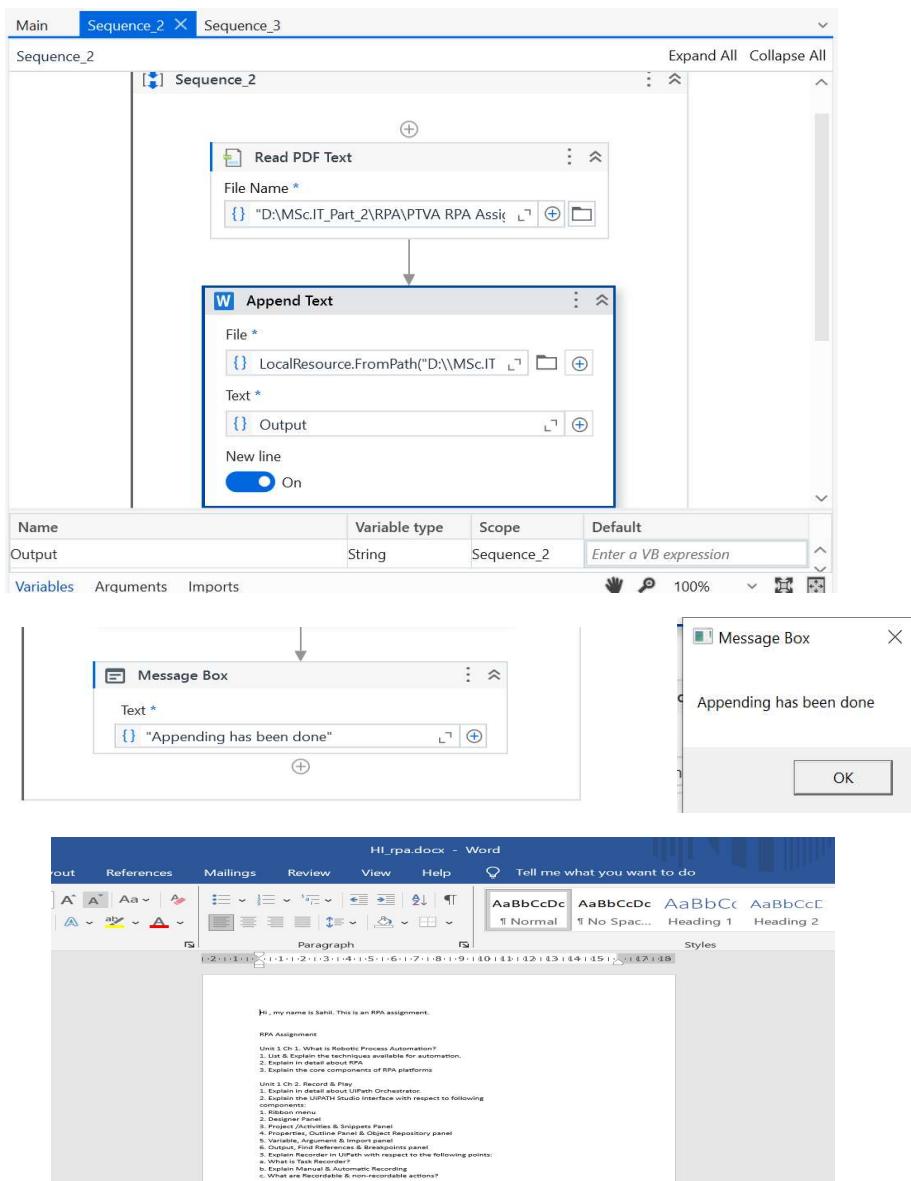


## **ii. Word Plugin**

### **Steps:**

1. Open project.
2. Select Sequence activity.
3. Download Word plugin from Manage Packages icon on Ribbon panel of UiPath studio.
4. Select from activities panel Get PDF Text activity and give file name from which we have to get text.
5. Create Output variable as String.
6. Select Word Append Text activity.
7. Browse the file in which we have to append and set Text as “Output”.
8. Select Message box and type “Appending has been done”.
9. Run the project.

### **Process & Output:**

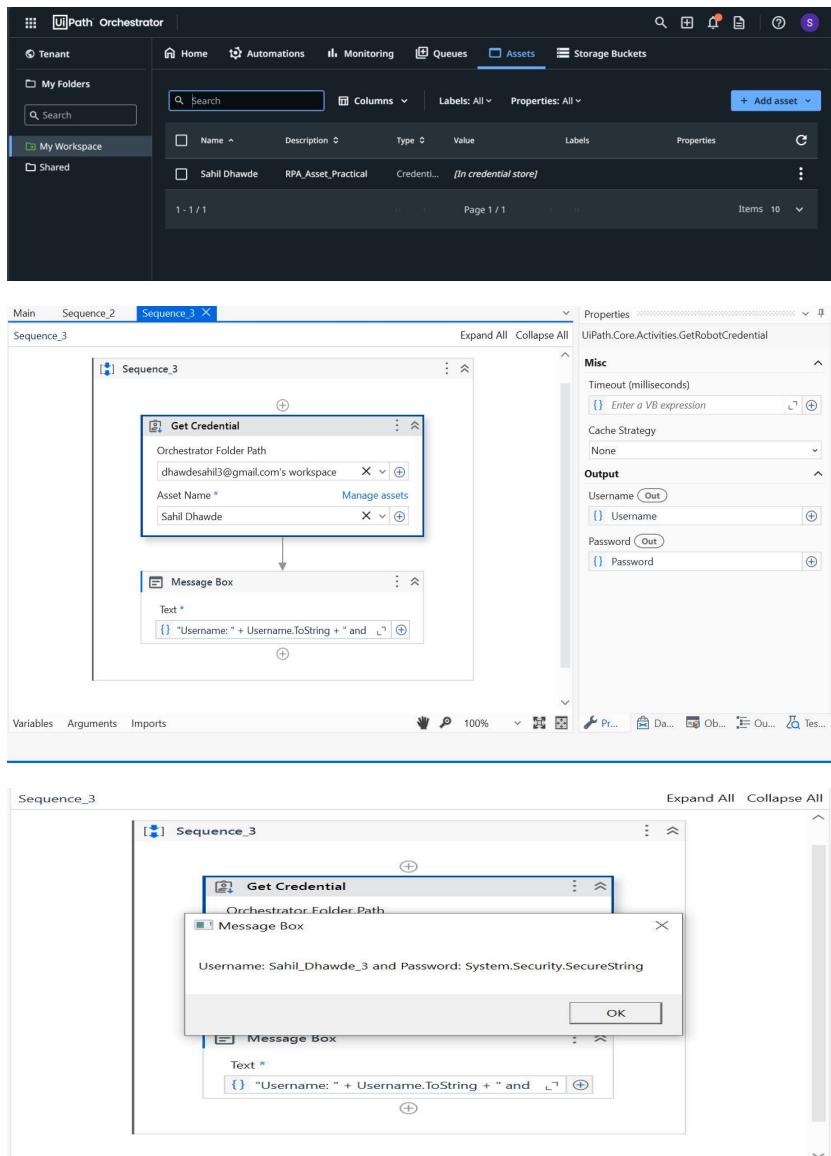


### **iii. Credential Management**

#### **Steps:**

1. Create an Asset in UiPath Orchestrator of type “Credential.”
2. Open Project.
3. Select Sequence activity.
4. Select Get Credential activity from activities panel.
5. In Get Credential activity, select orchestrator folder place as your workspace and enter the Asset Name that created earlier.
6. Create two variables as Username and Password.
7. Select Message box activity from activities panel and type “Username: ” + Username.ToString + ” and Password: ” + Password.ToString”.
8. Run the project.

#### **Process & Output:**



## Practical No: 9

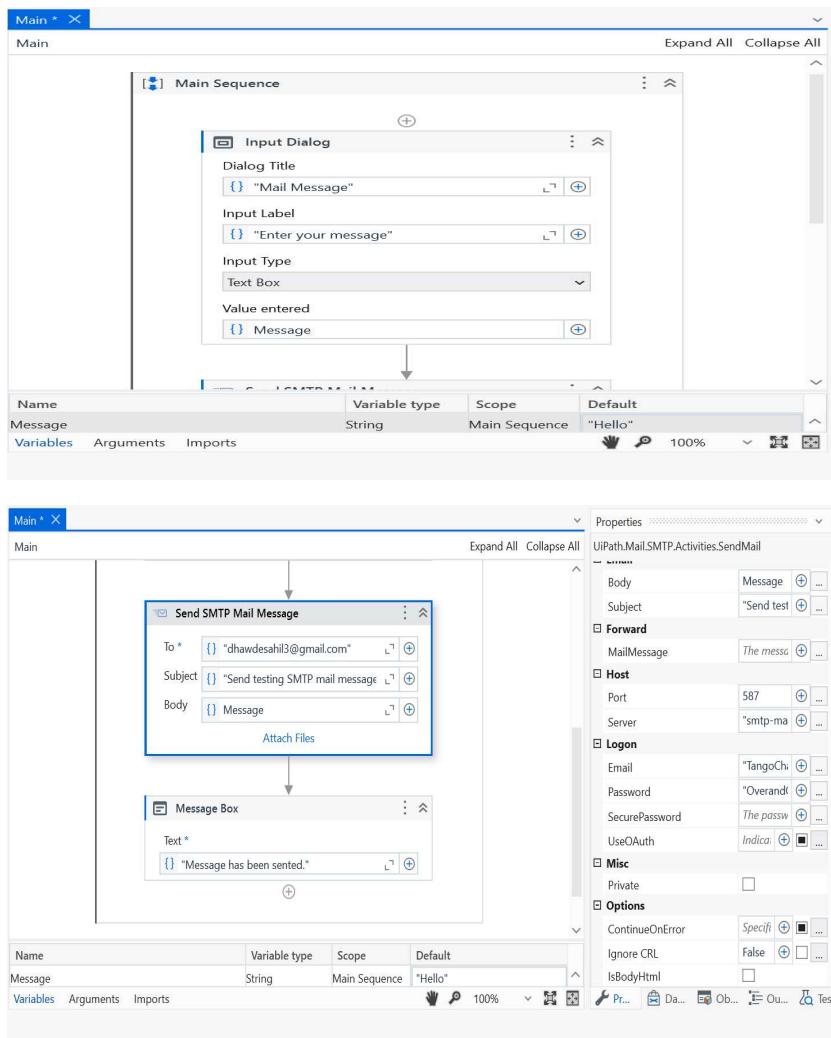
**Aim: Implement the following:**

**A. Automate the process of send mail event (on any email).**

**Steps:**

1. Open Project.
2. Select Sequence activity.
3. Create one string variables Message to store the message.
4. Select one Input dialog.
5. Configure the Input dialog boxes to take the values for Message to send.
6. Select Send SMTP mail message & configure the To, Subject & Message as per the variable created earlier.
7. In Properties panel. Set the Host values of Port to “587”, Server Name to "smtp-mail.outlook.com".
8. And select Message box and enter text “Message has been sended”.
9. Run the project.

**Process & Output:**



The screenshot shows a RPA tool's workflow editor. A step titled "Send SMTP Mail Message" is selected, indicated by a blue border. This step has a sub-step named "Mail Message" which contains the message body "Hello Sahil, I am doing RPA Practical". Below the message body is an "Ok" button. The main step also includes a "Text" field with the value "{!} \"Message has been sended.\"". At the top right of the main step, there are "Expand All" and "Collapse All" buttons.

The screenshot shows the Power Automate designer interface with the following steps:

- Send SMTP Mail Message**:
  - To: dhawdesahil3@gmail.com
  - Subject: "Send testing SMTP mail message"
  - Body: A message box containing the text "Message has been sended."
- Message Box**:
  - Text: "Message has been sended."

The "Send SMTP Mail Message" step is highlighted with a blue border. An arrow points from the "Message has been sended." text in the body of the email step to the "Text" field of the message box step.



Send testing SMTP mail message activity. Inbox x



TangoCharlie333@outlook.com  
Hello



TangoCharlie333@outlook.com  
to me ▾

Hello Sahil, I am doing RPA Practical.



## **B. Demonstrate the Exception handing in UiPath.**

### **Steps:**

1. Open Project.
2. Select Sequence activity.
3. Create one variables A (int32).
4. Select Try Catch activity from activities panel.
5. In Try block, drag n drop Input dialog activity and configure it by entering A as a Value entered.
6. In Catch block, drag n drop Message box and type “Entered values should be integer”.
7. And search for “System.Exception” for Exception.
8. Run the project.

### **Process & Output:**

The image shows the UiPath Studio interface with three main windows:

- Main Window:** Displays the Try Catch configuration. The Try block contains an Input Dialog activity with the following settings:
  - Dialog Title: "Only Numbers"
  - Input Label: "Enter a integer Values"
  - Input Type: Text Box
  - Value entered: AA table below shows variable A defined as Int32 with a scope of Main Sequence and a default value of 10.

Name	Variable type	Scope	Default
A	Int32	Main Sequence	10
- Try Catch Configuration Window:** Shows the Try block with an Input Dialog activity and a Catches section containing a Message Box activity with the text "Entered values should be Integer."
- Execution Results:** Two screenshots of message boxes. The first is the input dialog titled "Only Numbers" with the label "Enter a integer Values" and a text box containing "Sahil". The second is a message box titled "Message Box" with the text "Entered values should be Integer." and an OK button.

## **Practical No: 10**

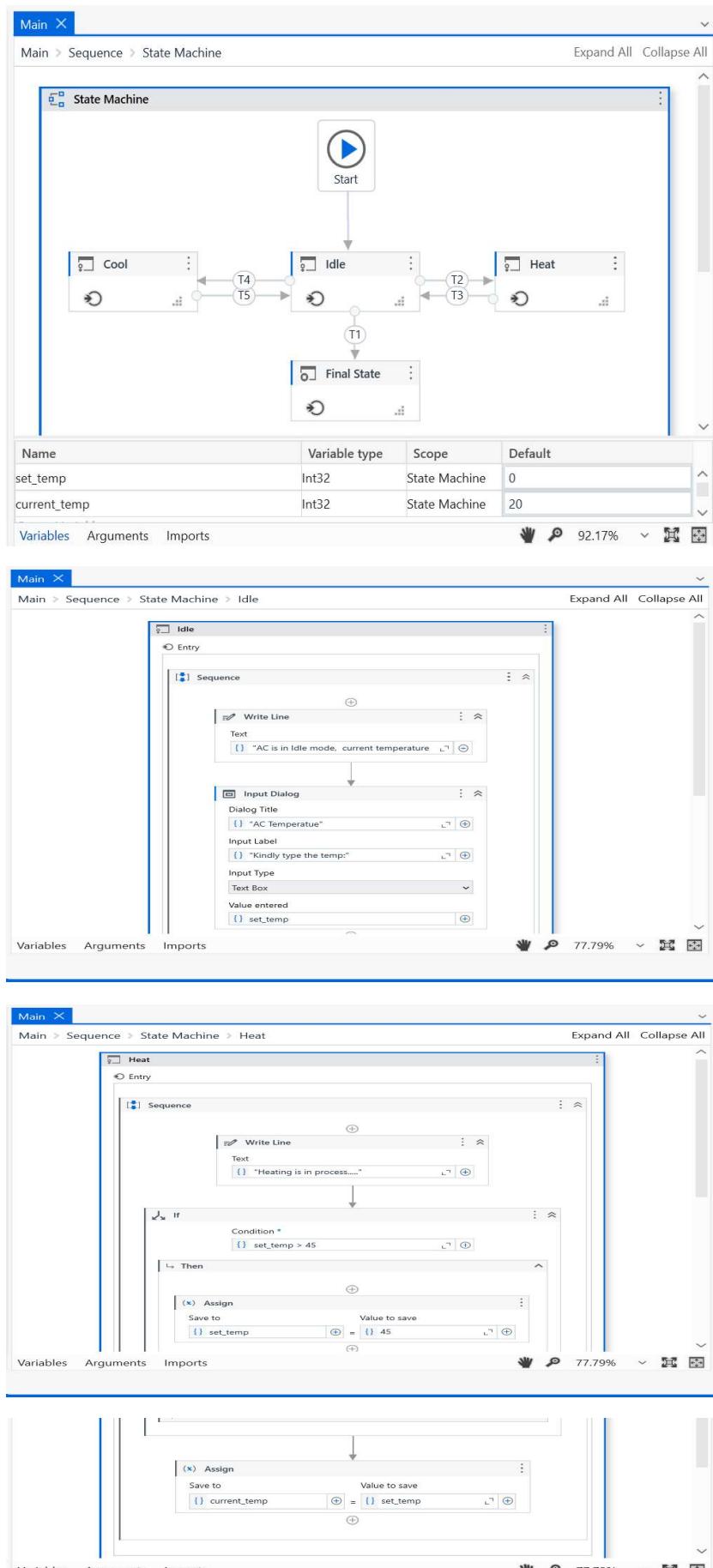
**Aim: Implement the following:**

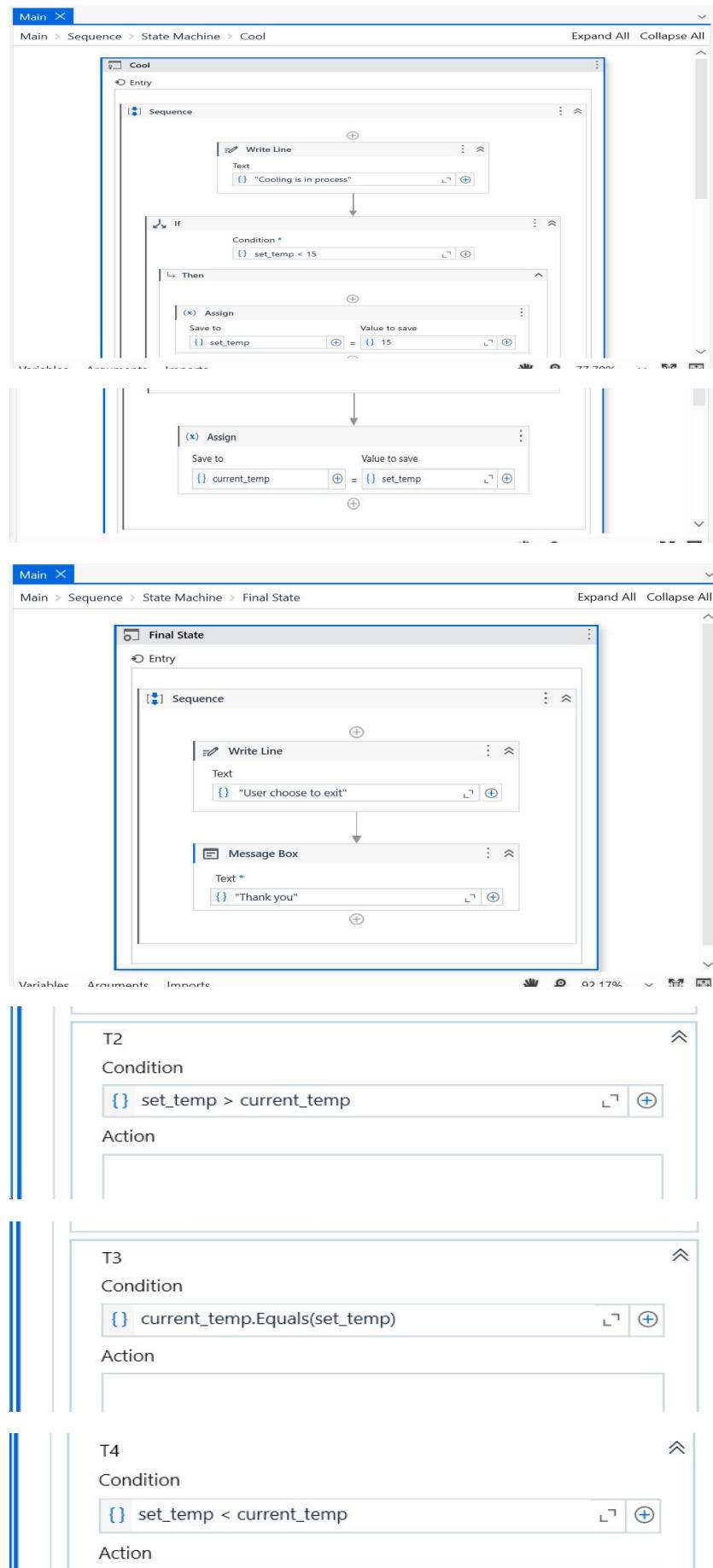
**A. Automate any process using State Machine in UiPath.**

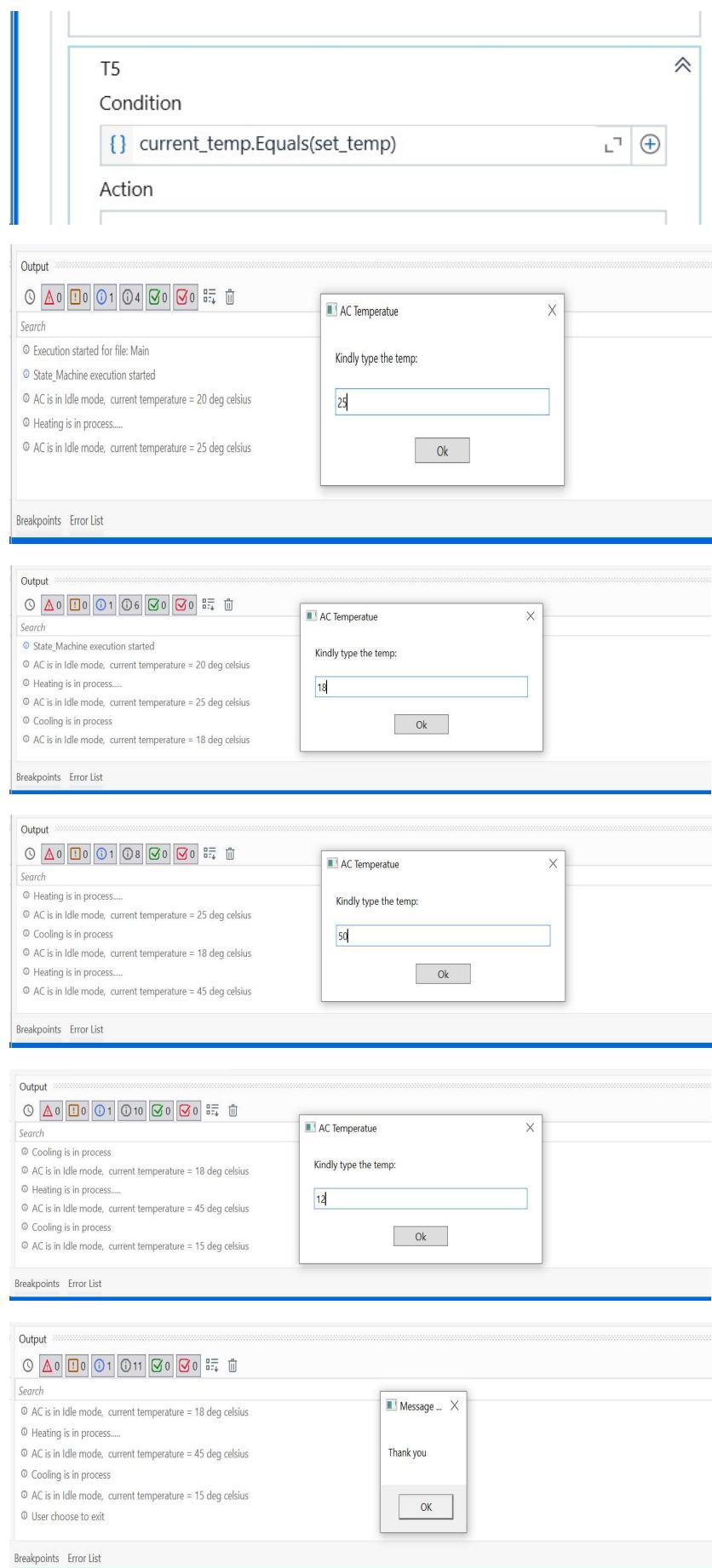
**Steps:**

1. Open Project.
2. Select State Machine activity, double click it.
3. Select from activities panel State activity and named them as Cool, Idle, Heat.
4. Place them beside near other in order as Cool, Idle, Heat.
5. Draw a two Transition line such as incoming (T3) and outgoing (T2) between from Idle to Heat.
6. Draw a two Transition line such as incoming (T5) and outgoing (T4) between from Idle to Heat.
7. Select from activities panel Final State activity.
8. Draw a one Transition line such as outgoing (T1) between from Idle to Final state.
9. Create two variables set\_temp (int32) assigns to 0 and current\_temp (int32) assigns to 20.
10. In Idle state, select one Write Line activity and type "AC is in Idle mode, current temperature = " + current\_temp.ToString + " deg celsius".
11. And select Input dialog and configure it.
12. Set the value of Value Entered as "set\_temp".
13. In Heat state, select one Write Line activity and type " Heating is in process.....".
14. Select If activity and give condition as "set\_temp>45".
15. In then block, select Assign activity to assign set\_temp = 45.
16. Select Assign activity outside the If activity and assign current\_temp = set\_temp.
17. In Cool state, select one Write Line activity and type " Cooling is in process.....".
18. Select If activity and give condition as "set\_temp<15".
19. In then block, select Assign activity to assign set\_temp = 15.
20. Select Assign activity outside the If activity and assign current\_temp = set\_temp.
21. Set the conditions of T2 as "set\_temp > current\_temp".
22. Set the conditions of T1 as "set\_temp < current\_temp".
23. Set the conditions of both T3, T5 transition as "current\_temp.Equals(set\_temp)".
24. Set the conditions of T1 as "set\_temp.Equals(0)".
25. In Final state, select one Write Line activity and type "User choose to exit".
26. And Select Message box and type "Thank you".
27. Run the project.

**Process & Output:**





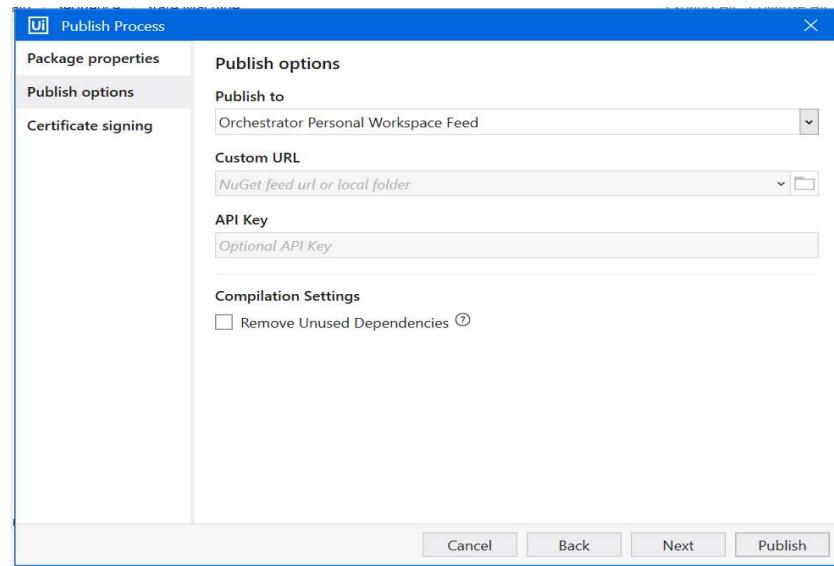
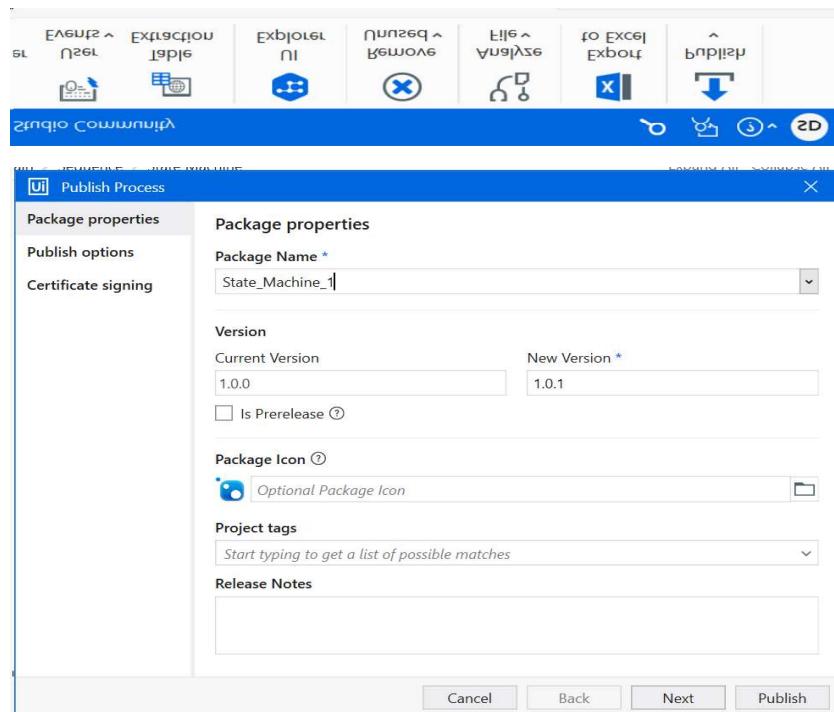


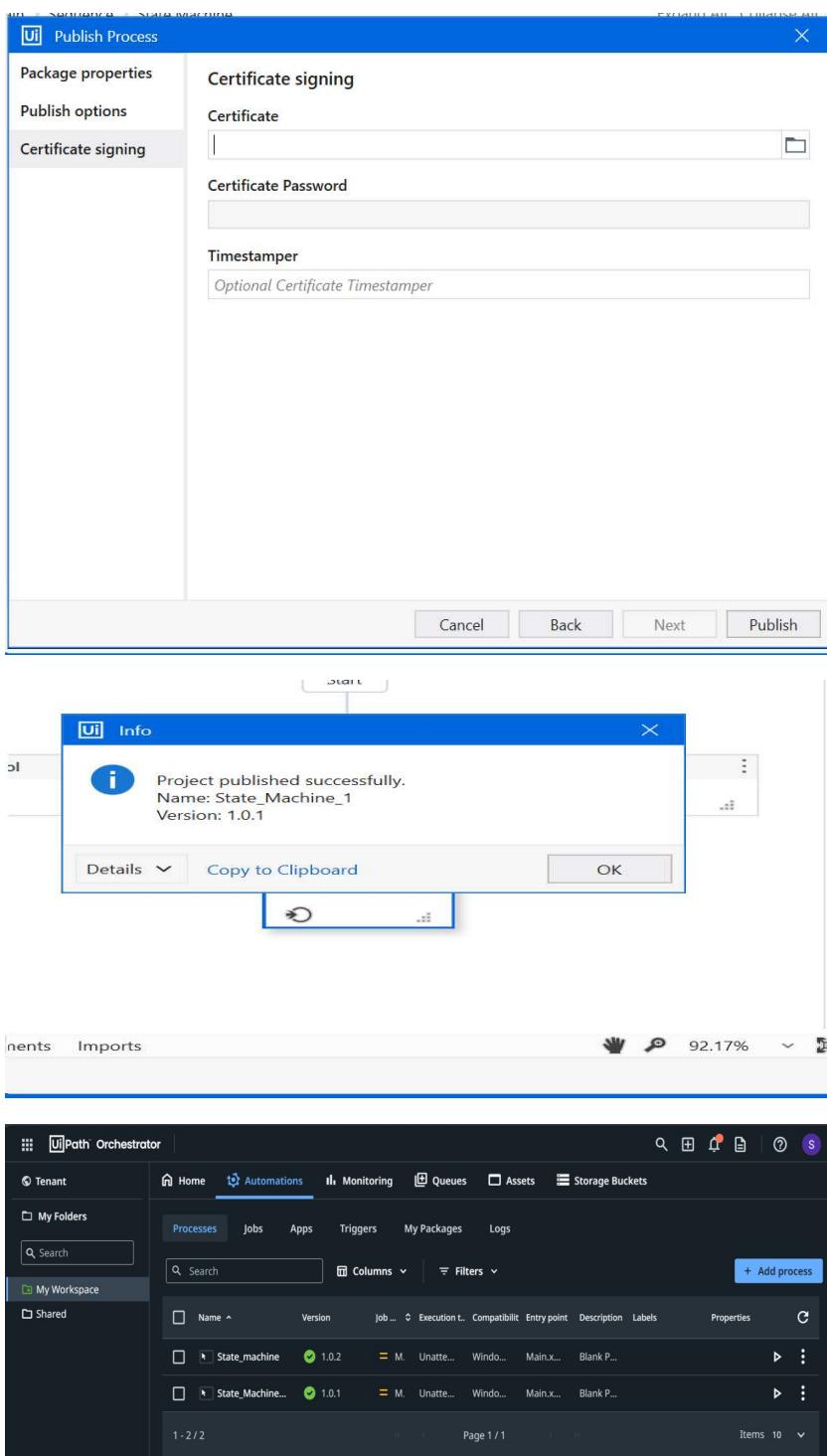
## **B. Demonstrate the use of publish utility.**

### **Steps:**

1. Open Saved project.
2. Select Publish icon on Ribbon panel of UiPath studio.
3. Publish process dialog box will be open.
4. In Package properties, give the Package Name and next.
5. In Publish options, select publish to “Orchestrator Personal Workspace Feed” and Next.
6. Then click on Publish button.
7. You will see your process publish in UiPath orchestrator and assistance.

### **Process & Output:**





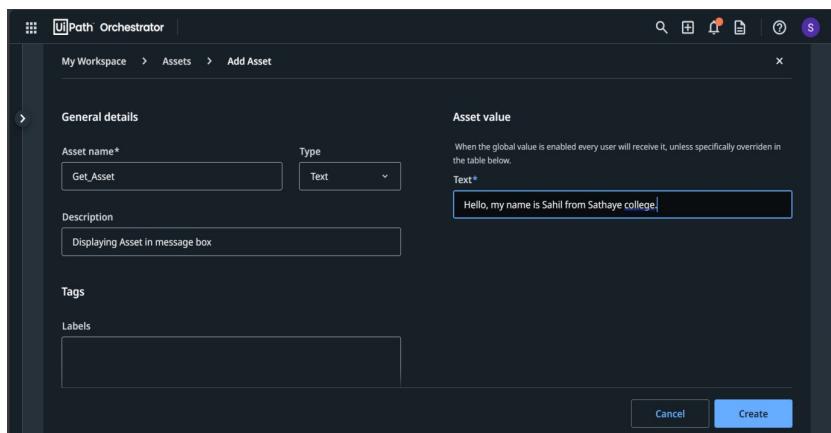
The image shows two side-by-side screenshots of the UiPath platform. The top screenshot is the 'UiPath Orchestrator' interface, showing a dashboard with metrics for Processes (2), Assets (1), Queues (0), Triggers (0), and Machines (2). It also displays 'Jobs Status' with counts for Running (0), Pending (0), Stopping (0), and Terminating (0). The bottom screenshot is the 'UiPath Assistant' interface, showing a sidebar with 'Home' selected, 'Automations' (with items 'State\_machine' and 'State\_Machine\_1' both listed as 'Awaiting install'), and 'UiPath Products' (with items 'Clipboard AI', 'Task Capture', and 'Studio Web').

## **C. Demonstrate the use of asset using orchestrator.**

**Steps:**

1. Create an Asset in UiPath Orchestrator of type “Text.”
2. Open Project.
3. Select Sequence activity.
4. Create one variables Output (string).
5. Select Get Asset activity from activities panel.
6. In Get Asset activity, select orchestrator folder place as your workspace and enter the Asset Name that created earlier.
7. Select Message box activity from activities panel and enter “Output” variable.
8. Run the project.

### **Process & Output:**



Tenant	Home	Automations	Monitoring	Queues	Assets	Storage Buckets
My Folders						
My Workspace	Search	Columns	Labels: All	Properties: All	+ Add asset	

The table lists two assets: 'Get\_Asset' (Text type, Value: 'Hello, my name is Sa...') and 'Sahil Dhawde' (Credential type, Value: 'In credential store').

