Robotic Process Automation Practical Journal

Academic Year: 2023-2024

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Practical 1

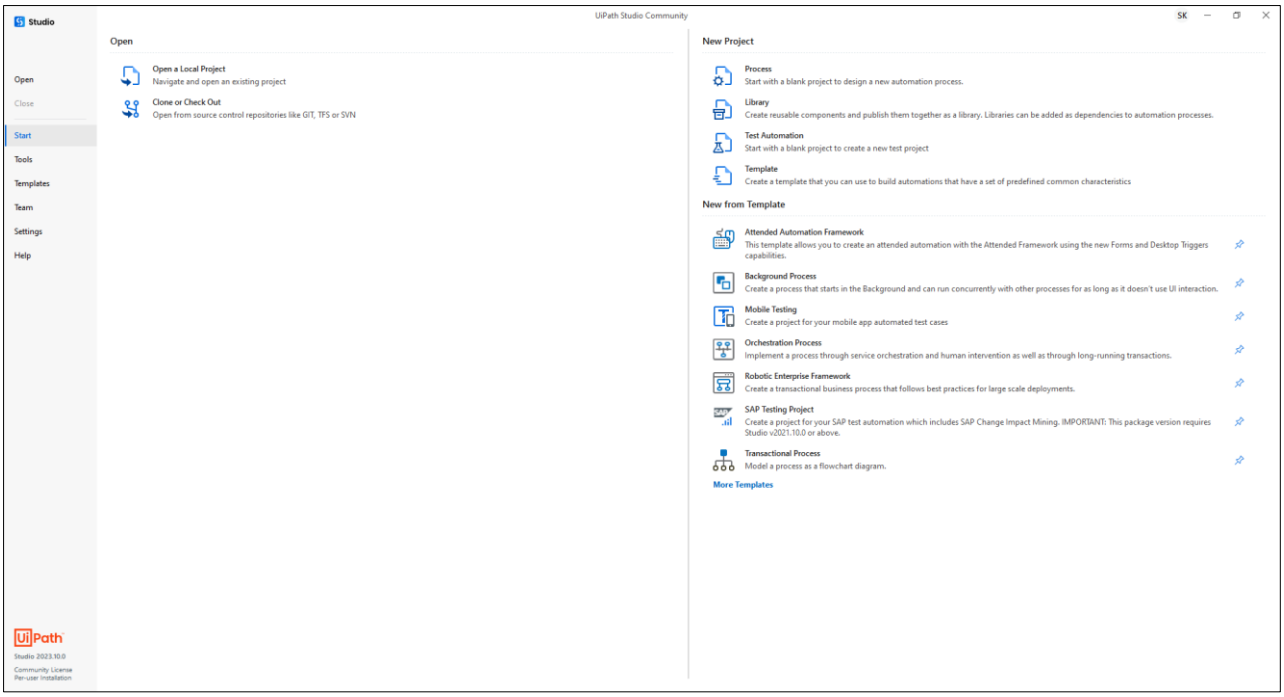
A. Create a simple sequence-based project.

AIM: Use two input dialogs for storing two numbers and display addition of them in message box.

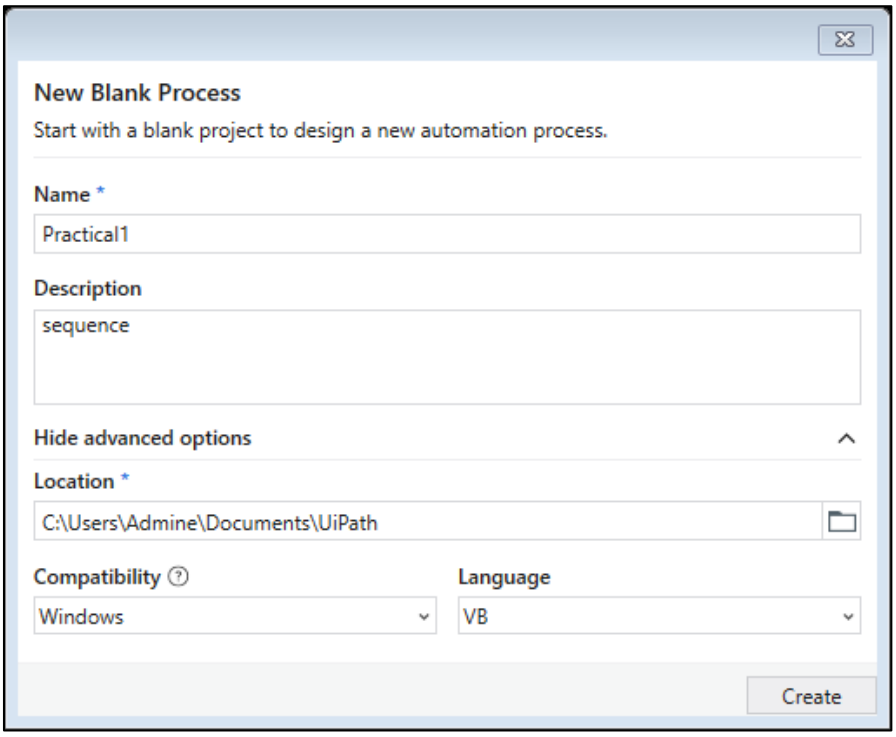
1. Download UiPath Studio Community version from: Studio - Install Studio (uipath.com). Click on Try UiPath Free and create your account then download UiPath community version.

2. After installing UiPath, login to your account. After login below screen will be displayed.

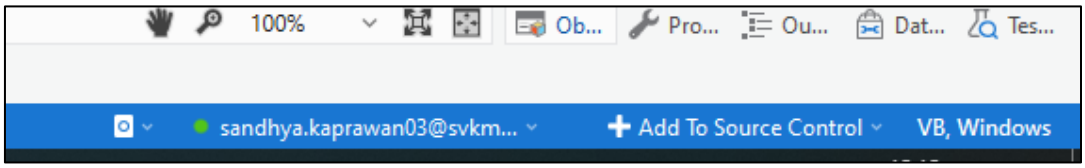
3. For creating new project, click on Process from New Project list.

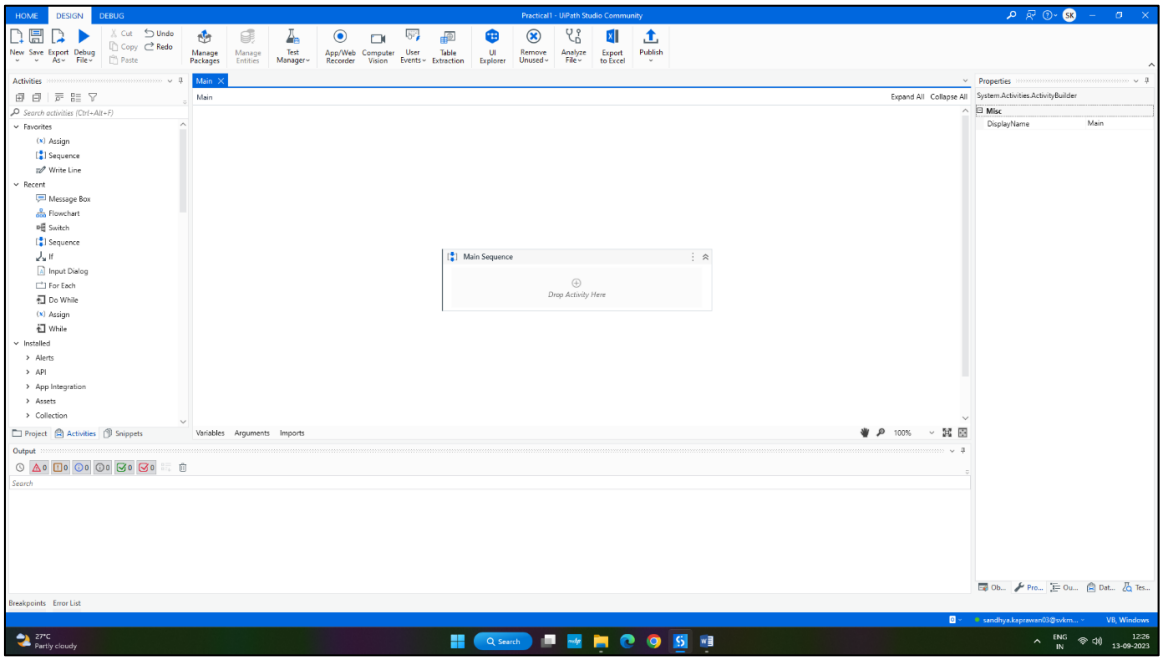


4. Type ‘Practical1’ in Name and sequence in Description for project. We can change the location for our project, by default it is in ‘C:\Users\Admin\Documents\UiPath’. Click on create.

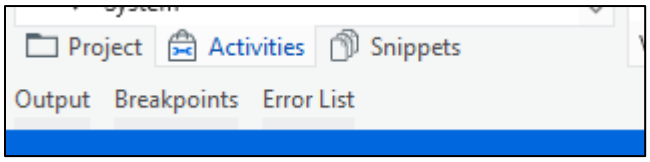


5. Practical1 project will be created. We can see email from which we are signed in, in the bottom right side. Home tab will be displayed, click on Design Tab. We can see Project, Activity and snippets on left hand side. The panel located on the right-hand side of the user interface is for viewing the properties of the activities and for making any changes, if required.

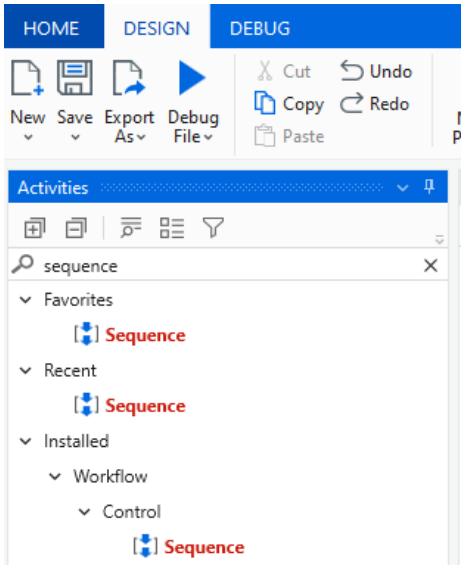


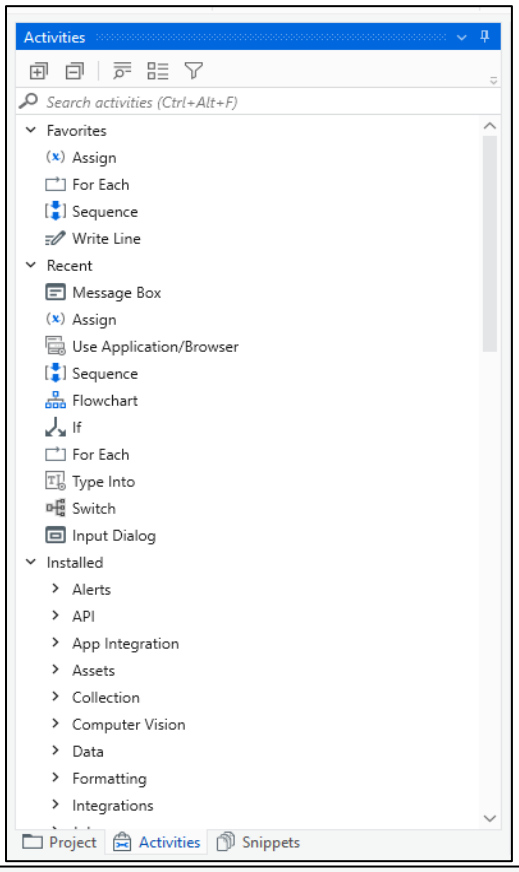


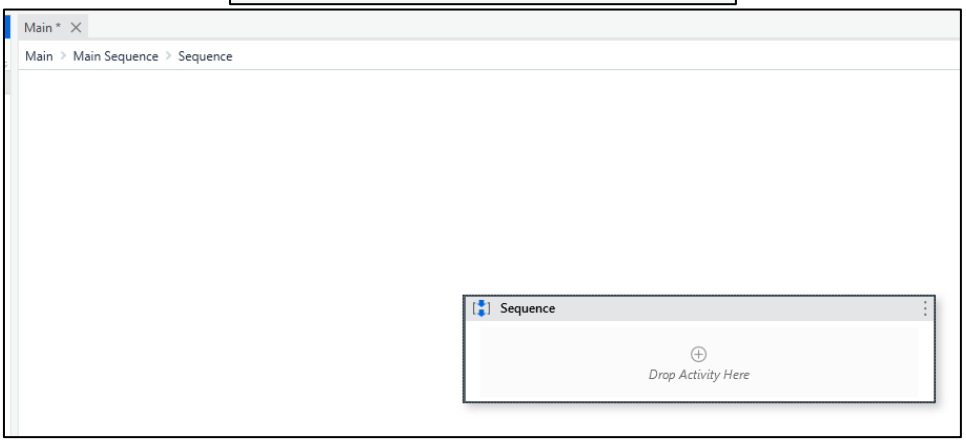
6. Click on Activities, we can drag and drop activities from Activity panel by manually locating them or searching it in search activities.



7. Now, click on search activities, type sequence and drag and drop Sequence to Designer Panel under Main Sequence.

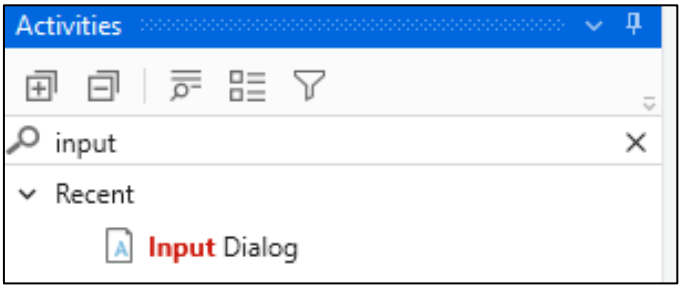


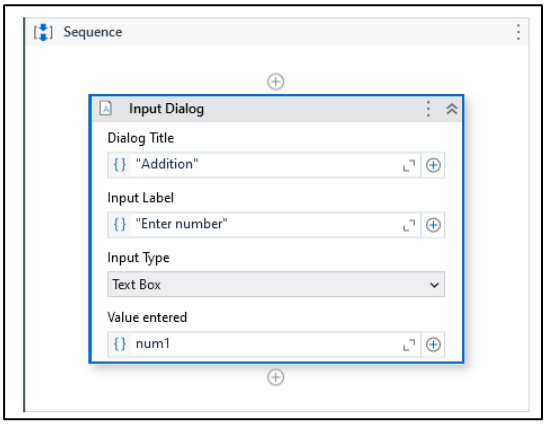




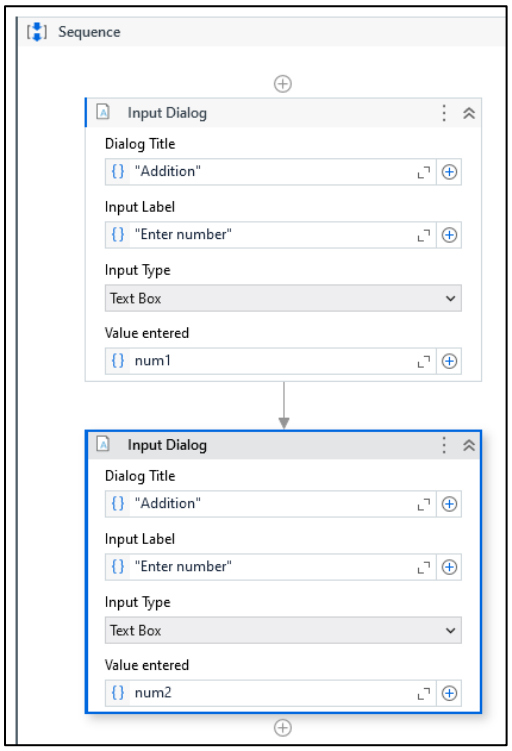
8. Type input dialog and drag it inside sequence activity. In Input Dialog box, type addition in Dialog Title, Enter number in Input Label and select Text Box in Input type and create one variable num1 and select it in value entered.

9. For creating variable, click on variable below Designer panel click on new variable and name it num1, select data type as int32.

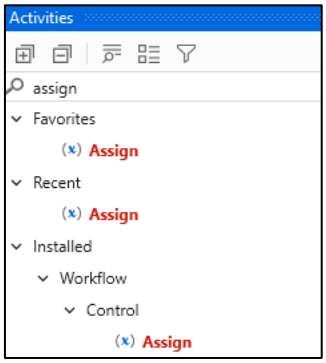


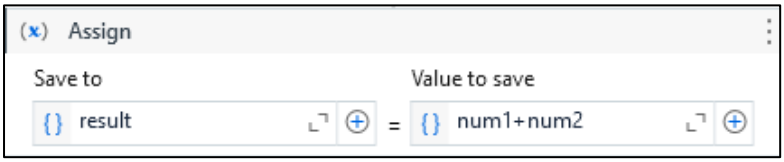


10. Drag one more input dialog box and follow same process for it. Give variable name as num2.



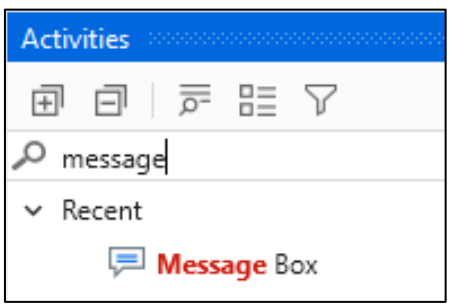
11. Search for assign activity and drag it below second input dialog box. Create variable result and select Int32 as variable type of variable num1, num2 and result. Select 'result' in Save to and 'num1+num2' in Value to save.

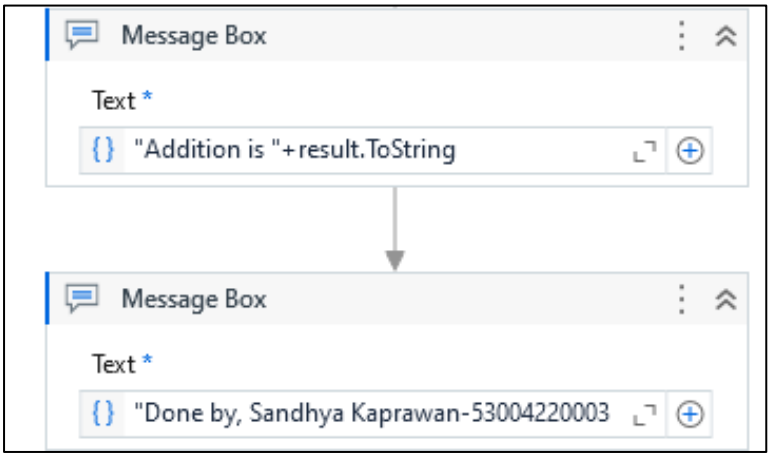




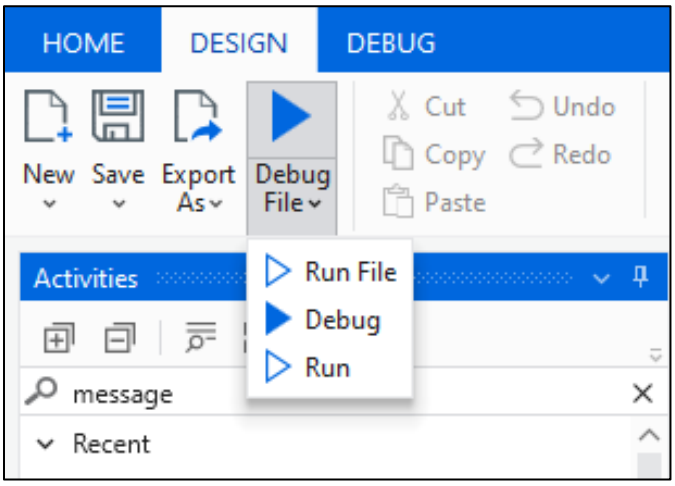
12. Search for message box and drag it below assign activity. In Textbox type "Addition is "+result.ToString.

13. Again, drag and drop message box and type your name and sapid in it.

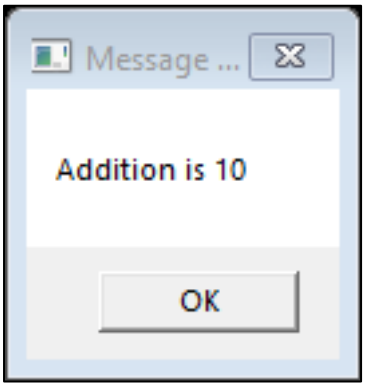


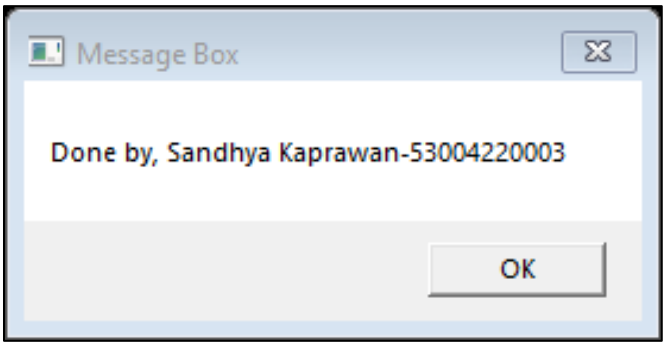


14. Save it and press CTRL+F6 Or click on debug file and Run File.



15. Type '5' in first input box and '5' in second input box. Result will be displayed.

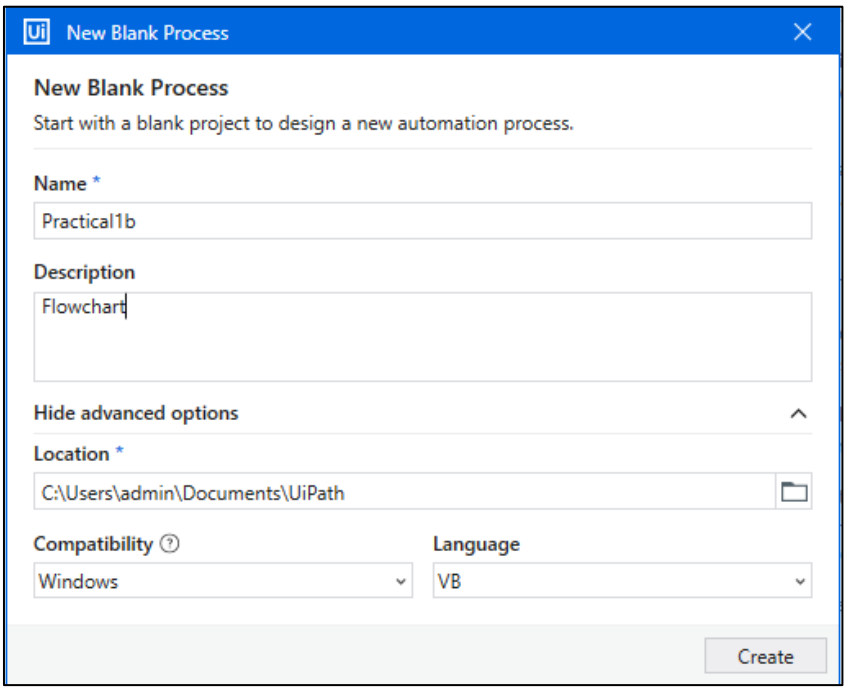




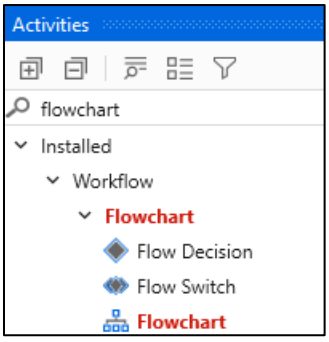
B. Create a flowchart-based project.

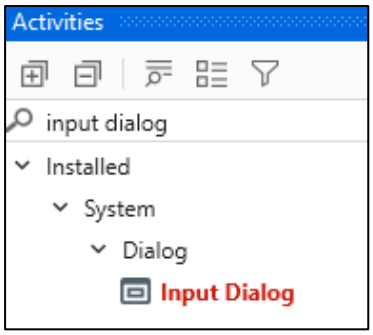
AIM: Use input dialog box to take number from user and using flow decision check whether it is even or odd using message box.

1. Click on Process and Select blank process and name it Practical1b, give description click create.

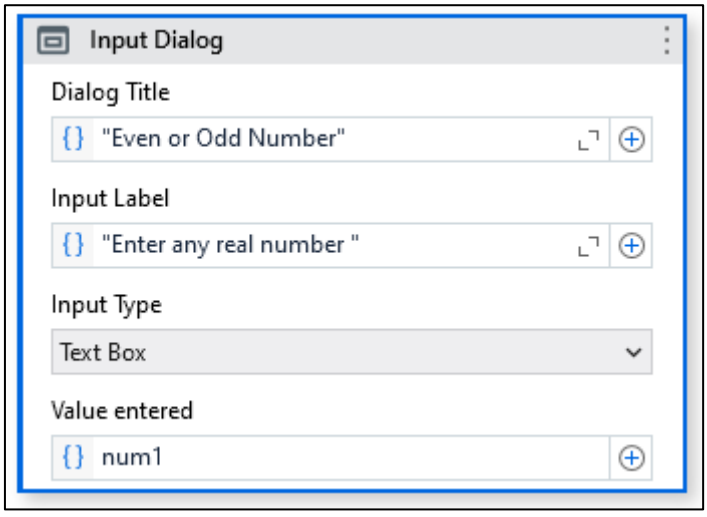


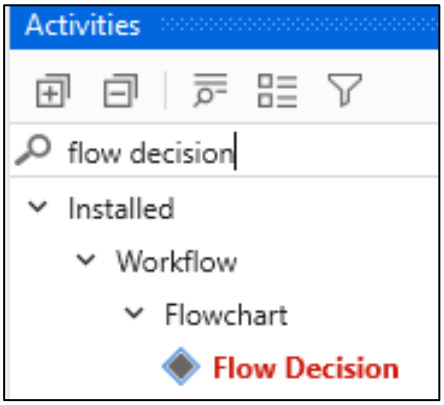
2. Click on Activities, search flowchart and drag and drop it inside main sequence. Do same step for input dialog and drag it inside flowchart below the start and set it as start node.



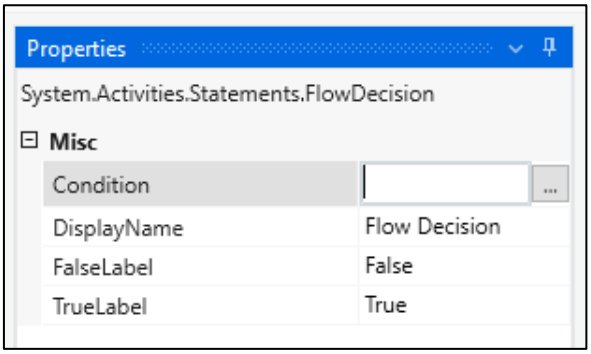


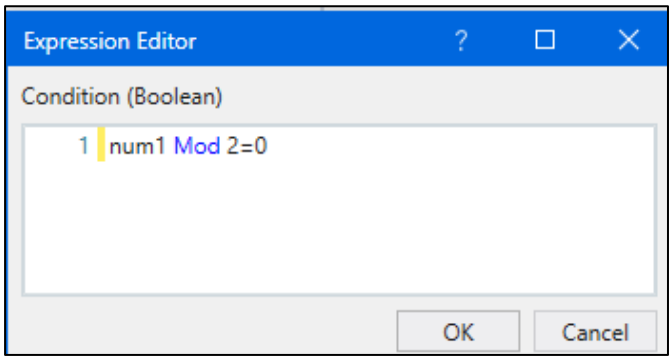
3. Inside input dialog box, fill in the details as given. Search for flow decision and drag it below input dialog box.



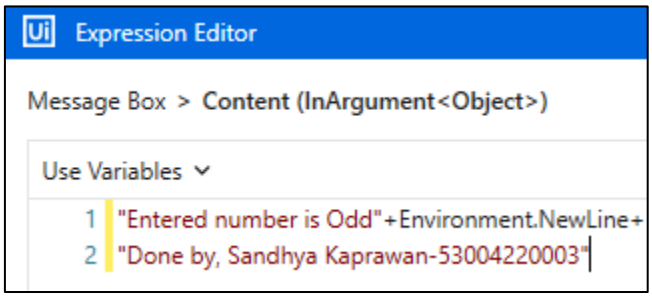


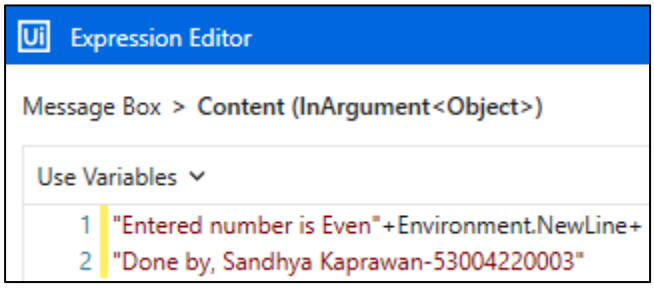
4. Open properties panel for flow decision and in condition box, open editor write “num1 Mod 2=0”.



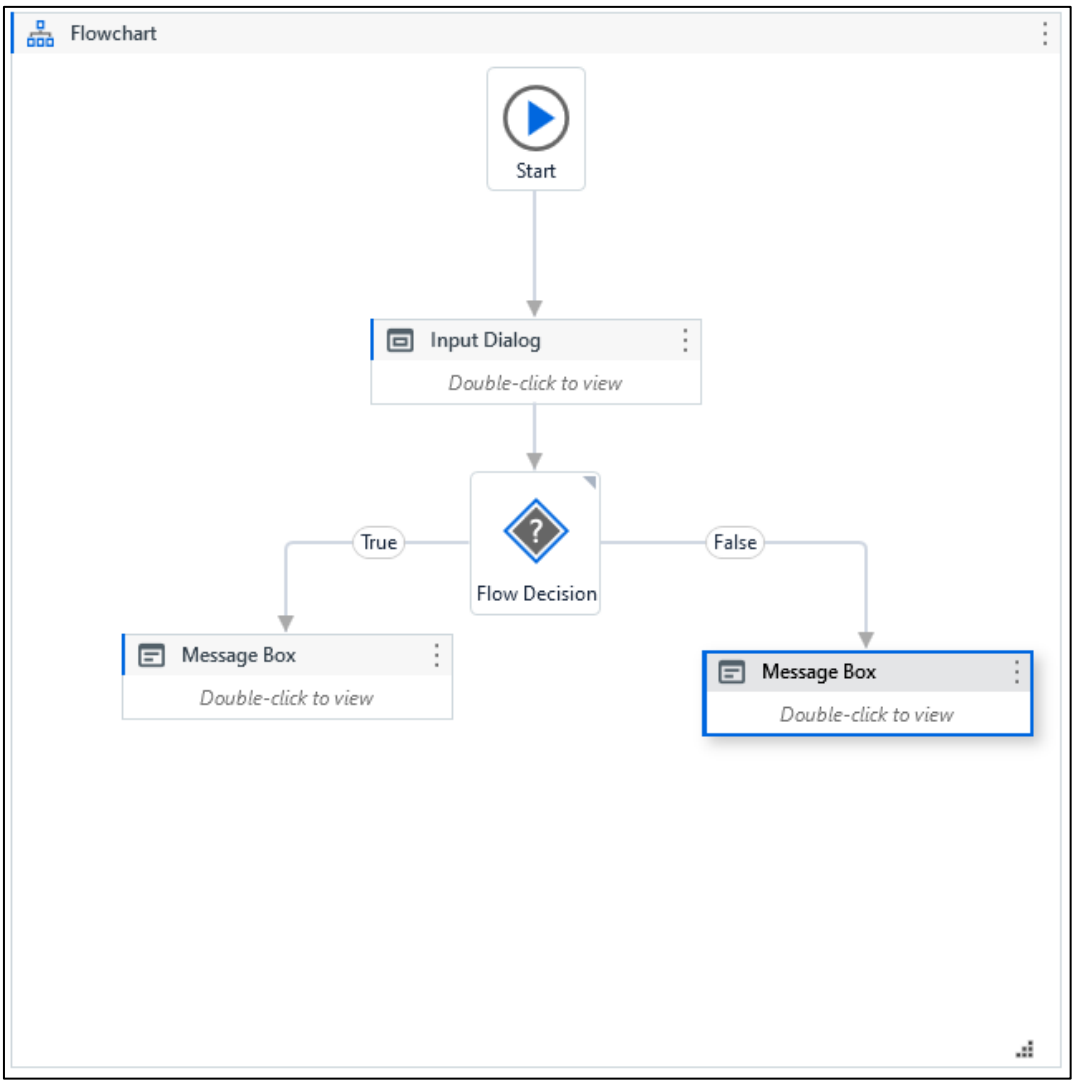


5. Search for message box and drag two below flow decision and connect one to true and one to false side of flow decision. Type message as shown below.

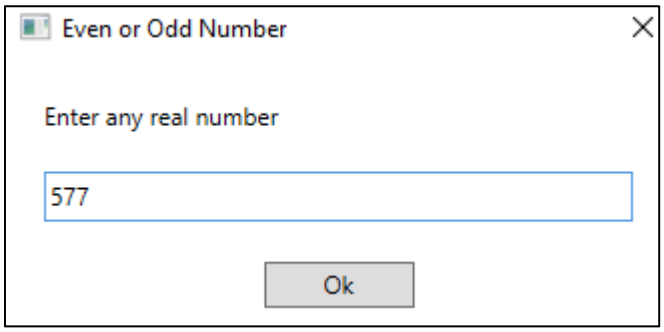


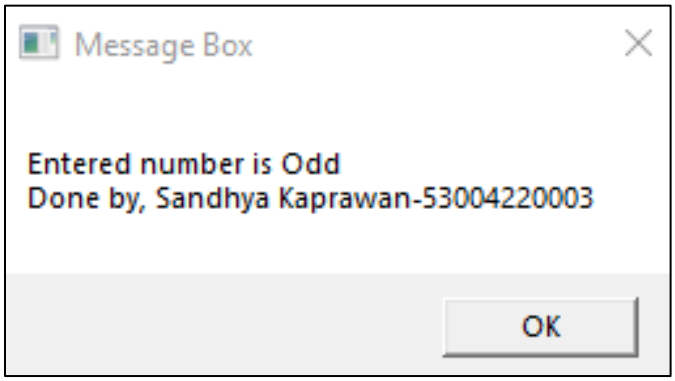


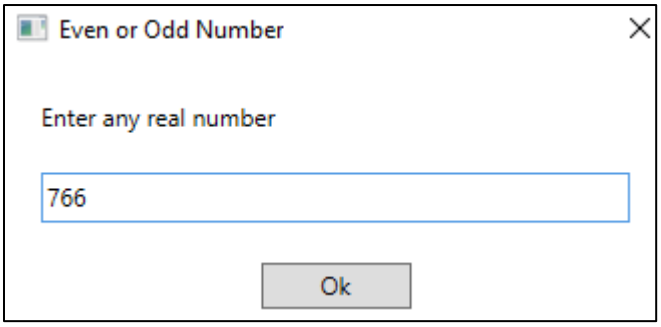
6. Entire flow chart will look like this

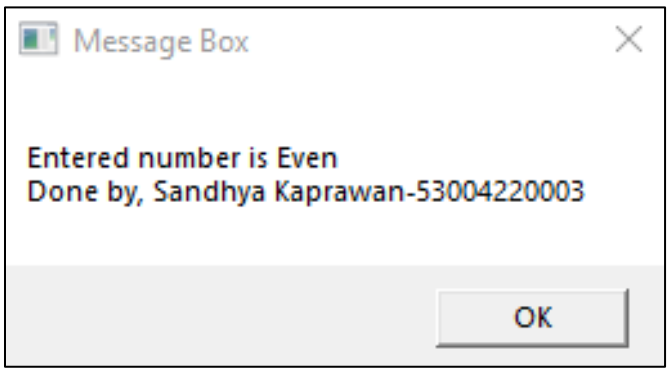


7. Click on Run file or press CTRL+F6. Output will be like this.







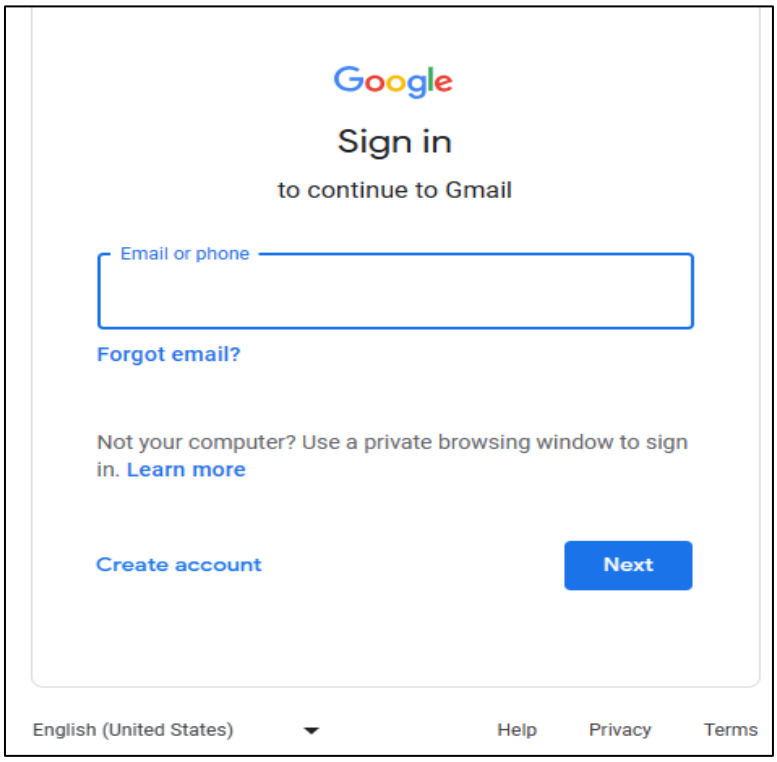


C. Create a UiPath Robot which can empty a folder in Gmail solely on basis of recording.

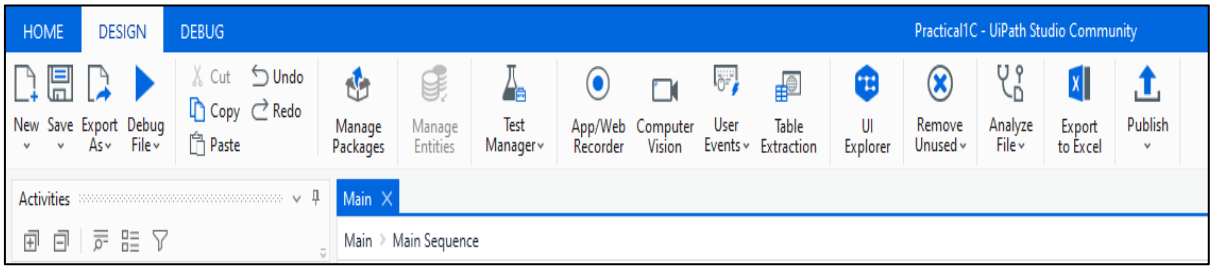
AIM: Use App/Web Recorder from Design Tab to login to Gmail and delete mails from bin.

1. Click on Process and create process Practical1C, give description and click on create.

2. Open chrome web browser and go to Gmail login screen. Gmail (google.com)

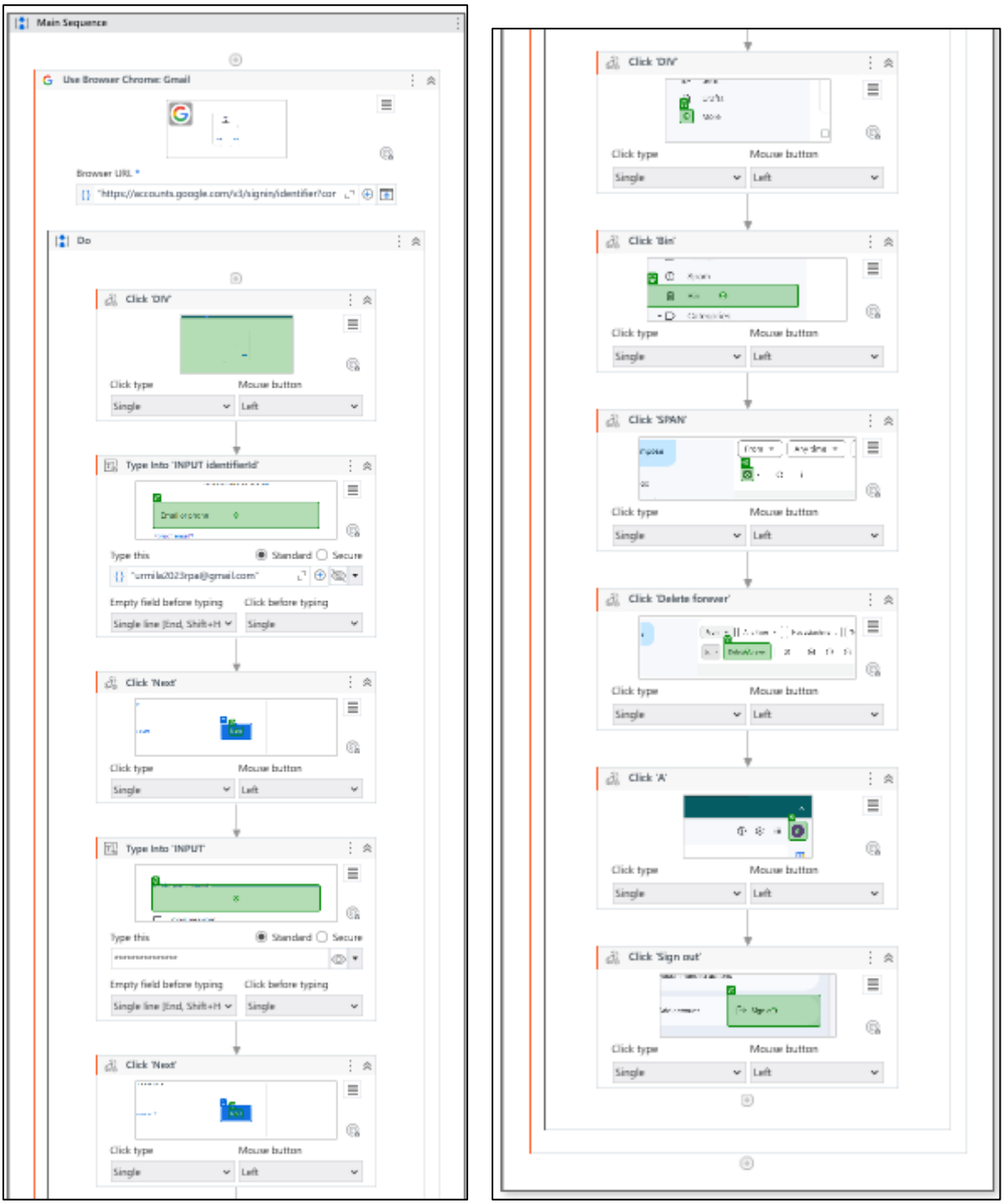


3. Go to main sequence then Click on App/web recording. Remember Gmail login screen should be behind UiPath Studio window so the recorder can start in web browser only. Recording will start, perform the login steps.



4. Use ‘Type into’ for typing and ‘Click’ for mouse clicking the next button. We can use secure option for password typing and standard for typing email.

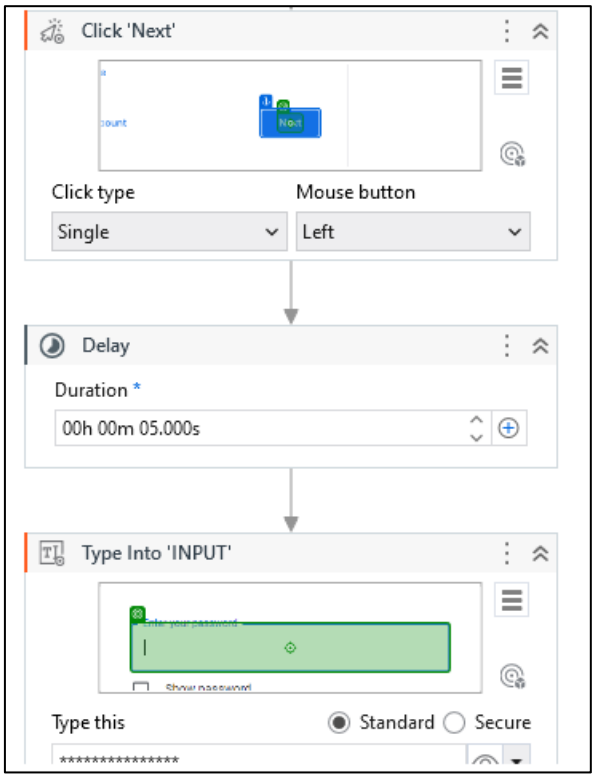
5. After deleting bin, press ‘Esc’ key two times or click on save option in recorder screen. Following are the steps recorded in recorder.

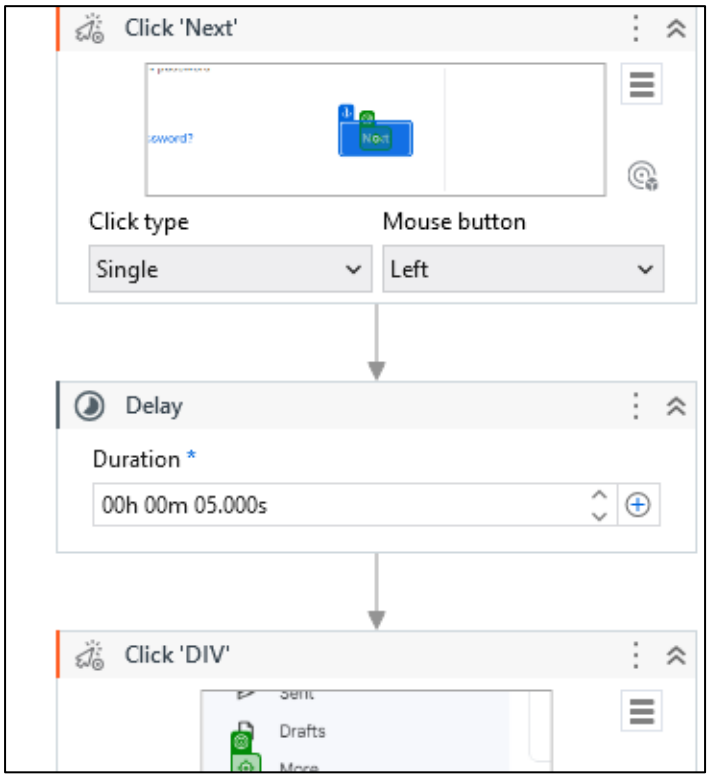


6. Now, we can run the file.

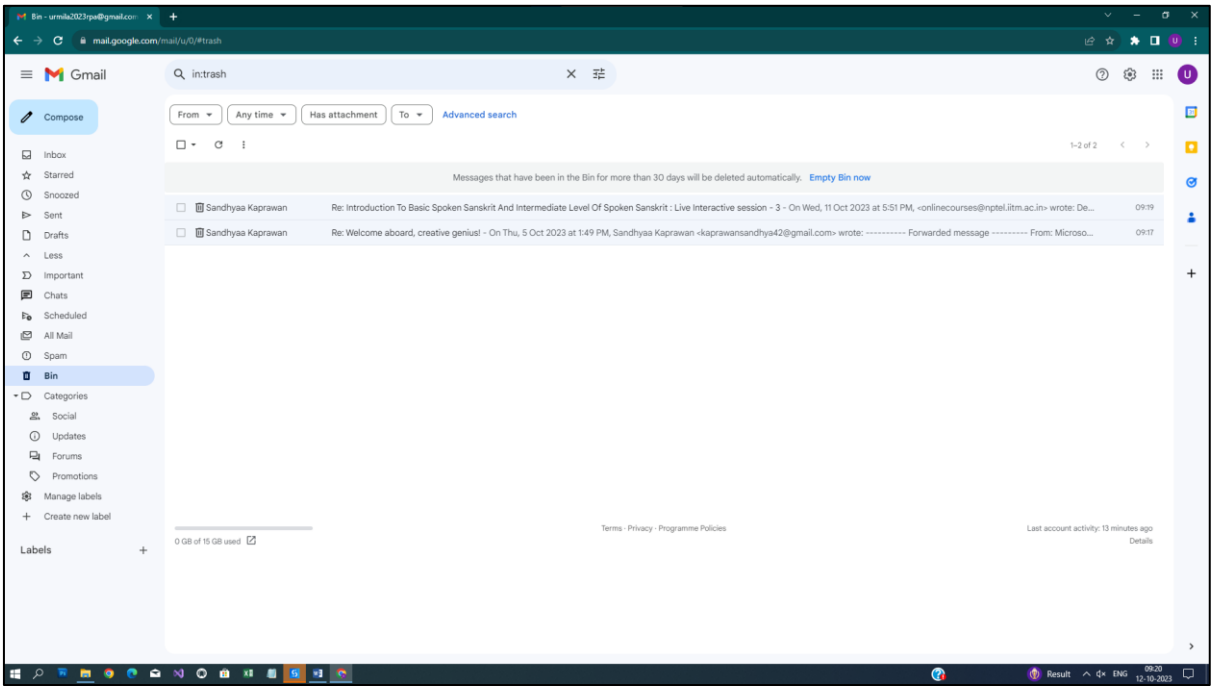
7. Due to network fluctuation, it may take some time to load the next window in browser but the UiPath reorder works very fast so, to slow it down we can add some delay between the screens. For this, search for delay activity in search activities panel and add delay after click next button event i.e. below next button.

8. Add 5 second delay below both the next button.



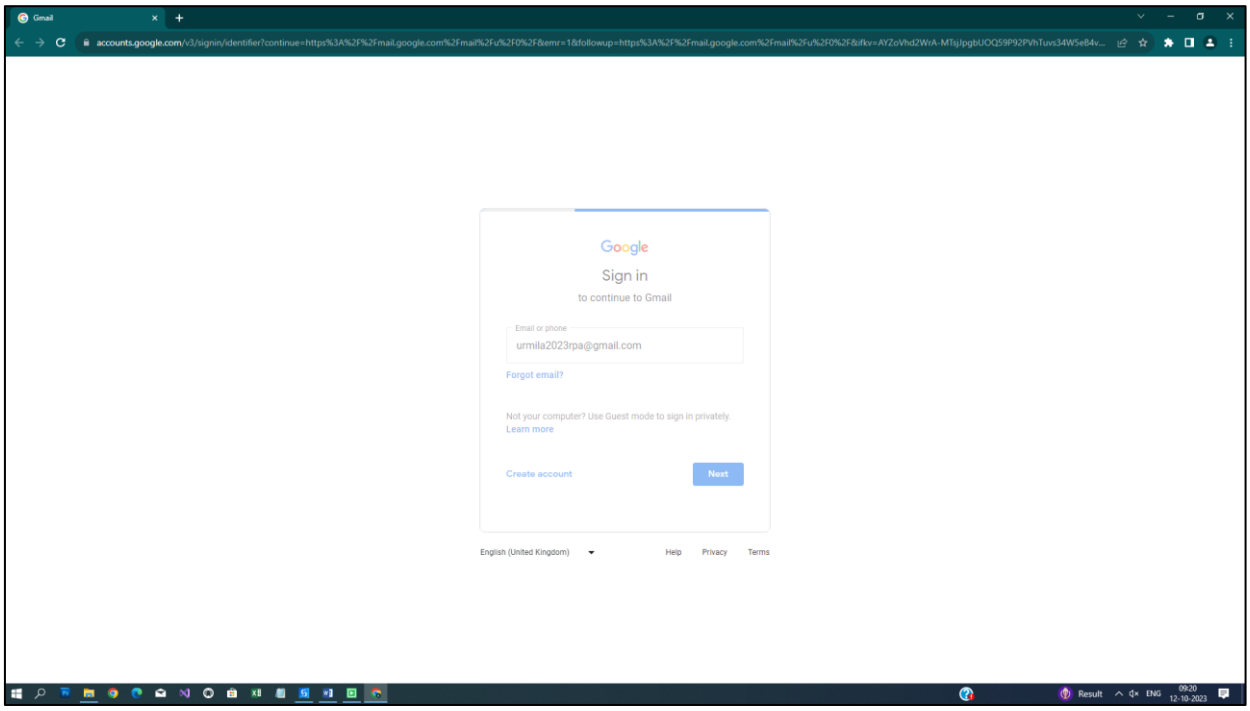


9. Trash bin before robot delete it.

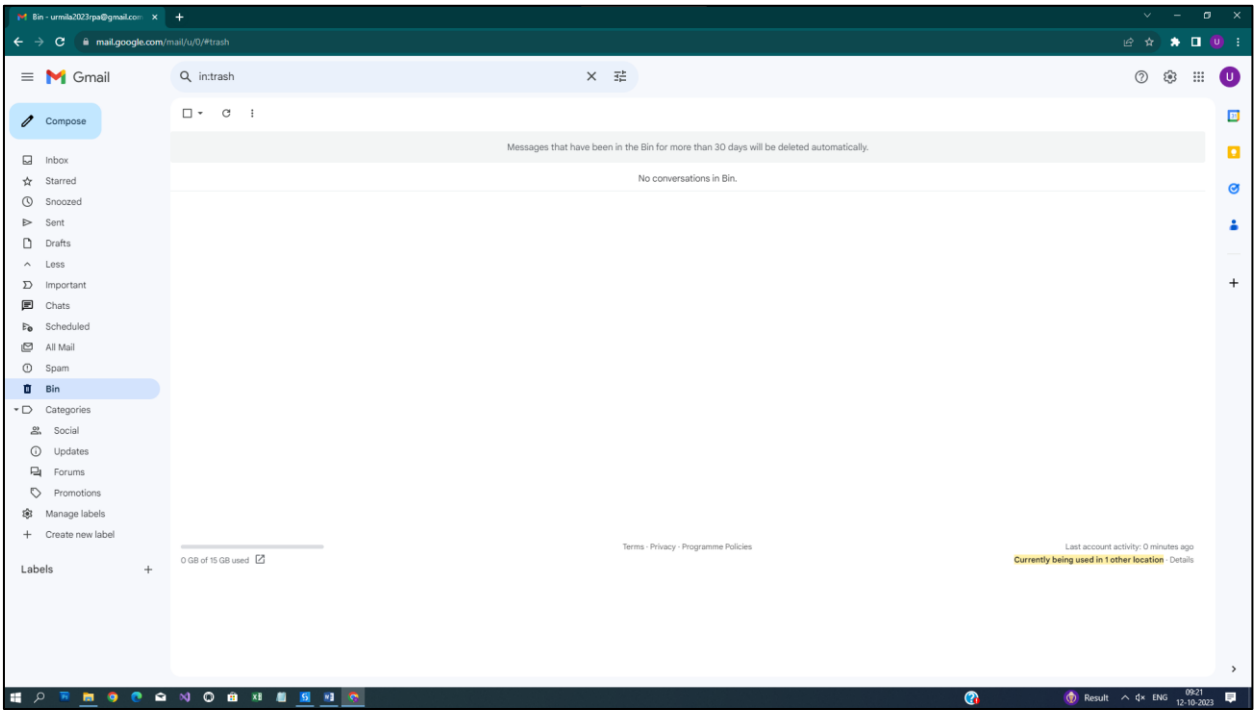


10. Now, before running file make sure you have some files in trash bin so robot can delete those files.

11. Click on Debug file and Run file option.



12. Trash bin after robot delete it.

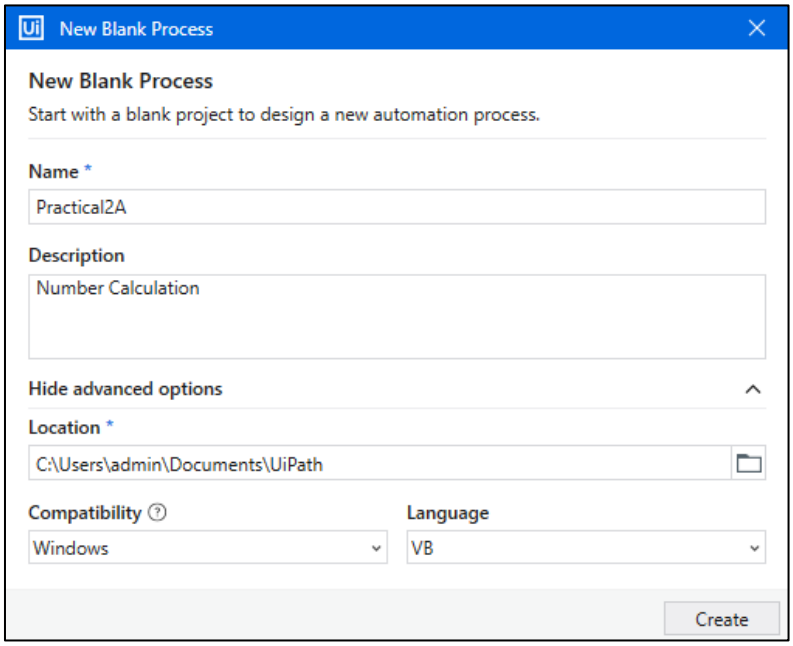


Practical 2

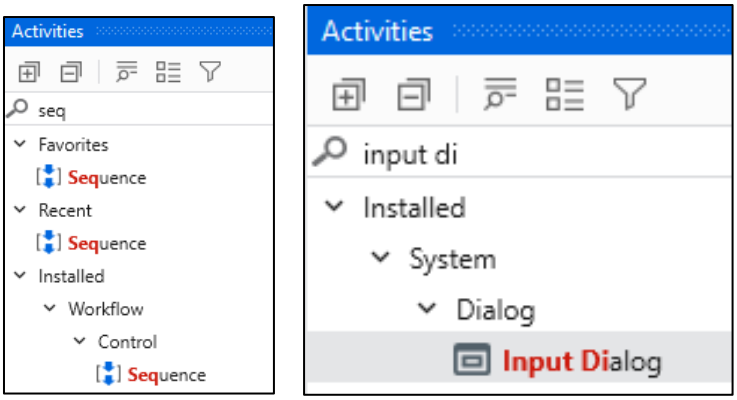
A. Automate UiPath Number Calculation.

AIM: Use two input dialogs for storing two numbers and display addition, subtraction, multiplication and division of them in message box.

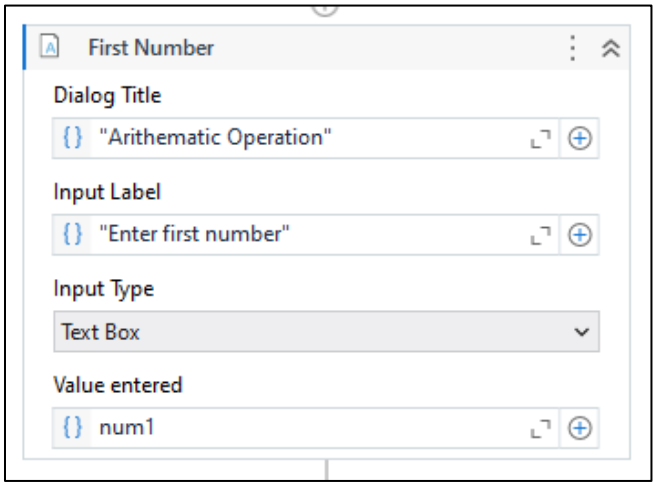
1. Click on Process and create process Practical2A, give description as number calculation and click on create.



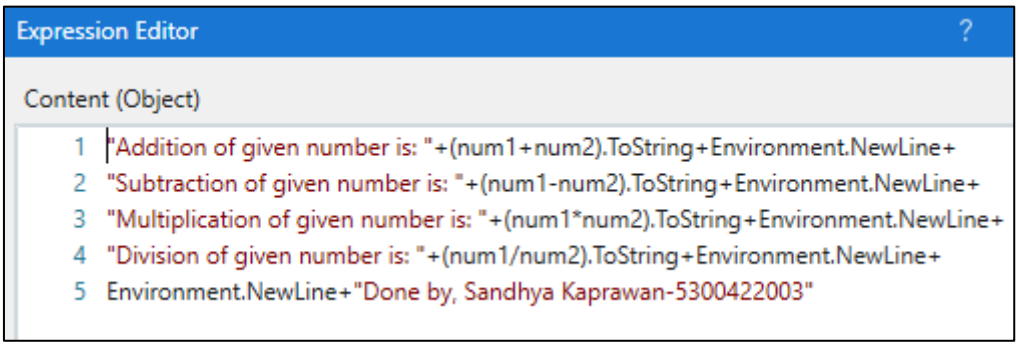
2. Drag Sequence from activities inside main sequence. Then drag two input dialog box inside sequence.



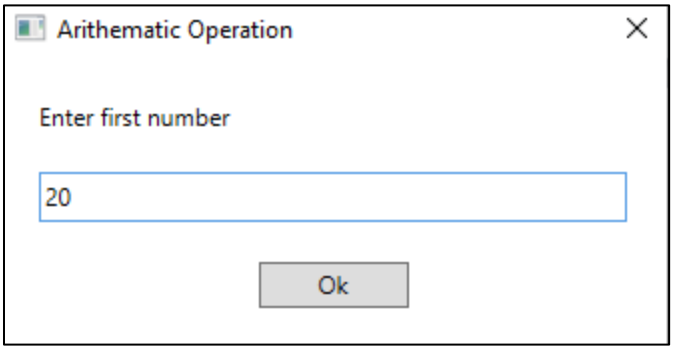
3. Fill all the details in input dialog box and store it in variable num1 and num2. Change theor scope to main sequence.

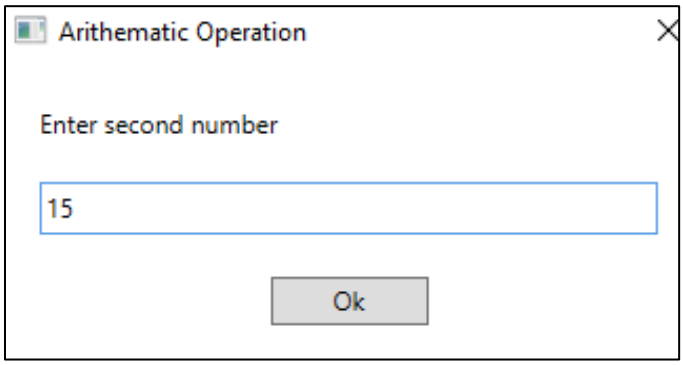


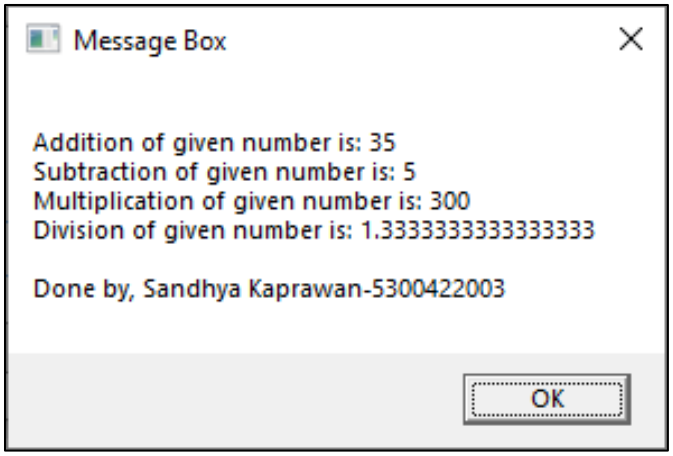
4. Now drag message box below input dialog box, and display arithematic operation of two numbers in it.



5. Output will look like this.



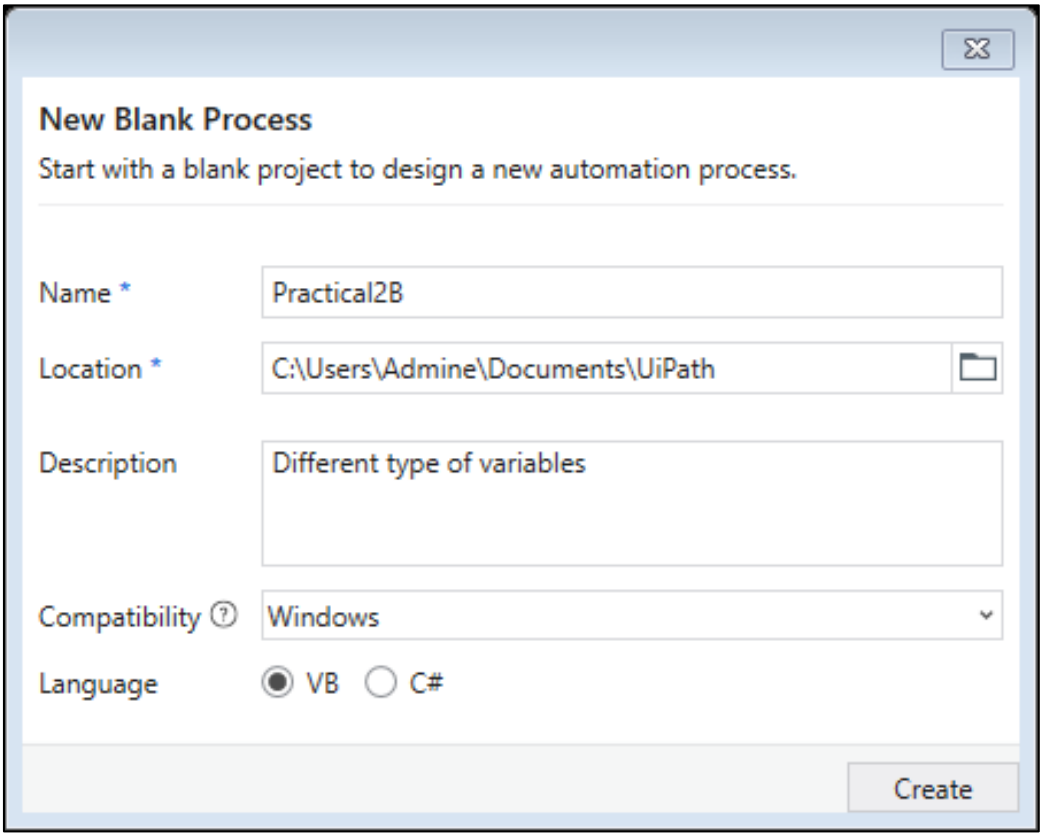




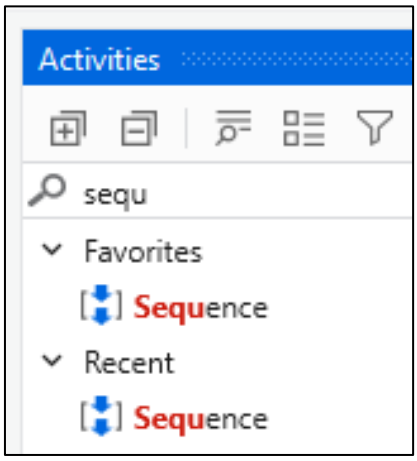
B. Automate UiPath Number Calculation.

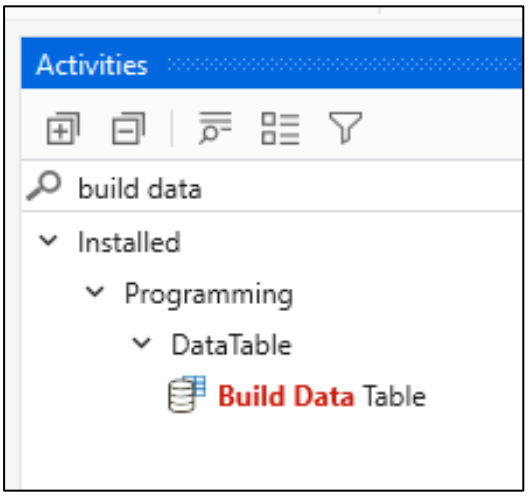
AIM: Create an automation UiPath project using different types of variables.

1. Click on Process and create process Practical2B, give description as Different type of variables and click on create.

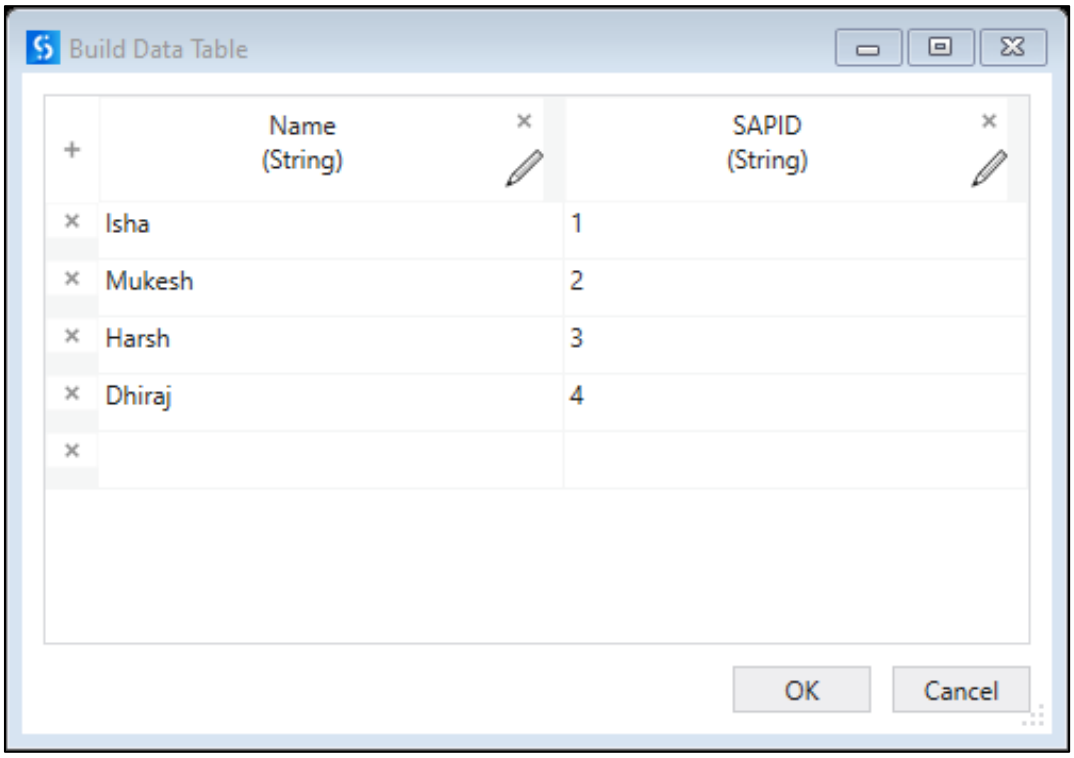


2. From activities, drag sequence then drag build data table inside it.

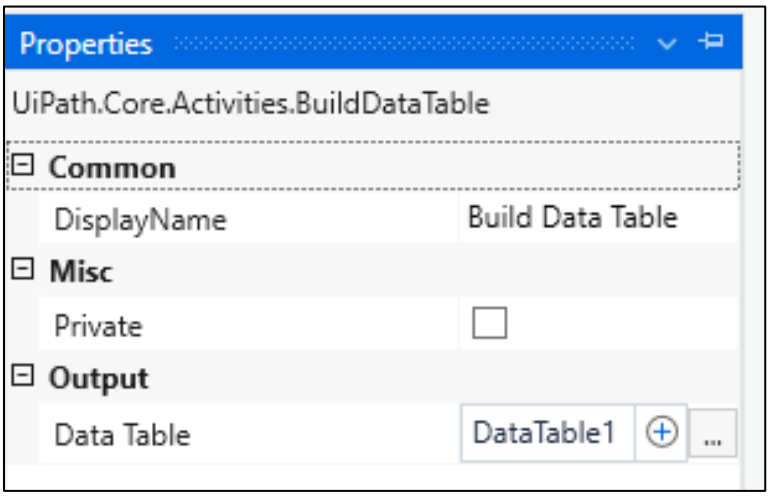




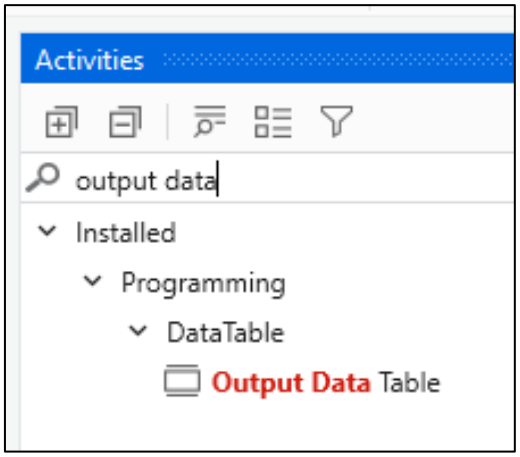
3. Click on data table, Build data table window will show. Click on x for column name then click on + sign and add Name and SAPID as column heading and add some records inside them and click on OK.

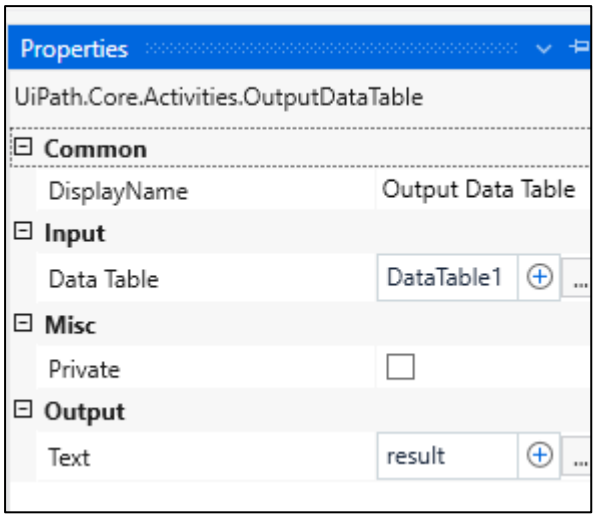


4. Now, we will require one variable to store the output for Data Table so we will create variable of type DataType by clicking on emty field beside data table in properties and press 'CTRL+k'. This will create a variable suitable for that output field in our case it is DataTable type variable.



5. For displaying the data table we will require Output Data table, so drag it and drop below data table. In properties, create result variable which will display data table.

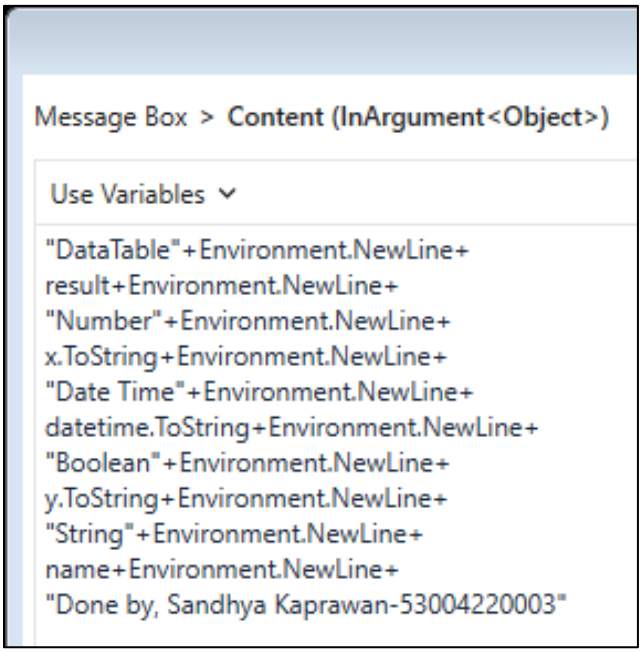




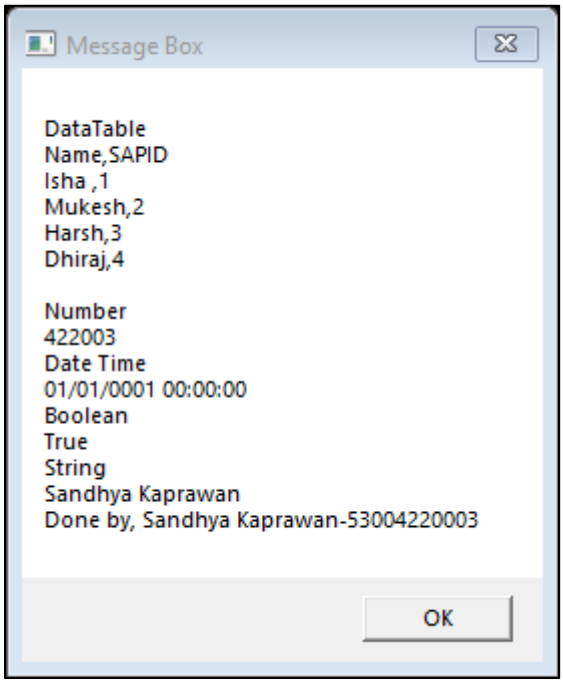
6. Now, create one variable ‘x’ with type ‘Int32’, ‘name’ with type ‘String’, ‘datetime’ as type ‘DateTime’(search it in variable type) and ‘y’ with type ‘Boolean’ and assign default value to them. For all variables created change their scope to ‘Sequence’ so that they can be accessesible within Sequence.

Name	Variable type	Scope	Default
x	Int32	Sequence	422003
name	String	Sequence	"Sandhya Kaprawan"
y	Boolean	Sequence	True
DataTable1	DataTable	Sequence	*Enter a VB expression*
result	String	Sequence	*Enter a VB expression*
datetime	DateTime	Sequence	*Enter a VB expression*
Create Variable			

7. Drag message box and open editor in it and write Output for all variables created.



8. Run file and output of different variables will look like this.

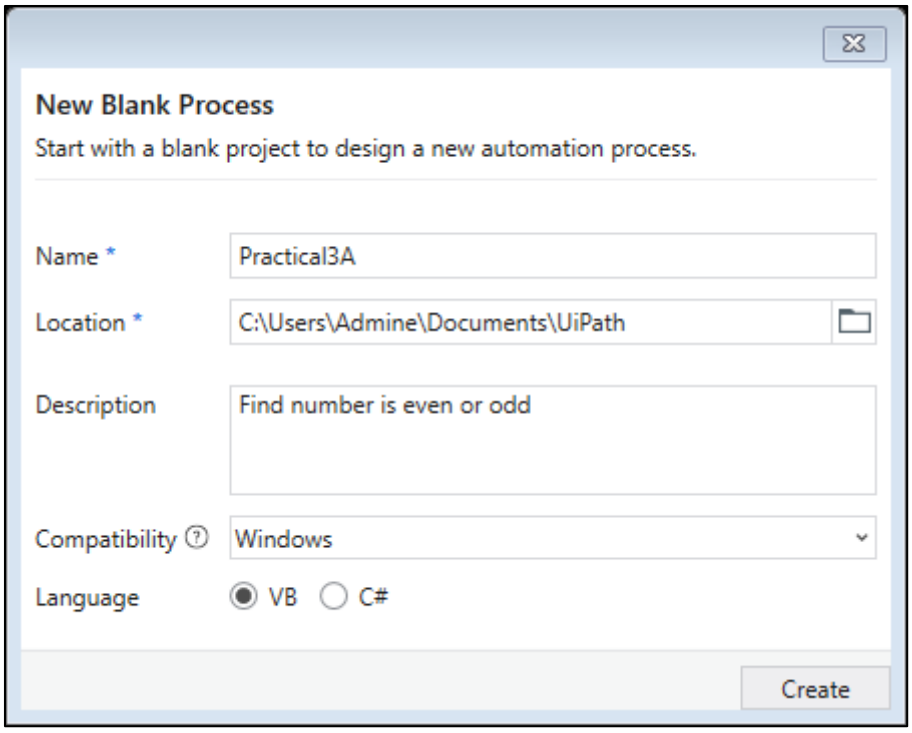


Practical 3

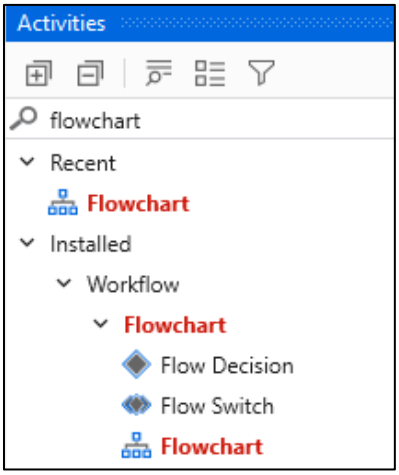
A. Create an automation UiPath Project using decision statements.

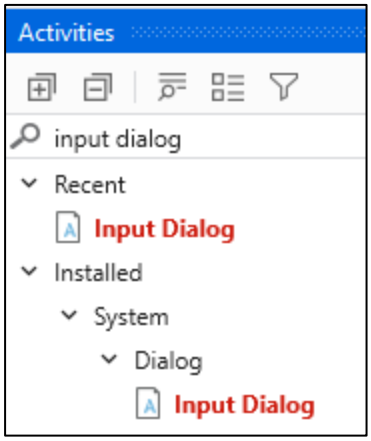
AIM: Use if else activity to display even and odd number in UiPath.

1. Create new process Practical3A, give description and click on create.

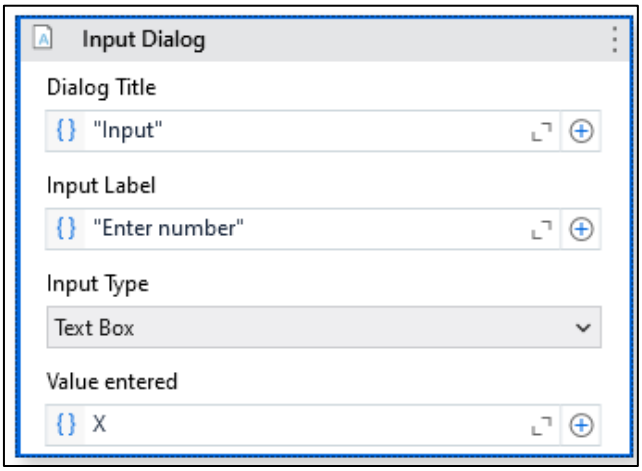


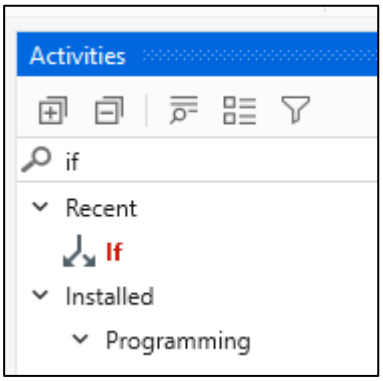
2. Drag flowchart inside main sequence. Inside flowchart drag input dialog box and set it to start node.



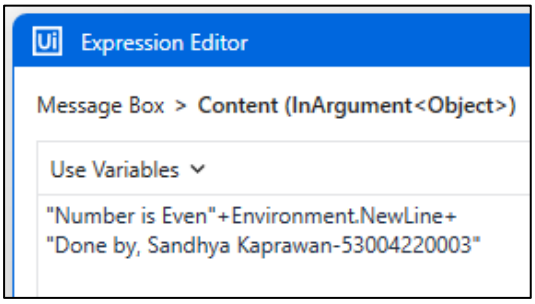


3. Fill details for input dialog box. Then drag if activity below input dialog box.

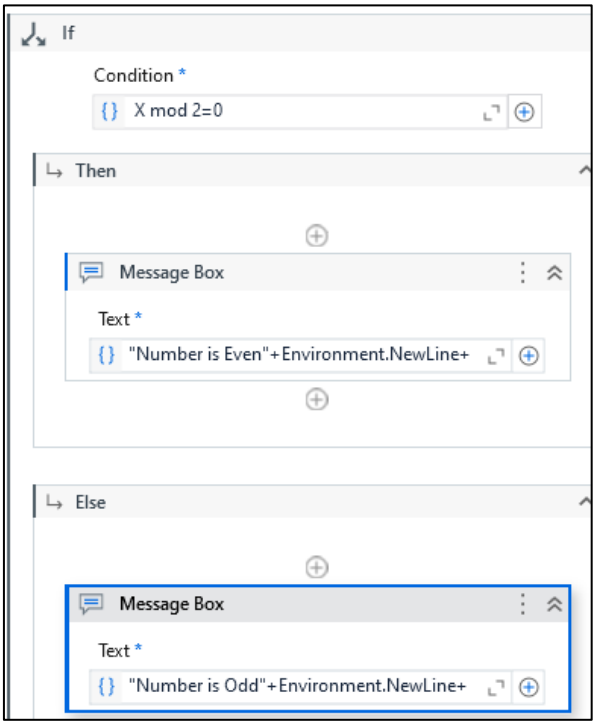


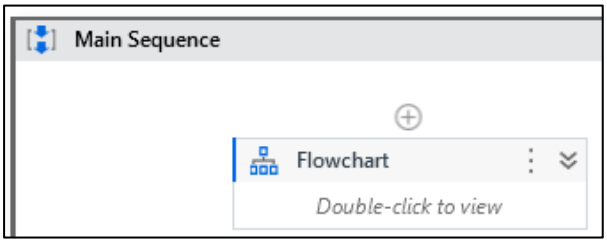


4. In condition, give condition as 'X mod 2=0'. Drag message box inside then and else block and display even and odd message in them.

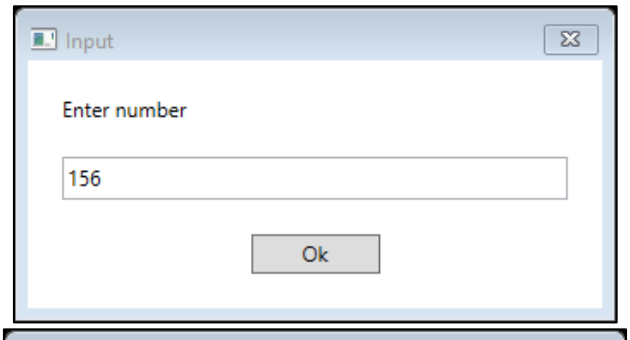


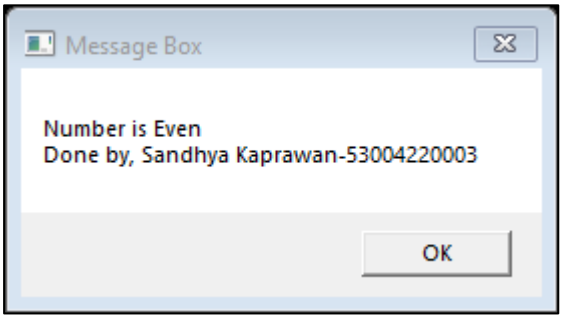
5. If else block will look like this.

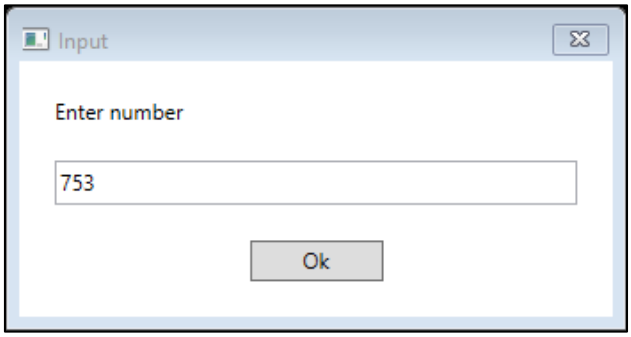


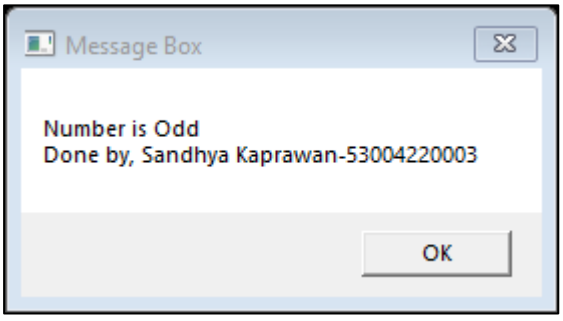


6. Click on Run file.





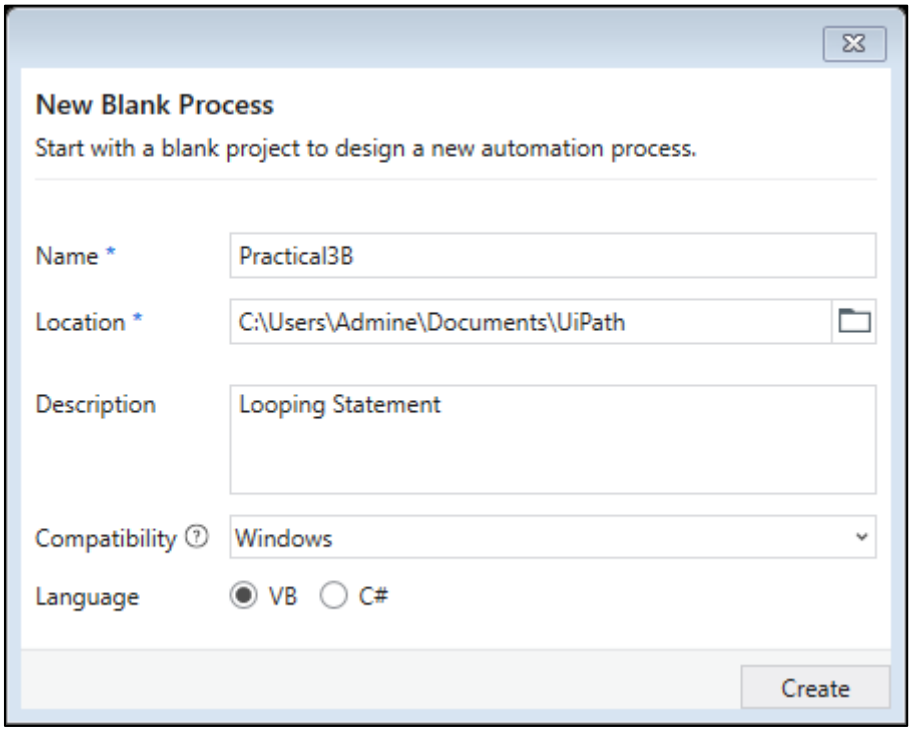




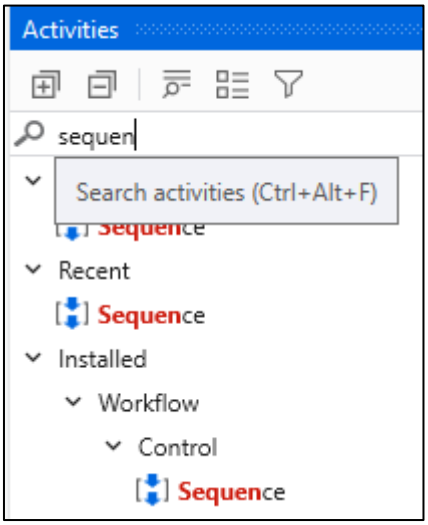
B. Create an automation UiPath Project using looping statements.

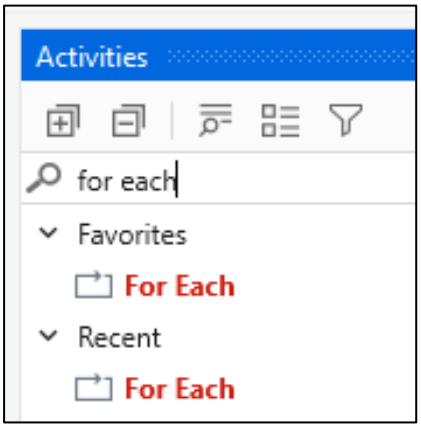
AIM: Use for each activity to iterate inside array of names and display them in message box.

1. Create new process Practical3B, give description and click on create.

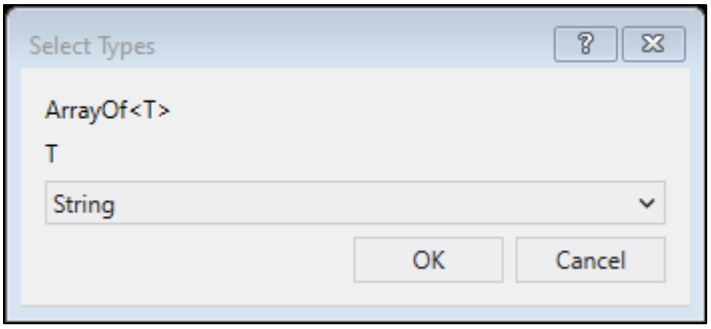


2. Drag and drop sequence inside main sequence then drag for each activity inside sequence.

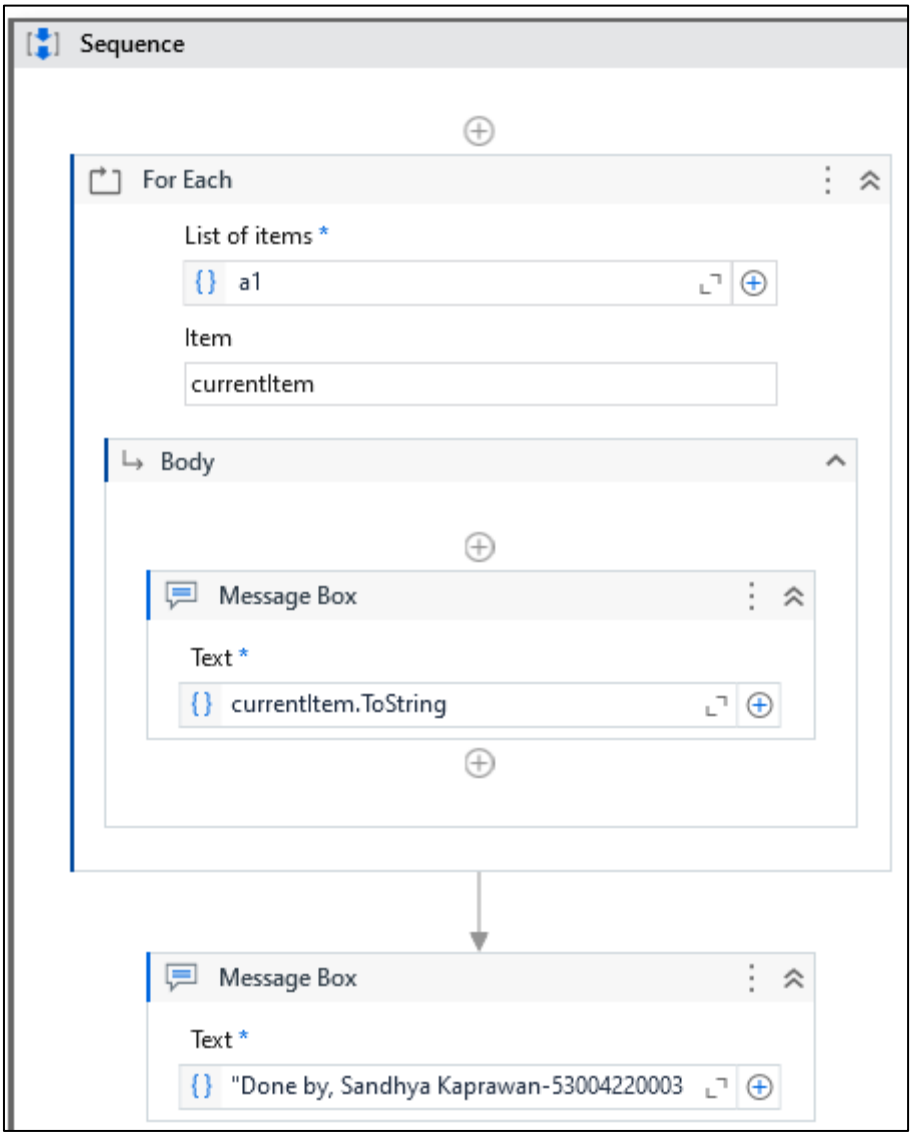




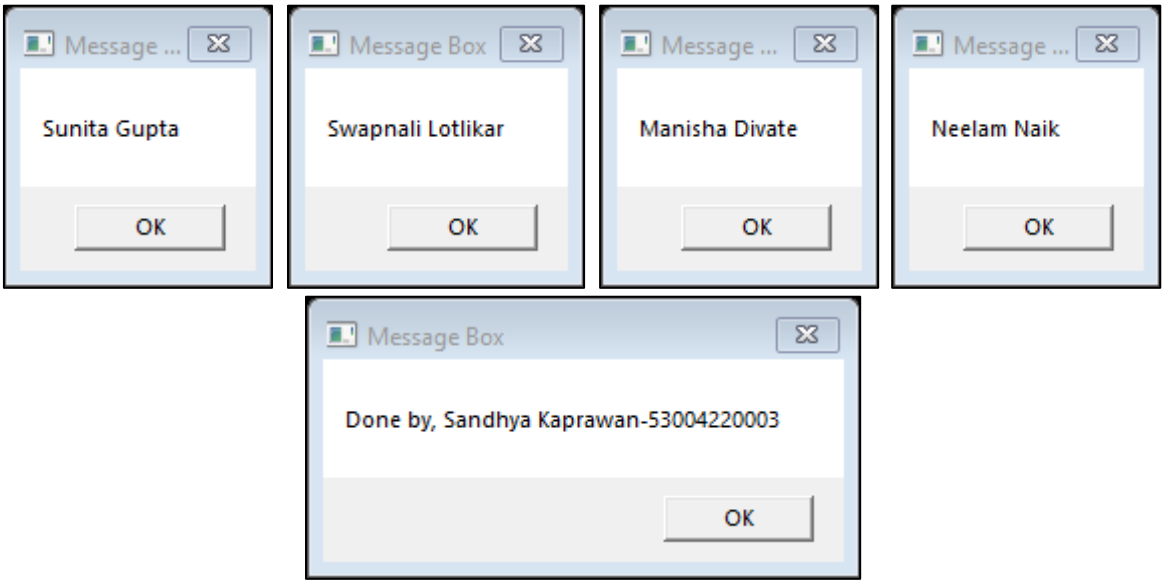
3. Create one variable name it as a1 and type as Array of String, set scope to sequence and add default values to it as {“Sandhya”,”Melissa”}.



4. Now, inside List of items select a1, drag message box inside body of for each activity. And in text field access ‘currentItem’ and convert it to string.



5. Click on Run File.

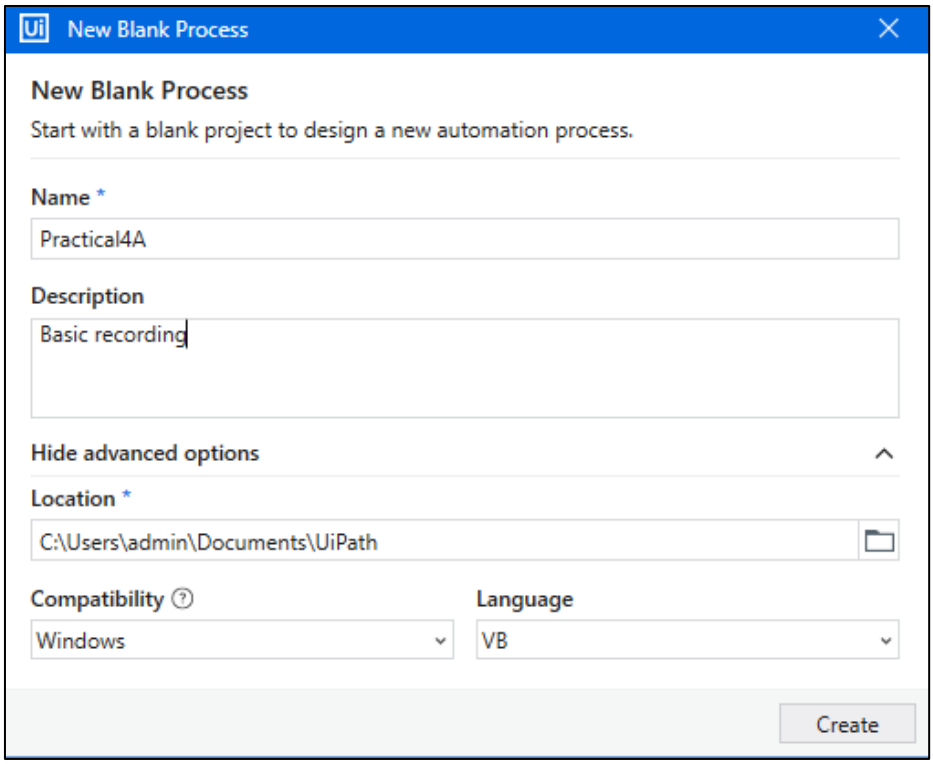


Practical 4

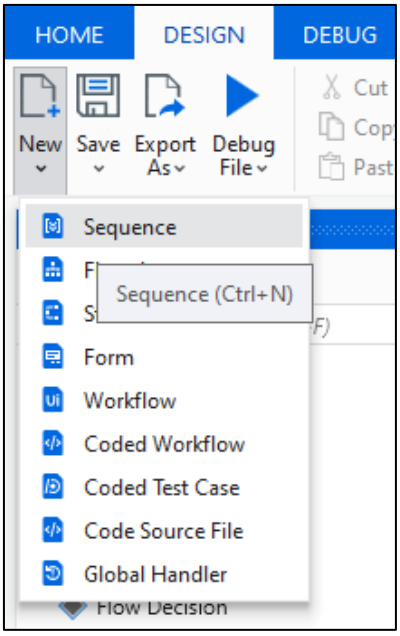
A. Automate any process using basic recording.

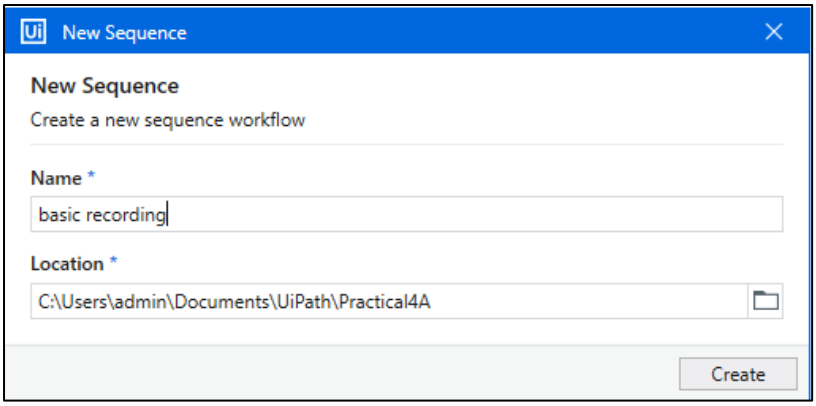
AIM: Use basic recorder to record basic sequence of activity in UiPath.

1. Create new process Practical4A, give description and click on create.

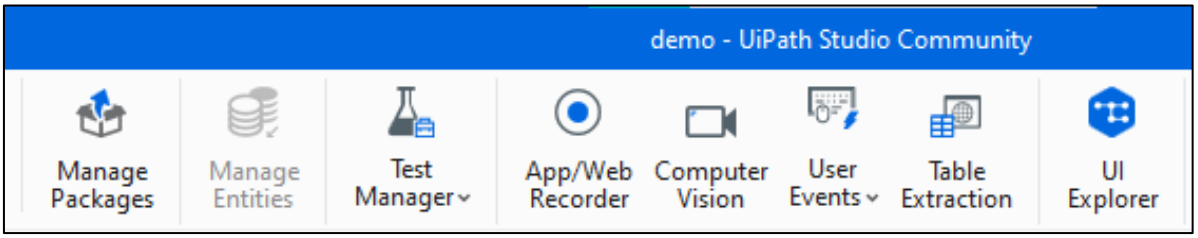


2. Click on new then sequence and name it as basic recording and click create.

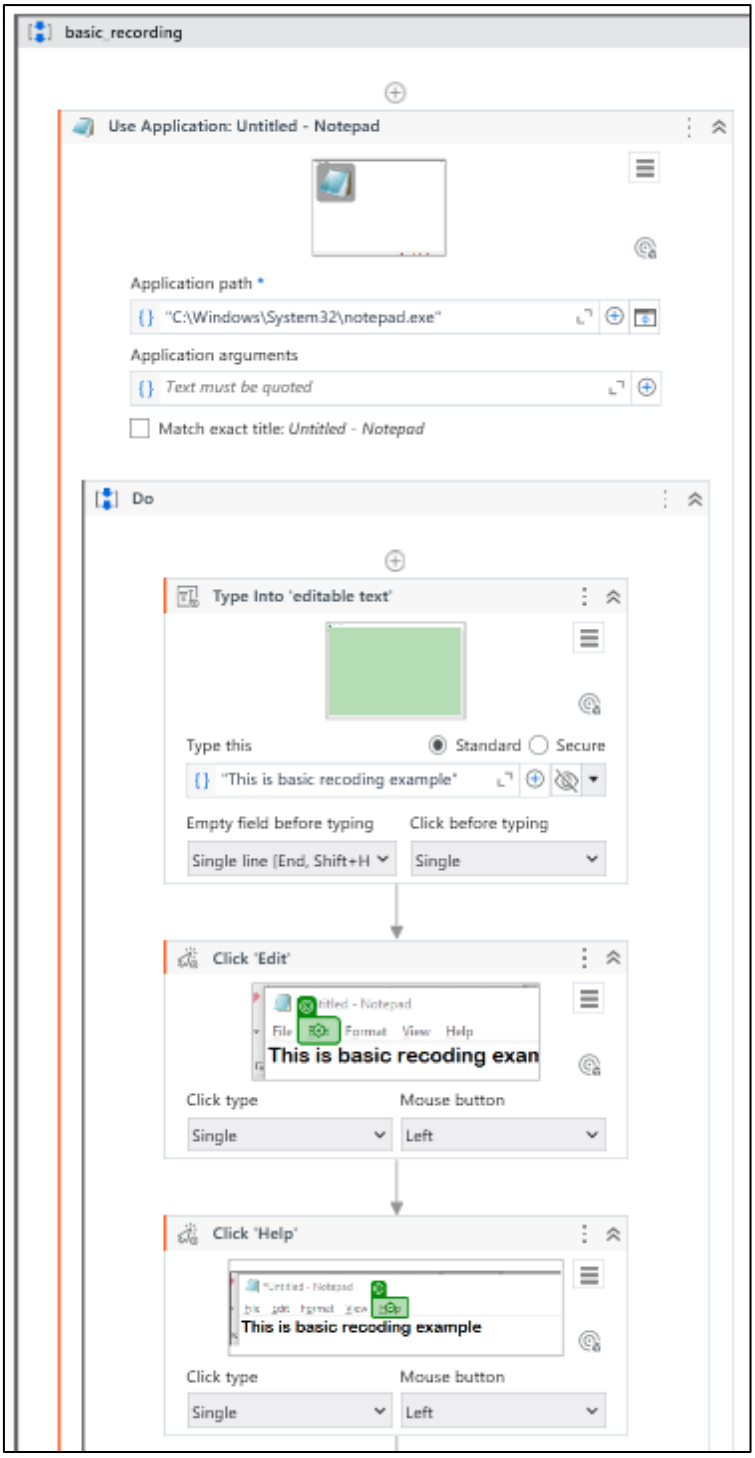


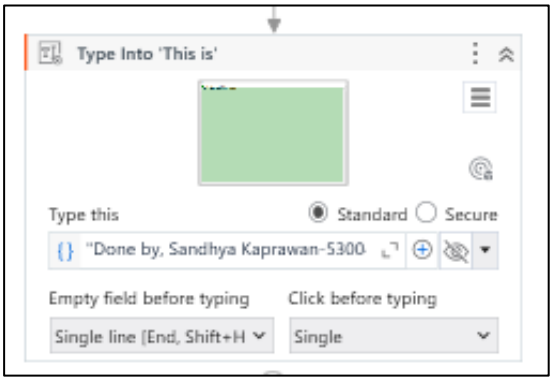


3. Open notepad and keep it in background so when recording is started it appear automatically after UiPath. Click on App/Web recorder and start recording sequence.

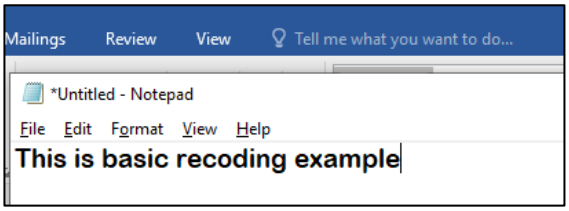


4. Click on notepad and select type into and in text field type “This is basic recording example” then type enter. Click on Edit then click on Help. After this click on notepad writing area and select type into again and in text field type “Done by, Sandhya Kaprawan-53004220003’ and enter. After all the recording is done press save or press Esc two times to get prompt for saving the recorded sequence.





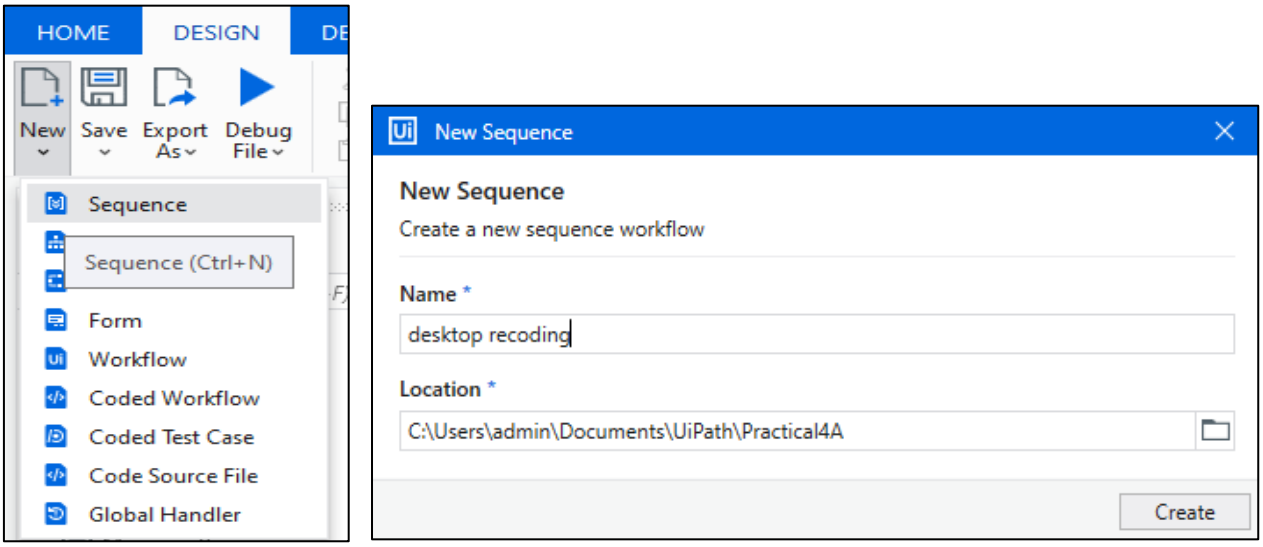
5. Click on run file.



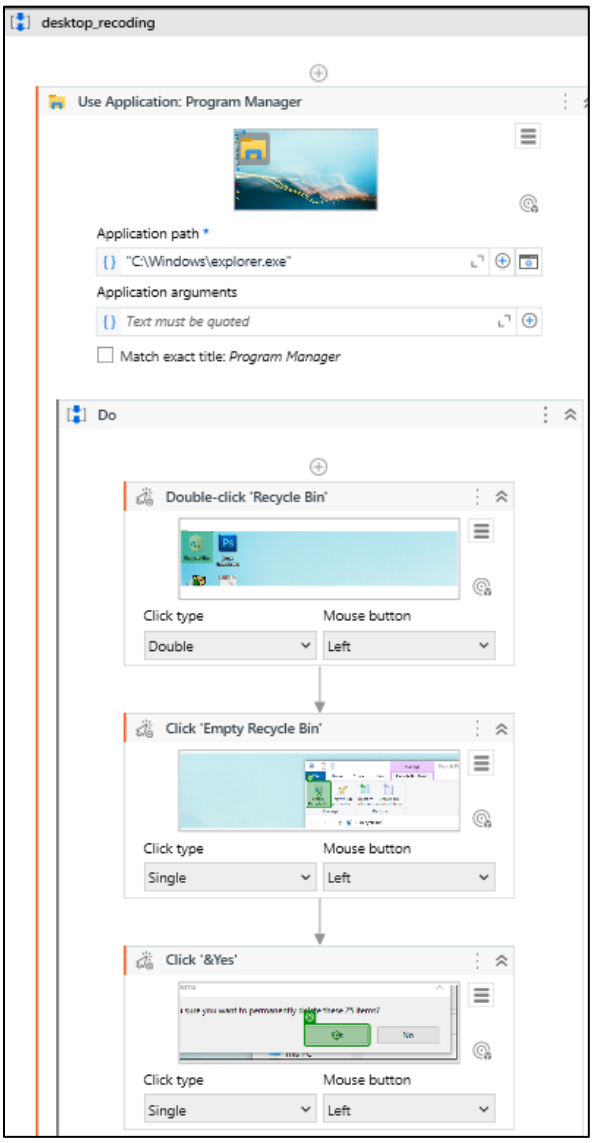
B. Automate any process using desktop recording.

AIM: Use desktop recorder to record sequence of emptying recycle bin in UiPath.

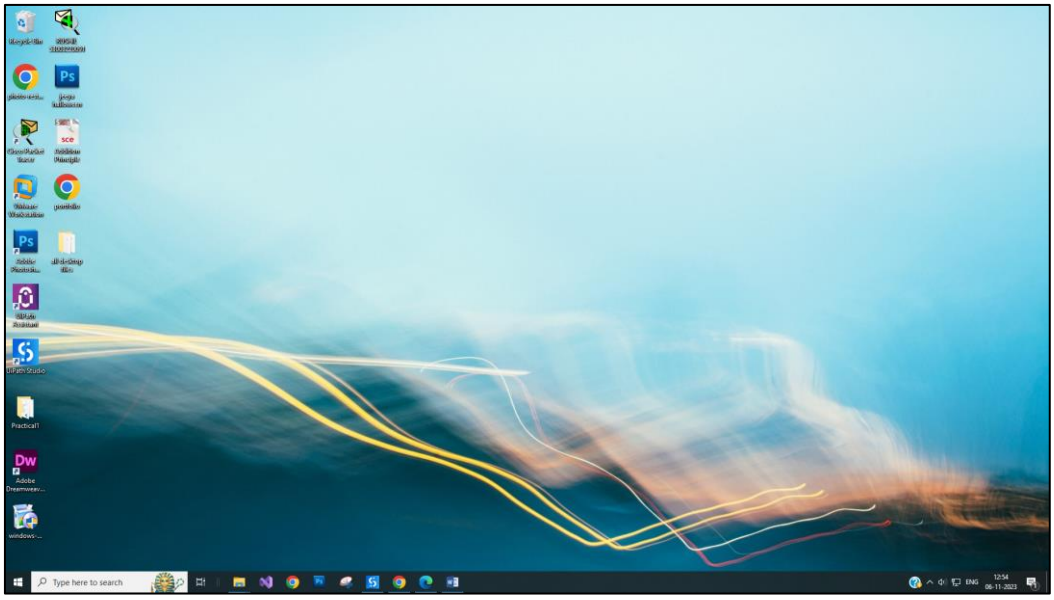
1. Click on new sequence name it desktop recording and click on create.



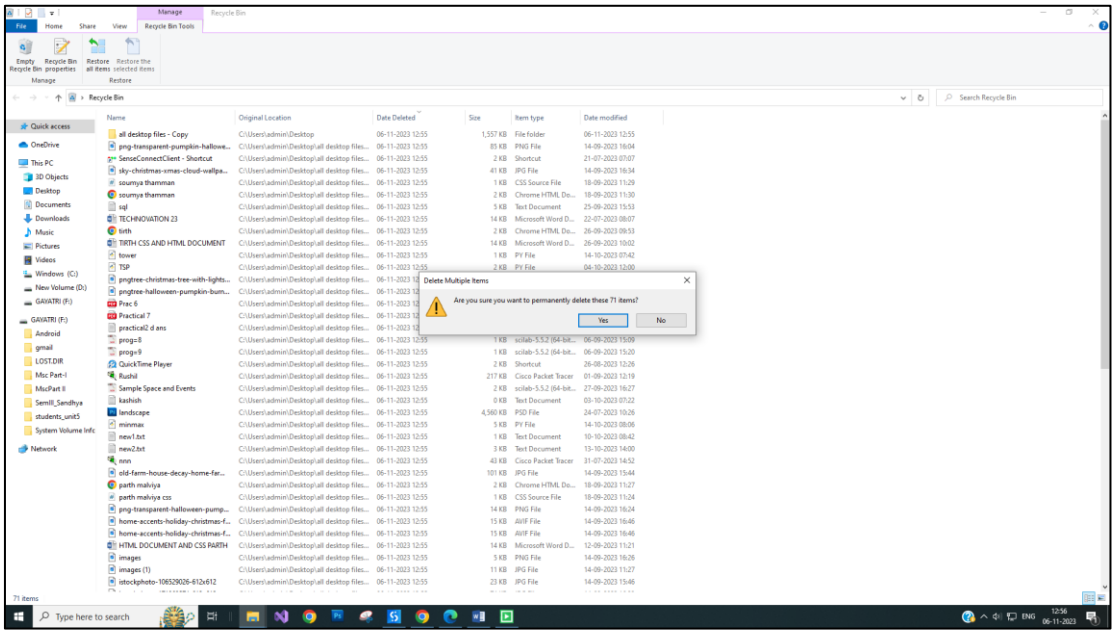
2. Click on App/Web recorder. Make sure desktop is in background and no other application is in middle of UiPath. After recorder start click on Recycle bin icon select double click and it will open the recycle bin. Click on Empty Recycle bin icon and select click then click on Yes when prompted and it will clear all files in recycle bin.

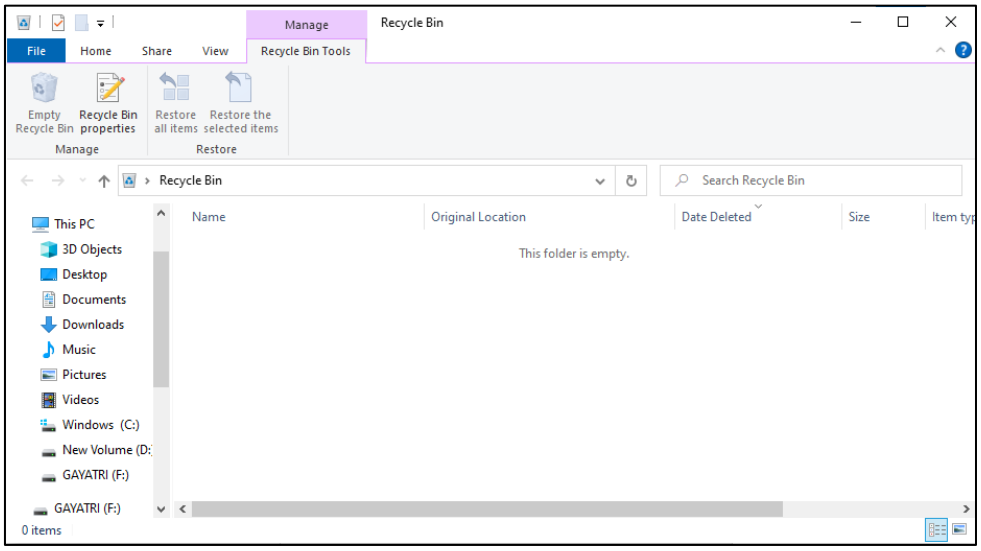


3. Make sure before you run file, recycle bin has some files in it so the robot can delete it.



4. Now run file.

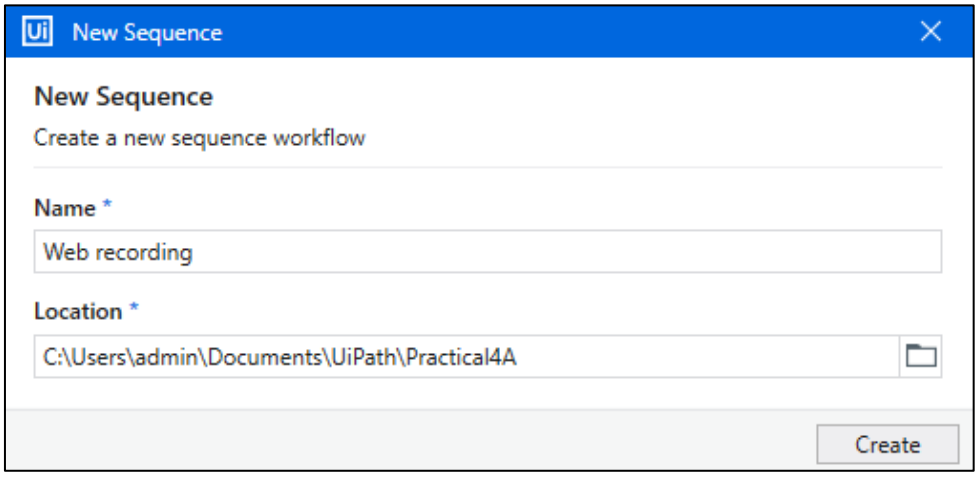




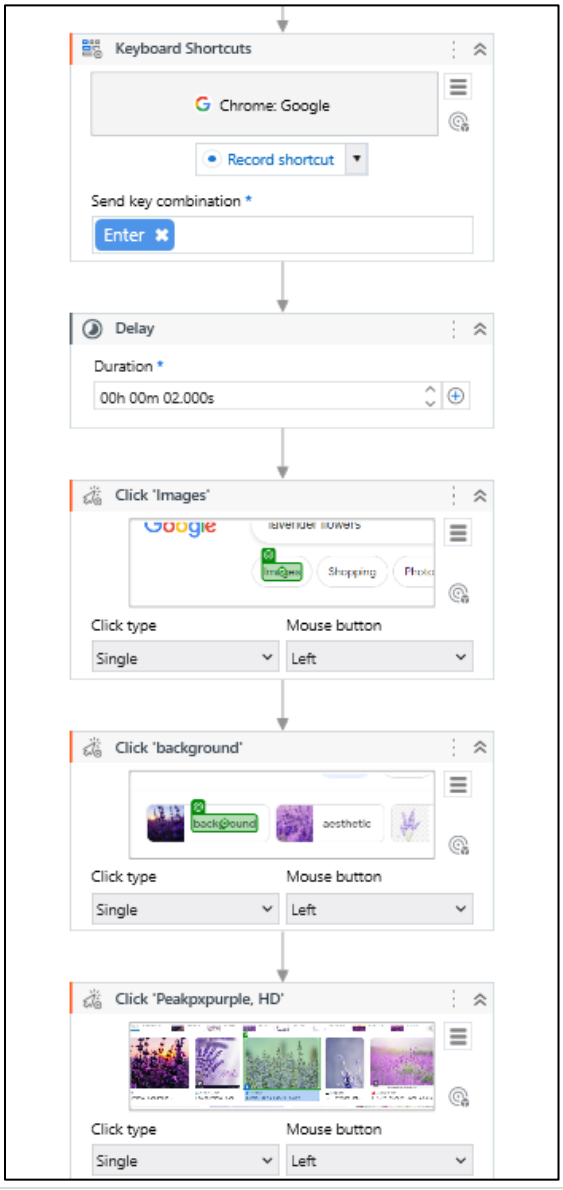
C. Automate any process using web recording.

AIM: Use Web recorder to record sequence of using google chrome and searching lavender flower in search box then clicking one image from image section.

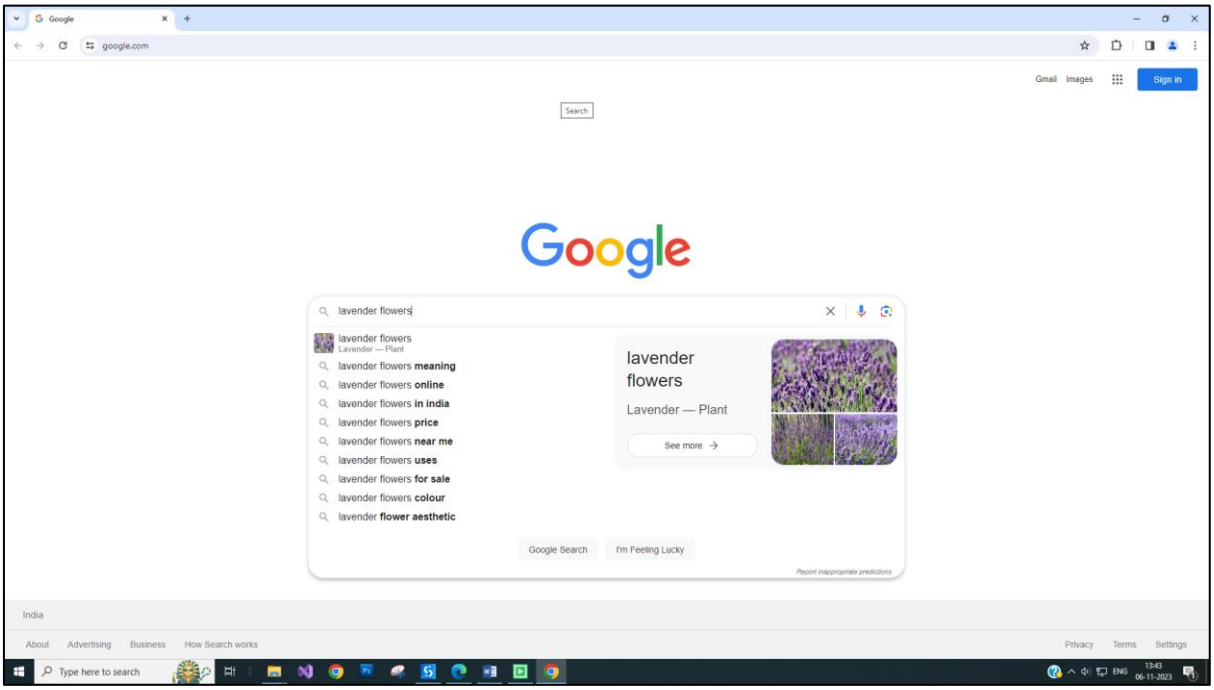
1. Click on new sequence, name it web recording and click on create.

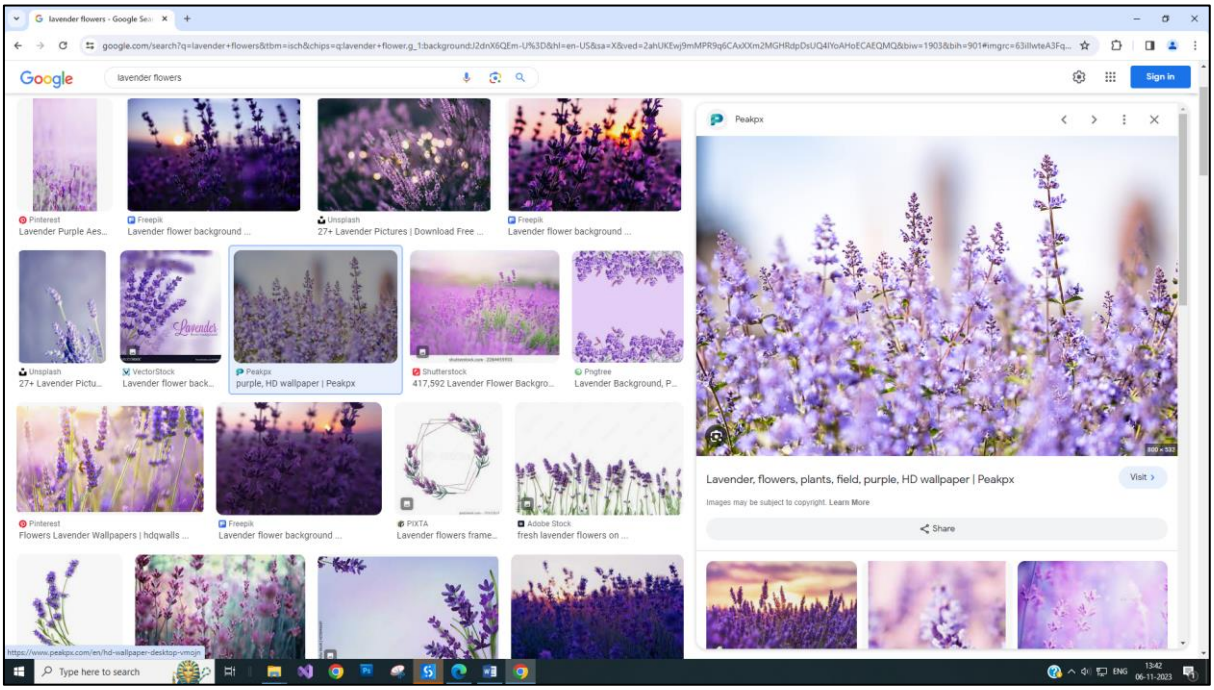


2. Make sure google chrome is open in background. Now start web recorder then click on google chrome home page. Click on search bar and type into “lavender flower” in it. Then, select image after it load and click on one of the images and save recording sequence. Now, we will add delay after searching as it will take time to load the search results. So add delay from activities for 02 seconds.



3. Run file and recorder will automatically open chrome and do the sequence of activity which is assigned in it.



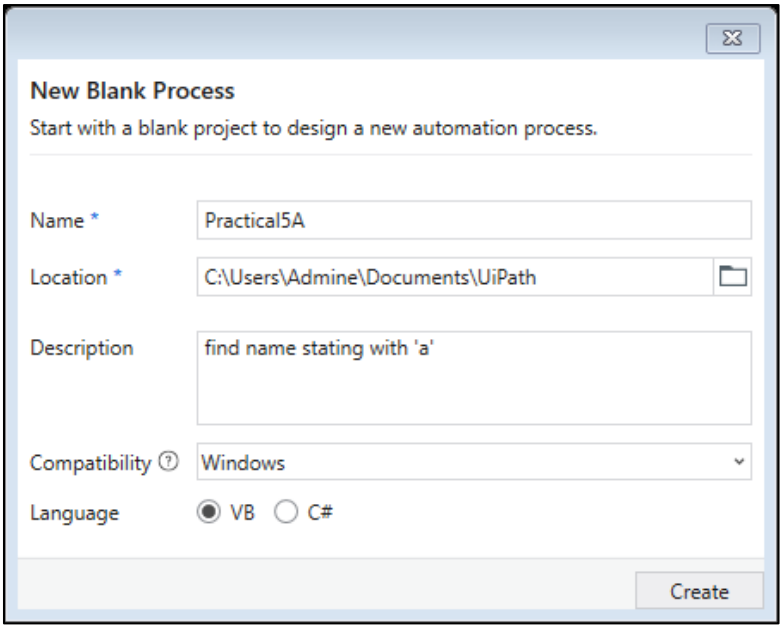


Practical 5

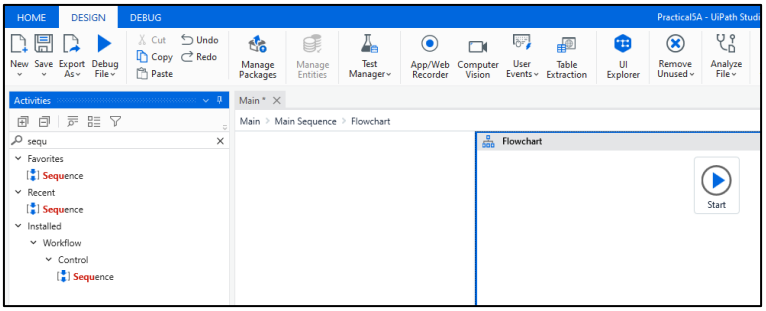
A. Create an automation where the number of names starting with "a" is counted and the result is displayed.

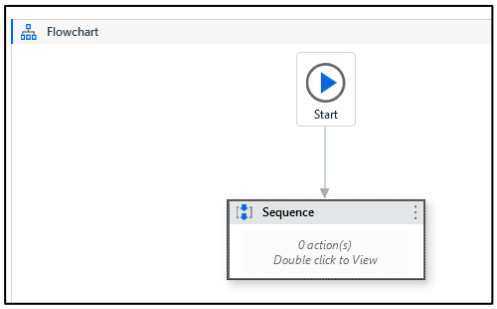
AIM: Consider an array of names. We have to find out how many of them start with the letter "a".

1. Click on Process and create process Practical5A, give description and click on create.



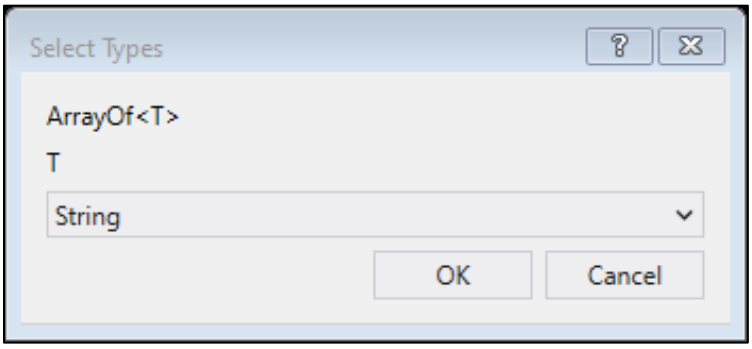
2. Drag Flowchart inside main sequence. Then add sequence inside flowchart and set as start node.



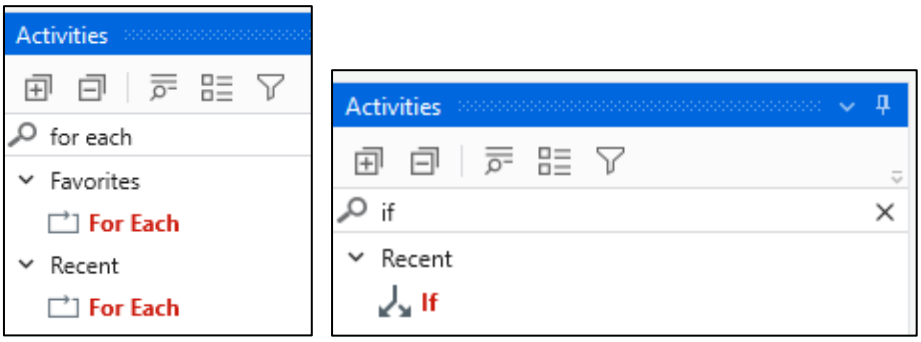


3. Click on create variable, name it as 'names' and select variable type as Array of String.

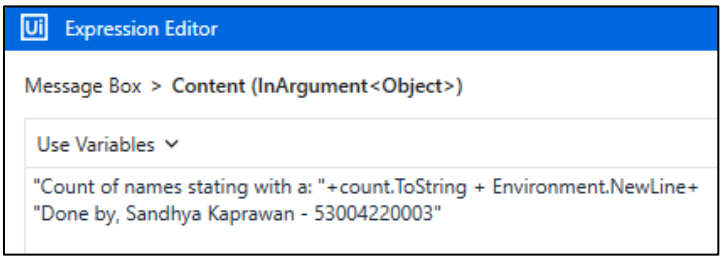
Name	Variable type	Scope	Default
count	Int32	Sequence	0
names	String[]	Flowchart	{"Sandhya","Akash","Amit","John","Ansh"}
Create Variable			



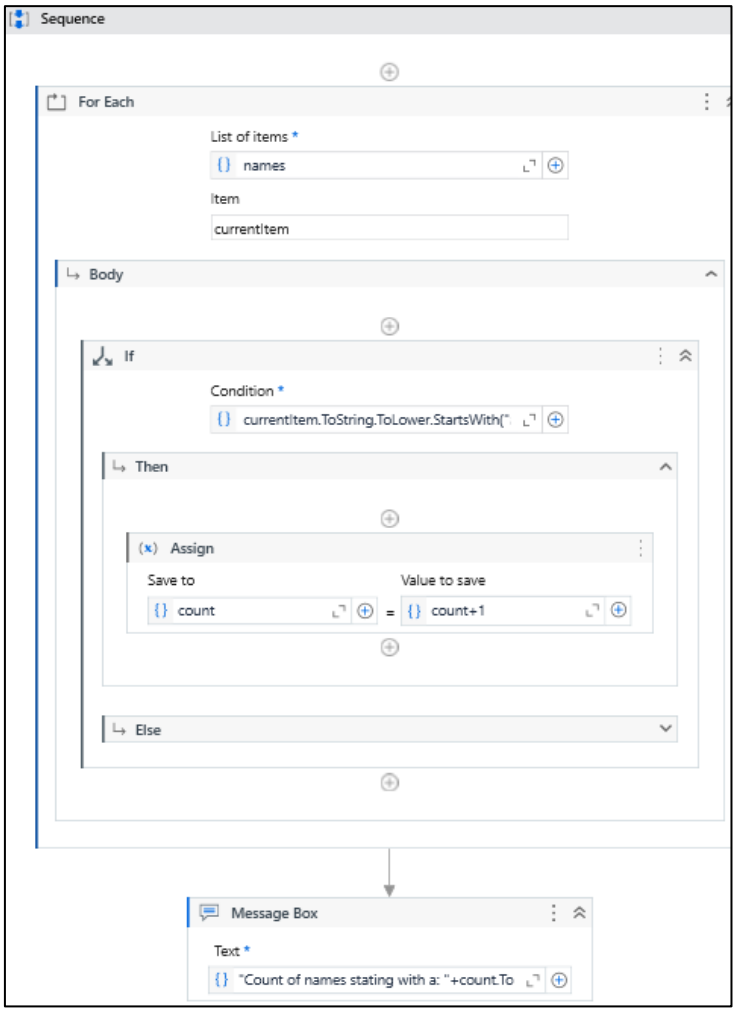
4. Drag for each inside sequence and if inside body of for each activity.

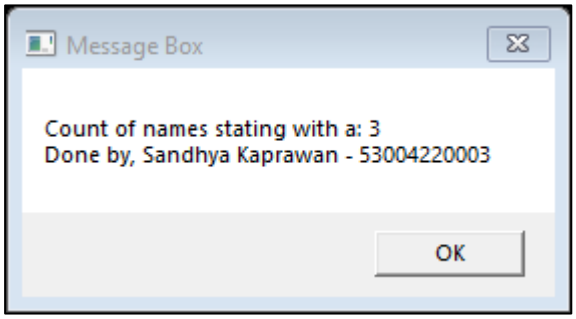


5. In list of items type names. In condition box type currentItem.ToString.ToLower.StartsWith('a'). Drag message box below for each activity and create count variable and display count of letter in message box.



6. Click on Run file.



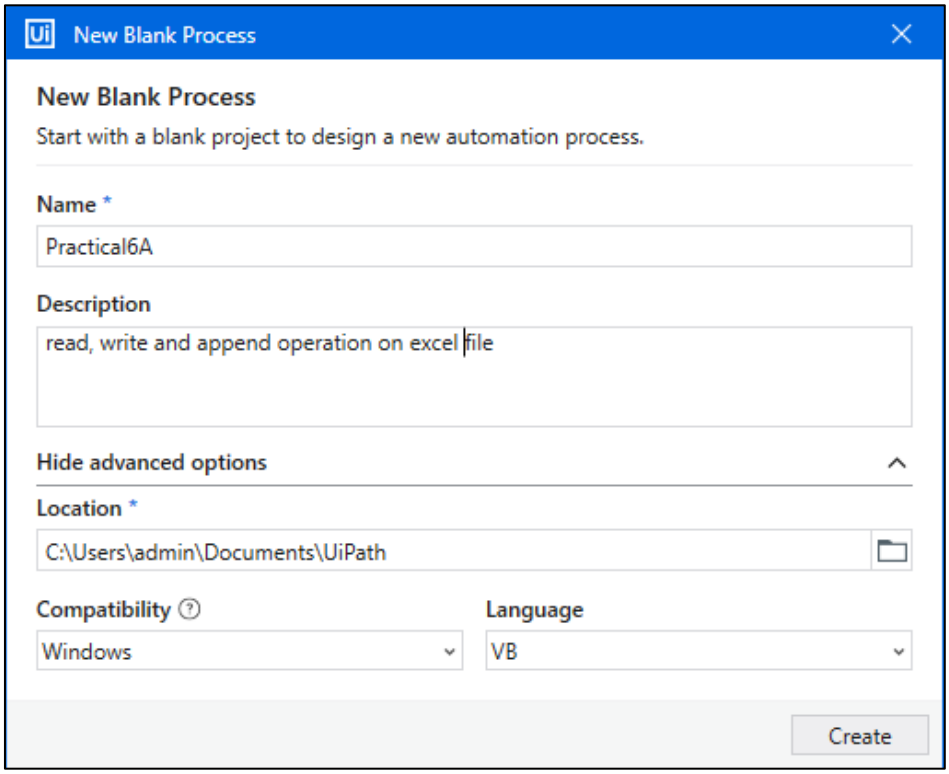


Practical 6

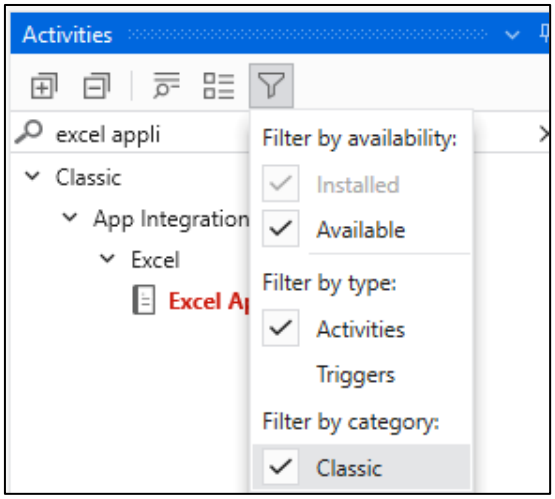
A. Create an application automating the read, write and append operation on excel file.

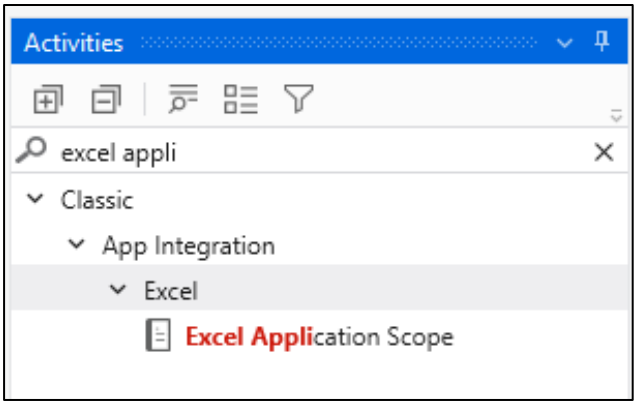
AIM: Use excel file to read, write and append data into it.

1. Click on Process and create process Practical6A, give description and click on create.

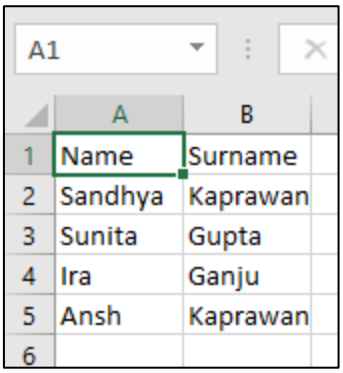


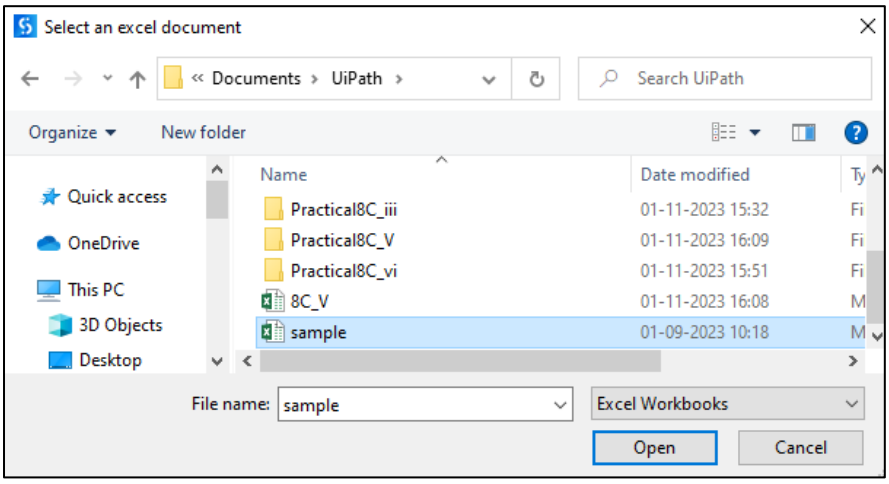
2. In activities, click on filter and check classic filter. Drag Excel application scope inside Main sequence.



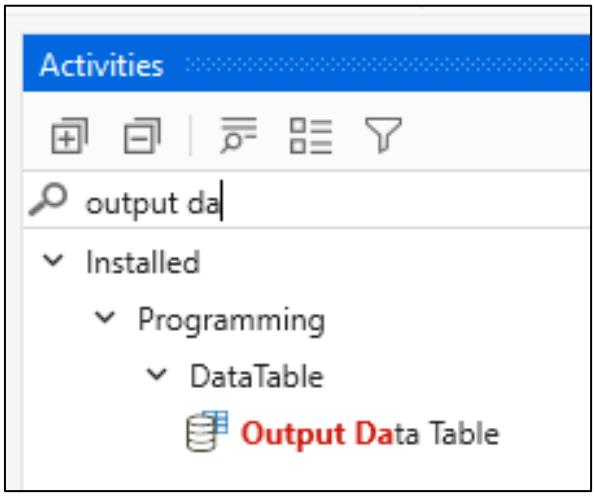


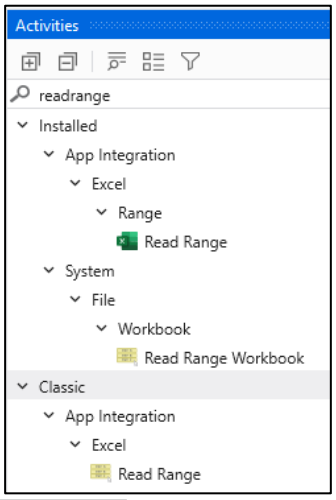
3. Create one excel file add some data inside it and save it in the same folder as practical6A. Select file path in excel application scope.

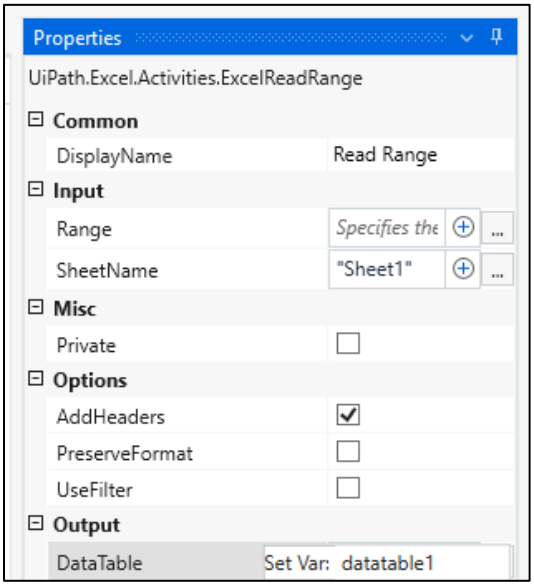




4. Drag read range inside excel scope, in its properties check Add Headers and create one variable for output as datatable1, set its scope for main sequence.



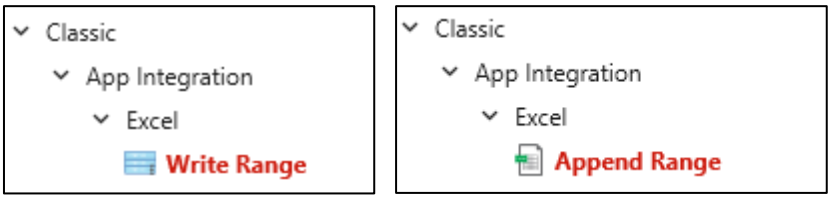




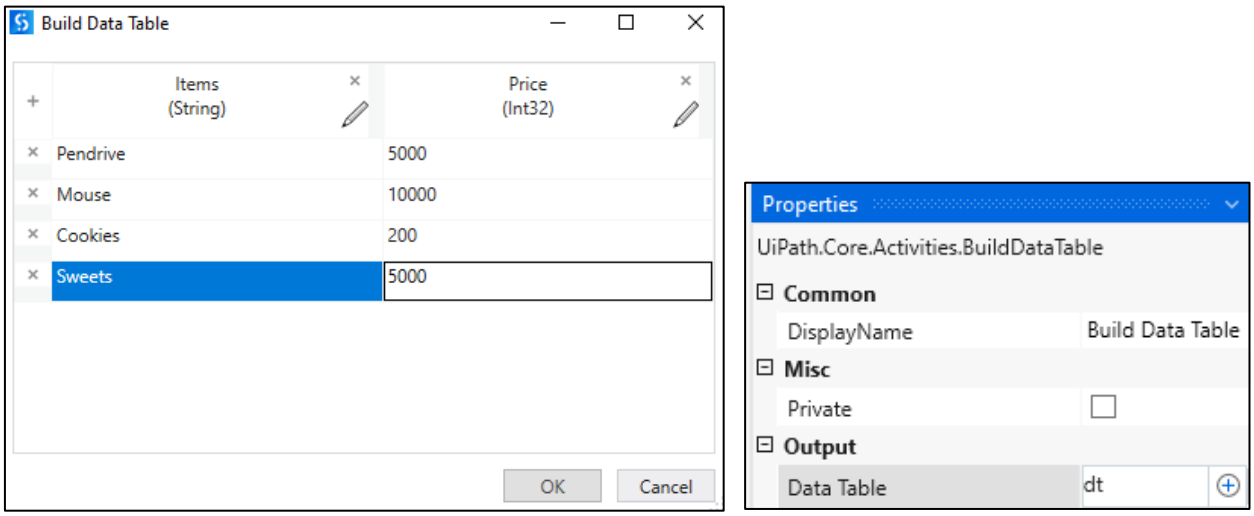
5. For displaying excel data, drag output data table and give datatable1 as its input and create result variable for output field of String type.

6. Drag message box, and display result variable in it which displays records read from excel file via data table.

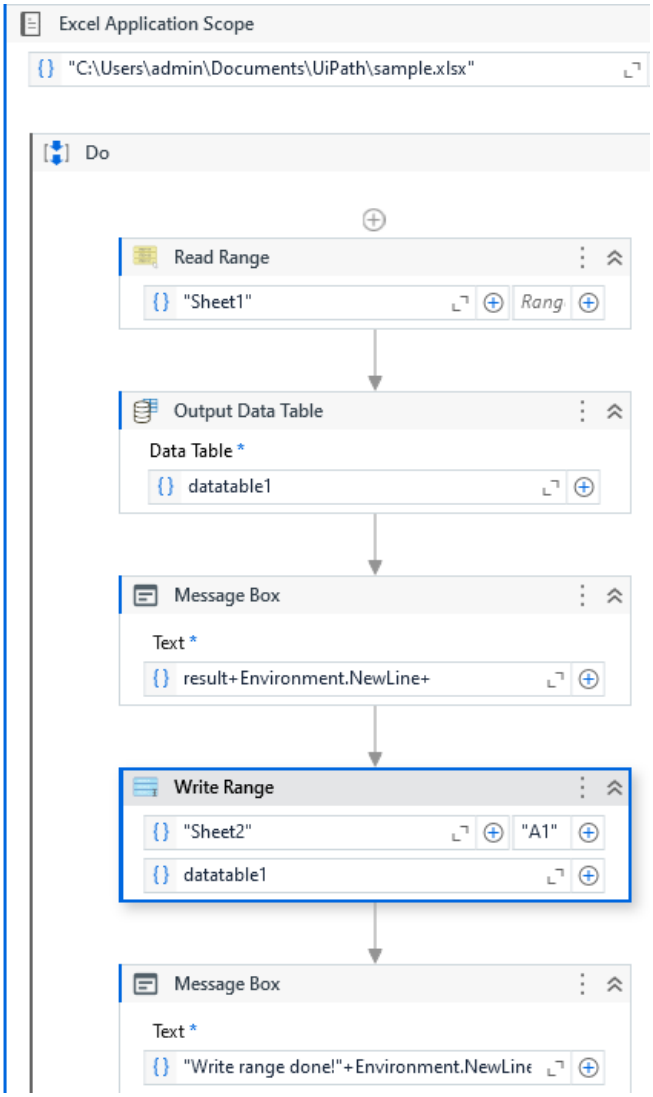
7. Now, drag write range and append range under message box. In write range, type Sheet2, A1 cell and in input data table type ‘datatable1’. Drag message box after write range and display message as write range done.

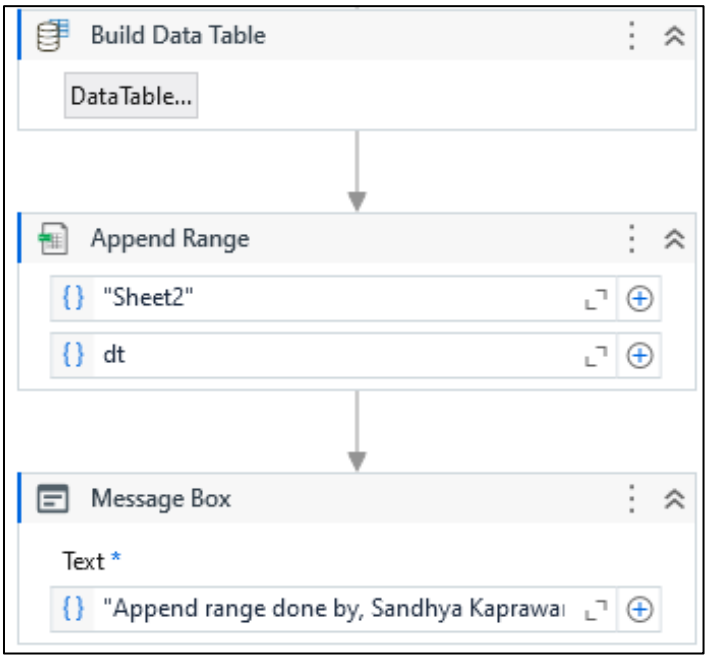


8. Drag Build data table and create Items and Price as column names and add some data into it and click ok. Set dt as output for Build data table activity from properties.

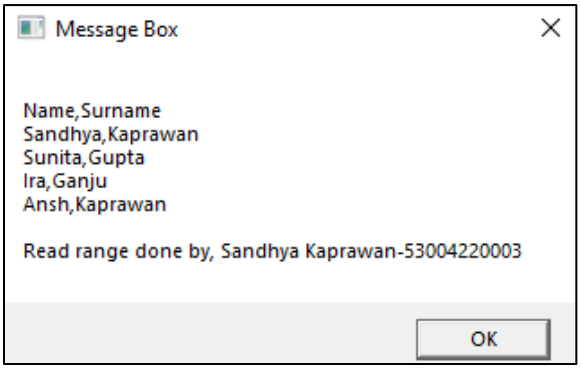


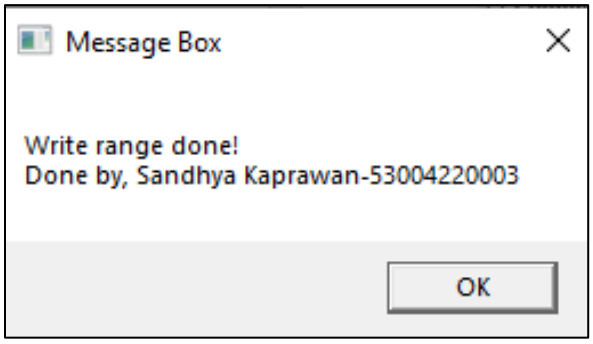
9. In append range, select Sheet2 and put dt as data table to be appended. Drag message box and put message as append range done.

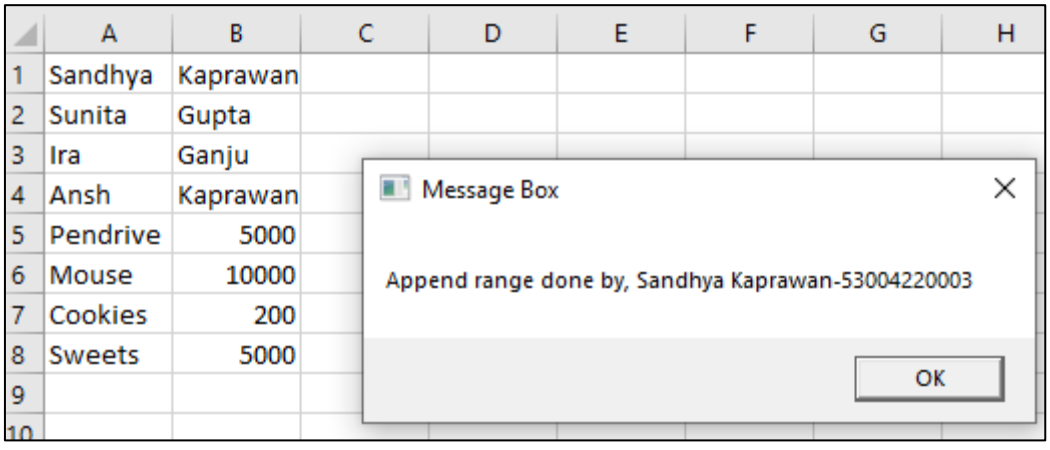




10. Click on run file.



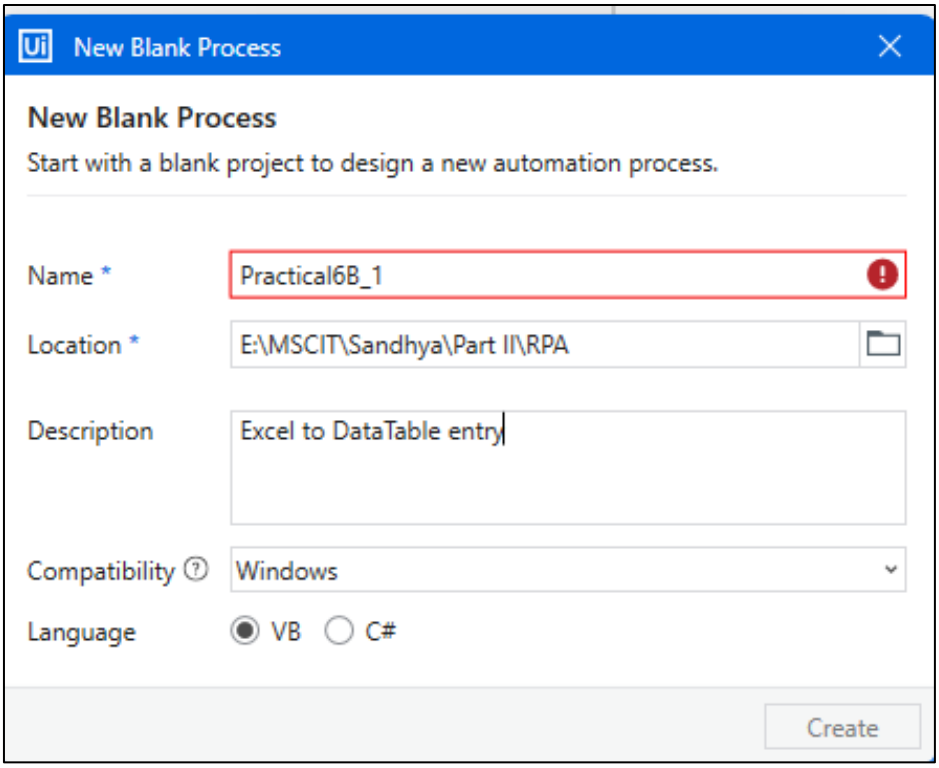




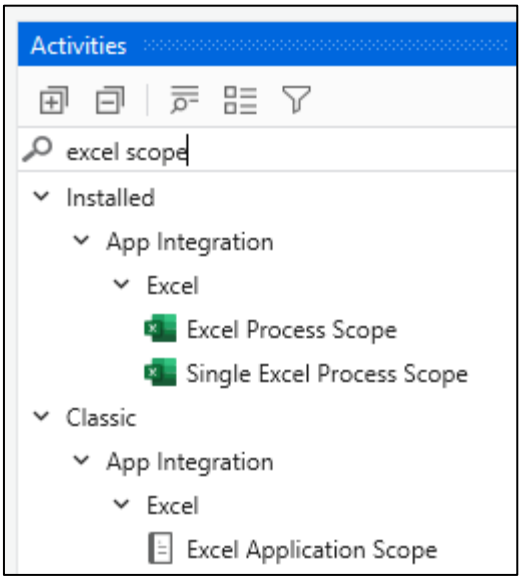
B. Automate the process to extract data from an excel file into a data table and vice versa.

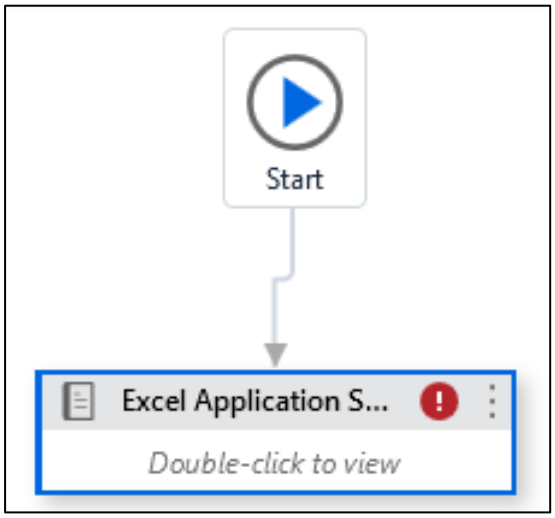
AIM: Use excel file to extract data from it into data table.

1. Click on Process and create process Practical6B_1, give description and click on create.

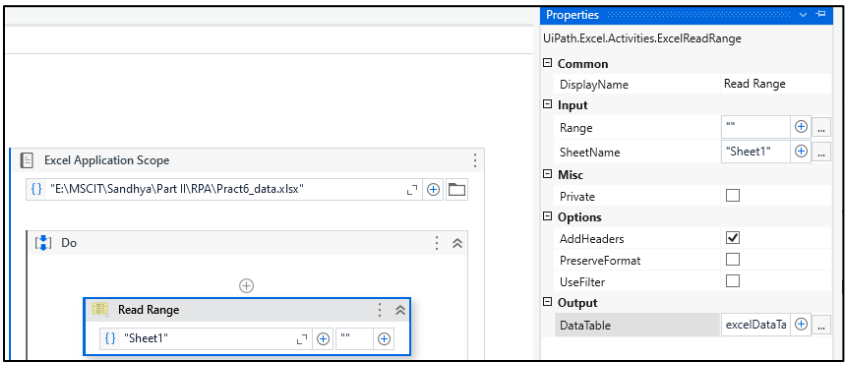


2. Create excel sheet with few records. Drag flowchart inside main sequence then drag excel application scope inside flowchart and set it as start node.



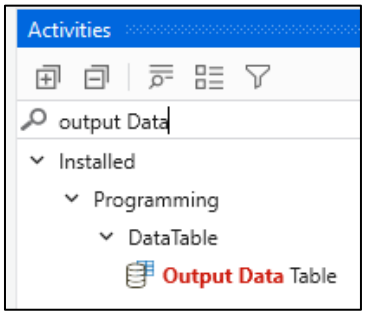


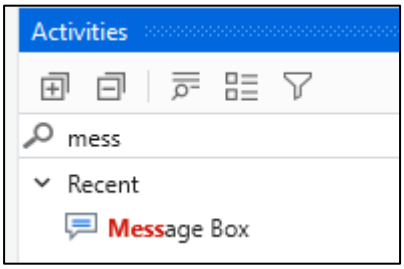
3. Drag read range and browse file into path for excel application scope. In read range properties, create ‘excelDataTable’ variable for output and set scope as flowchart.



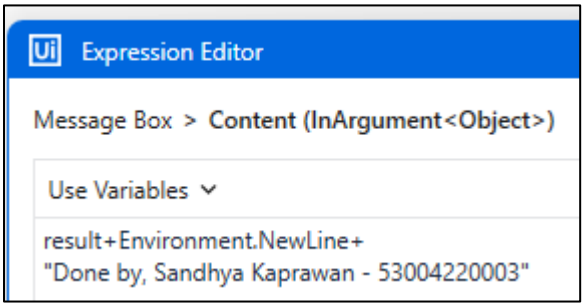
Name	Variable type	Scope
excelDataTable	DataTable	Flowchart
Create Variable		

4. Drag output data table and give variable ‘excelDataTable’ as input for it and create output variable as result.



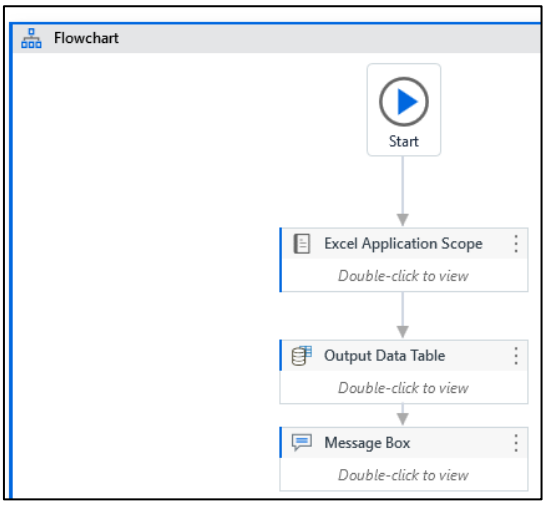


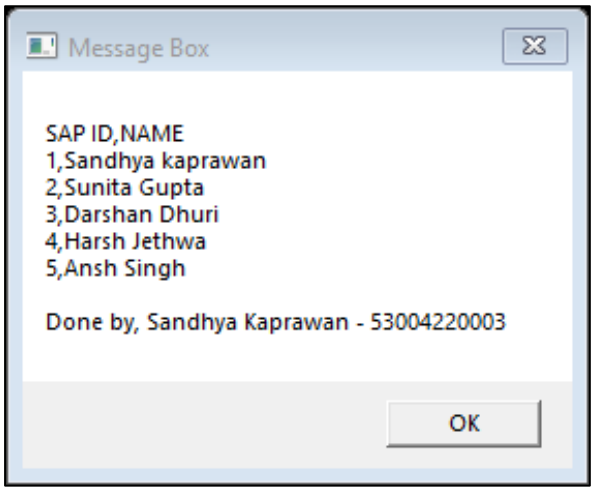
5. Display result variable in message box. Set scope of all variable to Flowchart.



Name	Variable type	Scope
excelDataTable	DataTable	Flowchart
result	String	Flowchart
Create Variable		

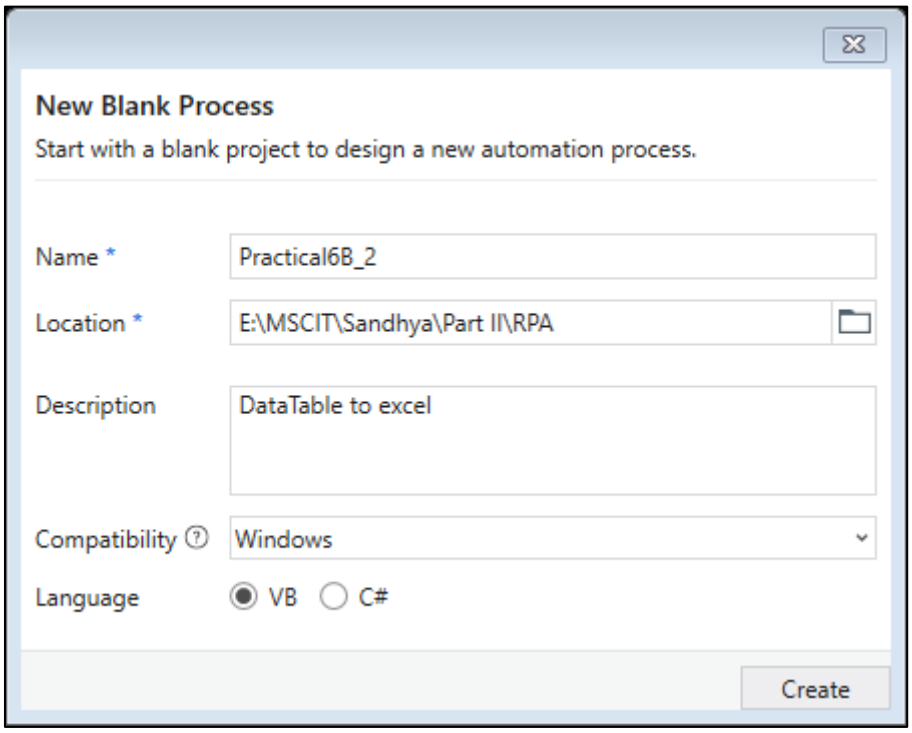
6. Click on run file.



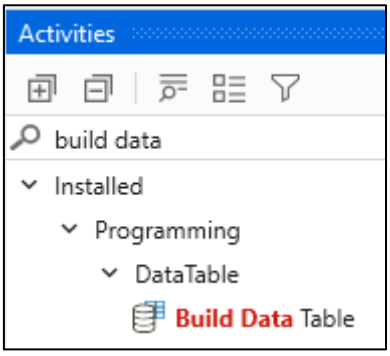


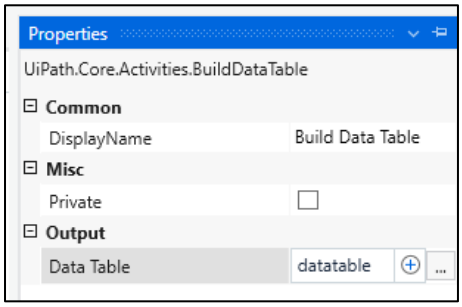
AIM: Use Data Table to write data from it into Excel file.

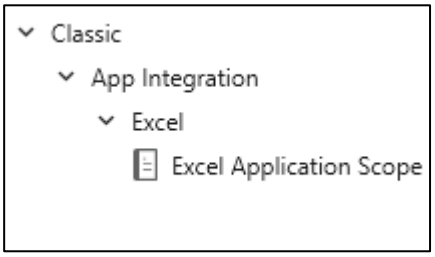
1. Click on Process and create process Practical6B_2, give description and click on create.



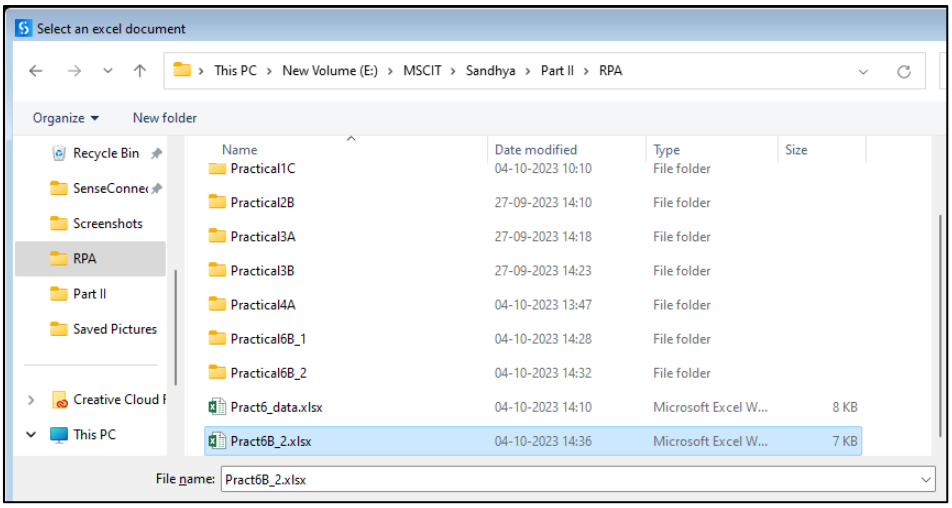
2. Drag build data table inside Main Sequence. Create some records into it. For output create one variable of type datatype. Drag Excel application scope below it.



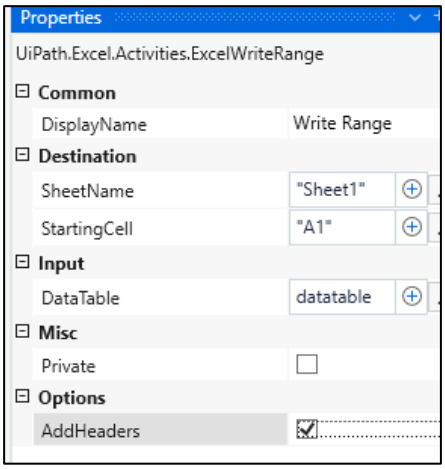




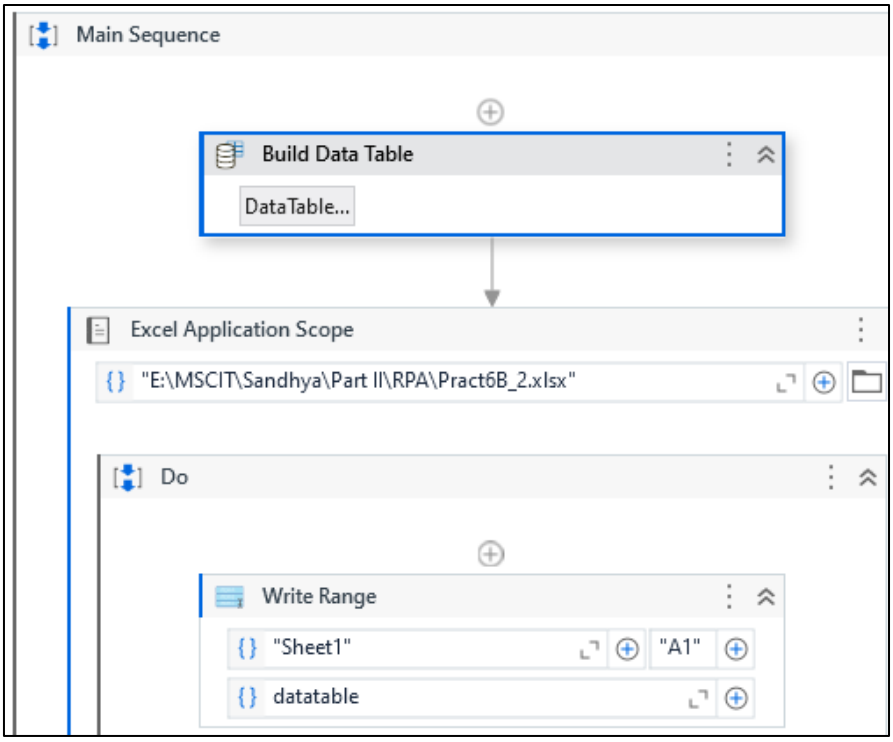
3. Select file to write into.

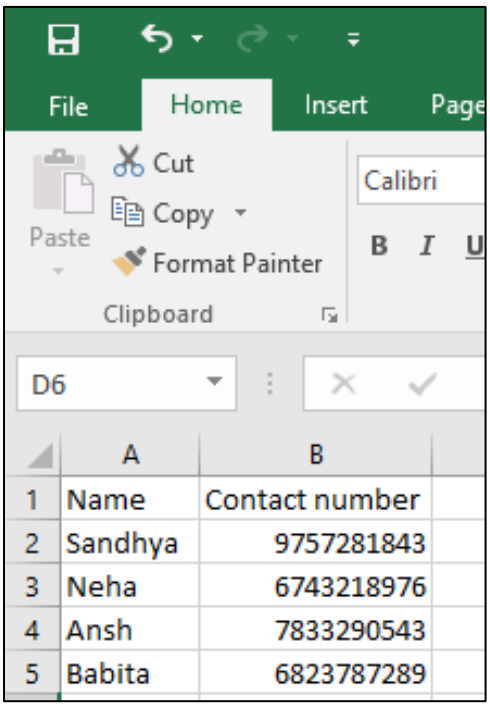


4. Drag Write range; put Sheet1, A1 and variable ‘datatable’ for input.



5. Click on run File.



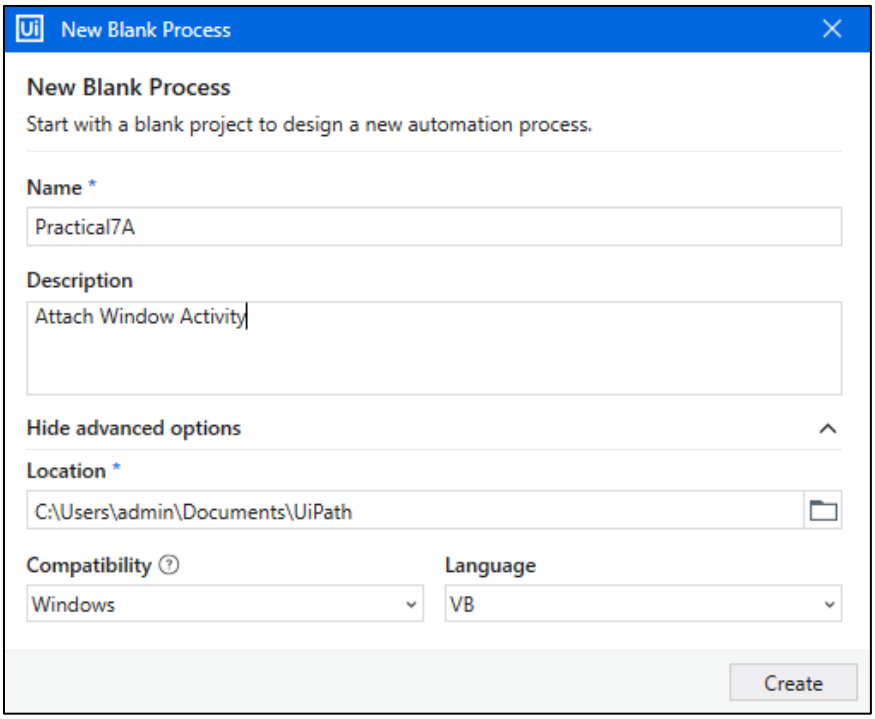


Practical 7

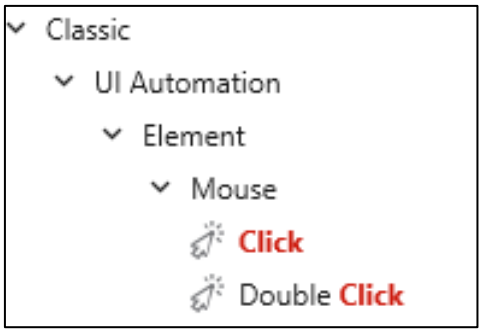
A. Implement the attach window activity.

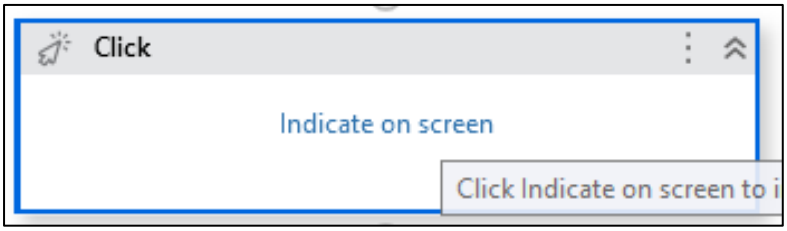
AIM: Use attach window to open notepad and write into it.

1. Click on Process and create process Practical7A, give description and click on create.

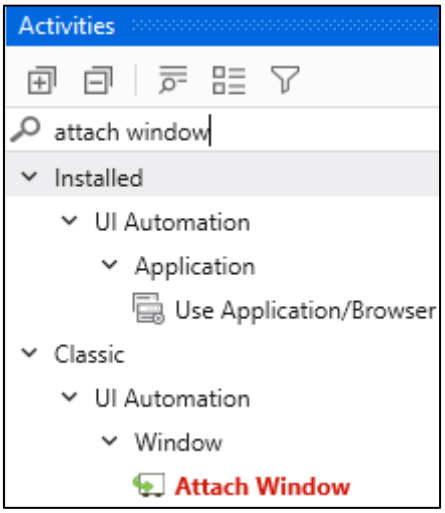


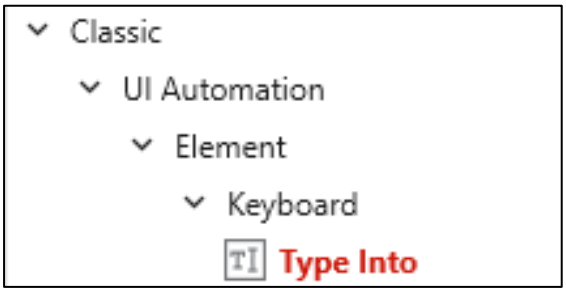
2. Drag sequence and inside it drag mouse click and indicate notepad icon to it.



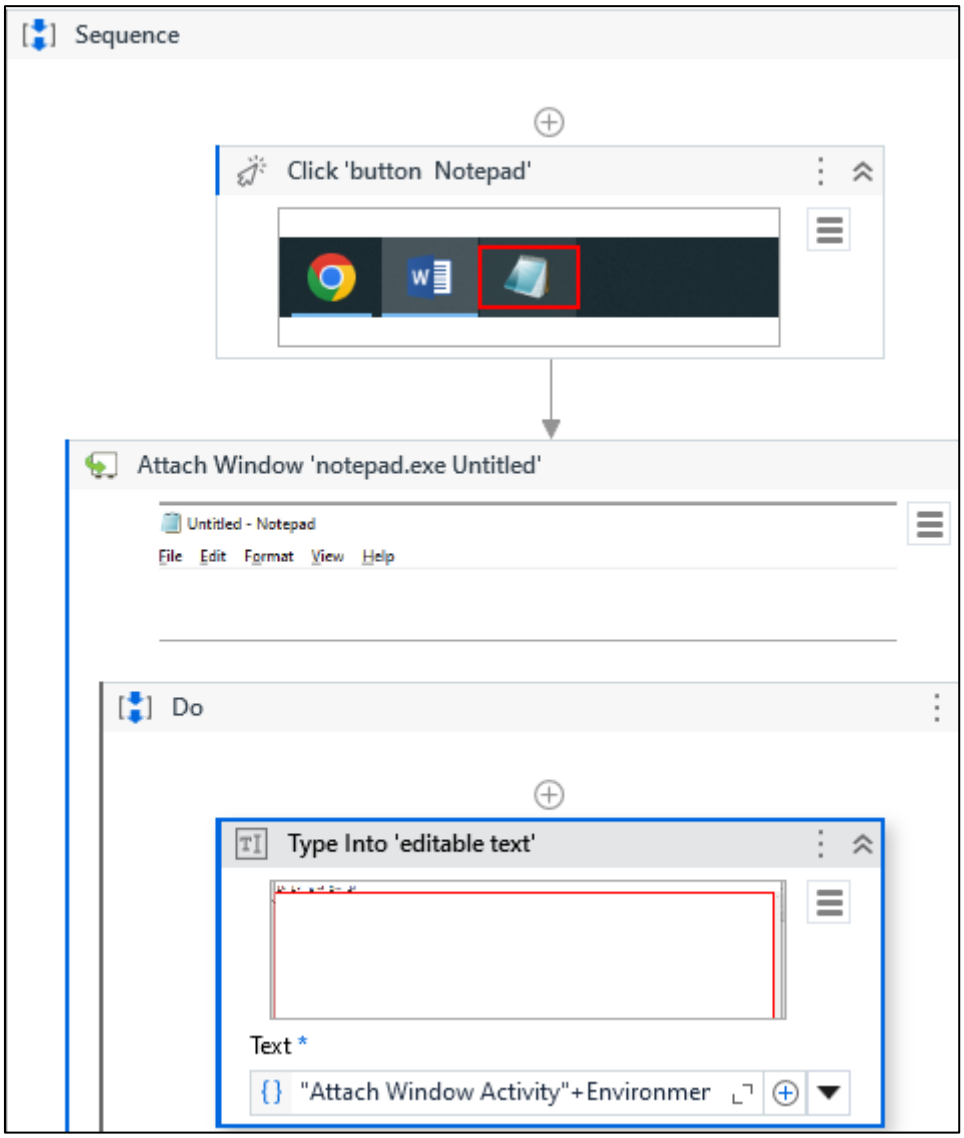


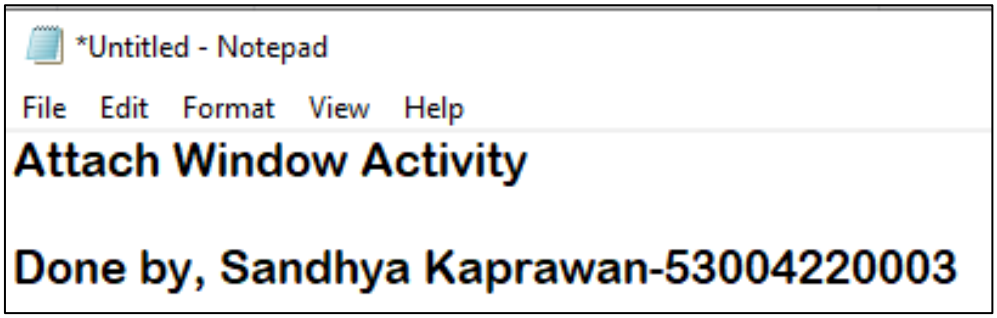
3. Drag Attach window, inside do drag type into. Indicate blank notepad on attach activity.





4. Now, inside type into Write Attach window activity and save it and click on Run File.

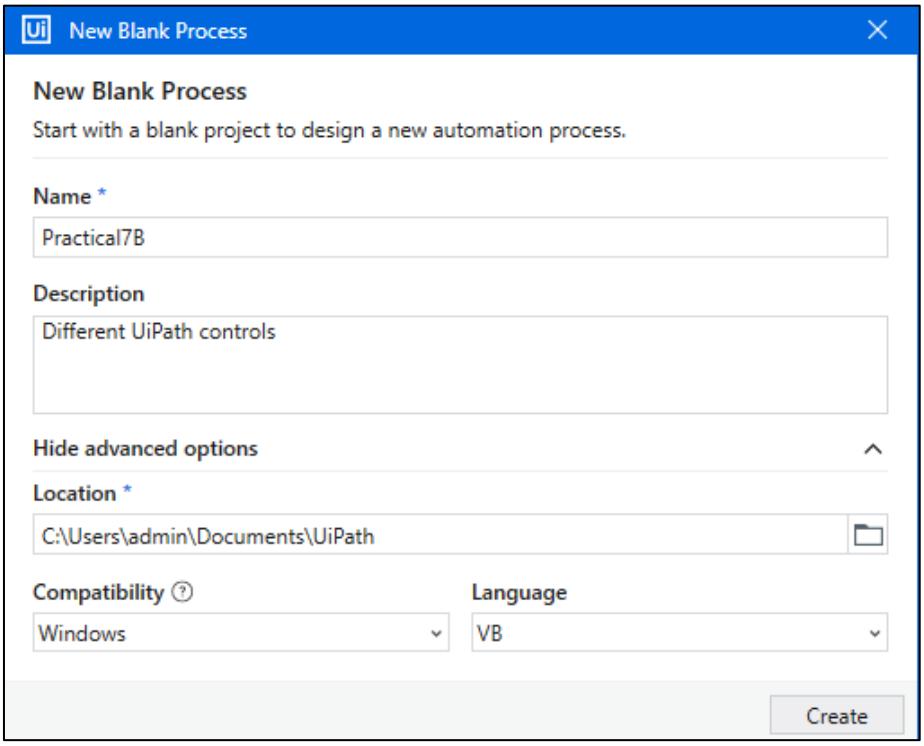

Sequence
Click 'button Notepad'
Attach Window 'notepad.exe Untitled'
Untitled - Notepad
File Edit Format View Help
Do
Type Into 'editable text'
Text *
{} "Attach Window Activity"+Environmer


*Untitled - Notepad
File Edit Format View Help
Attach Window Activity
Done by, Sandhya Kaprawan-53004220003

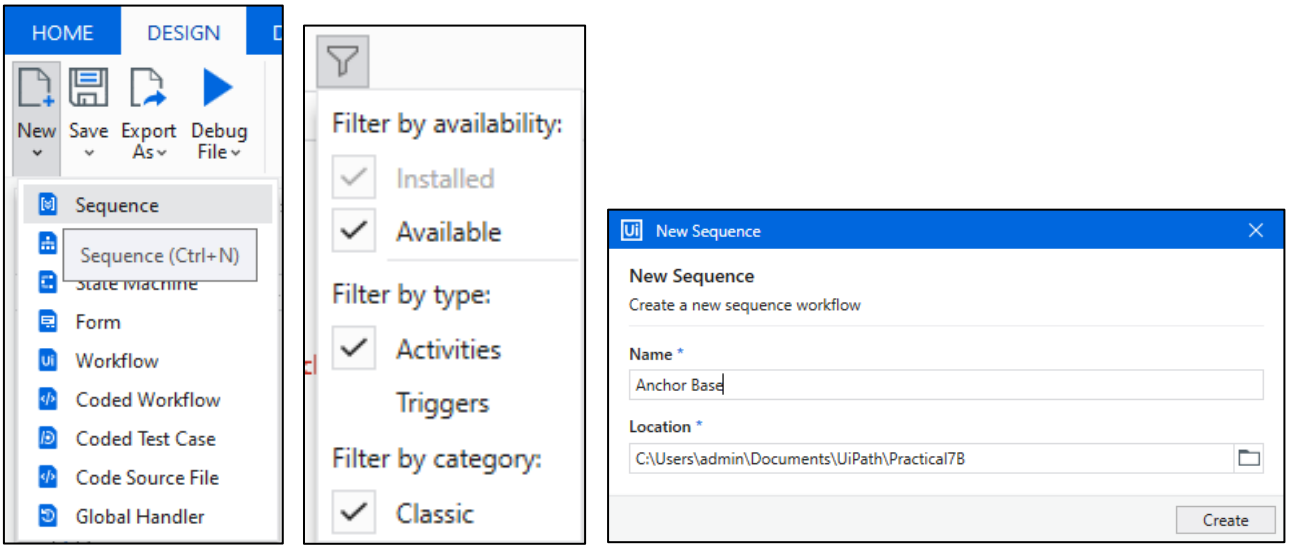
B. Find different controls using UiPath.

AIM: Using different controls to automate task.

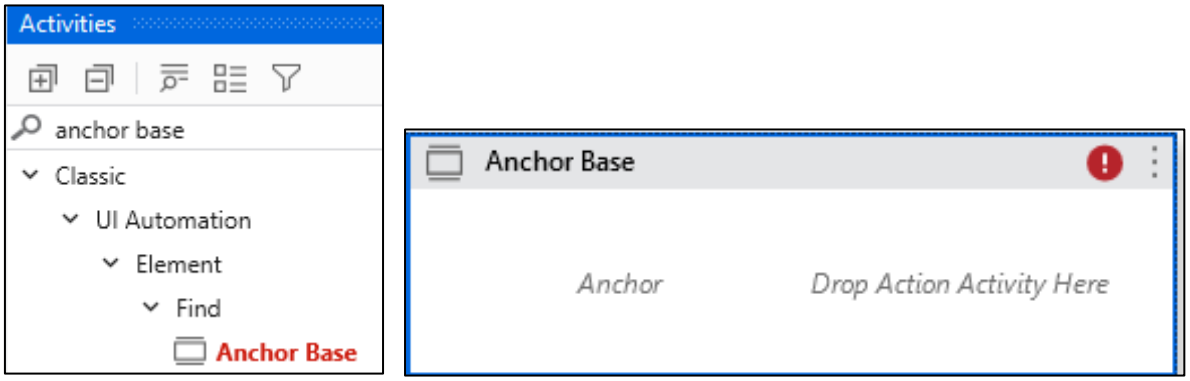
1. Click on Process and create process Practical7B, give description and click on create.



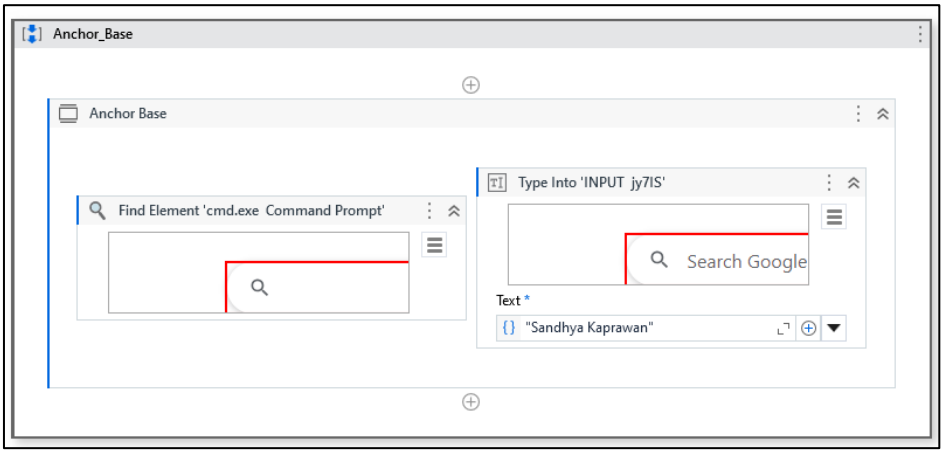
2. Create new sequence, name it as anchor base and enable classic from filter.



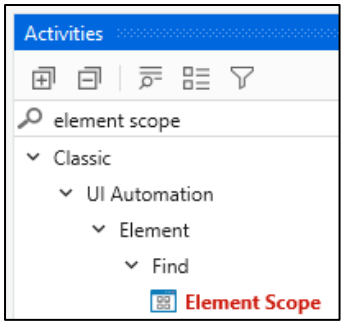
3. Drag anchor base inside sequence.



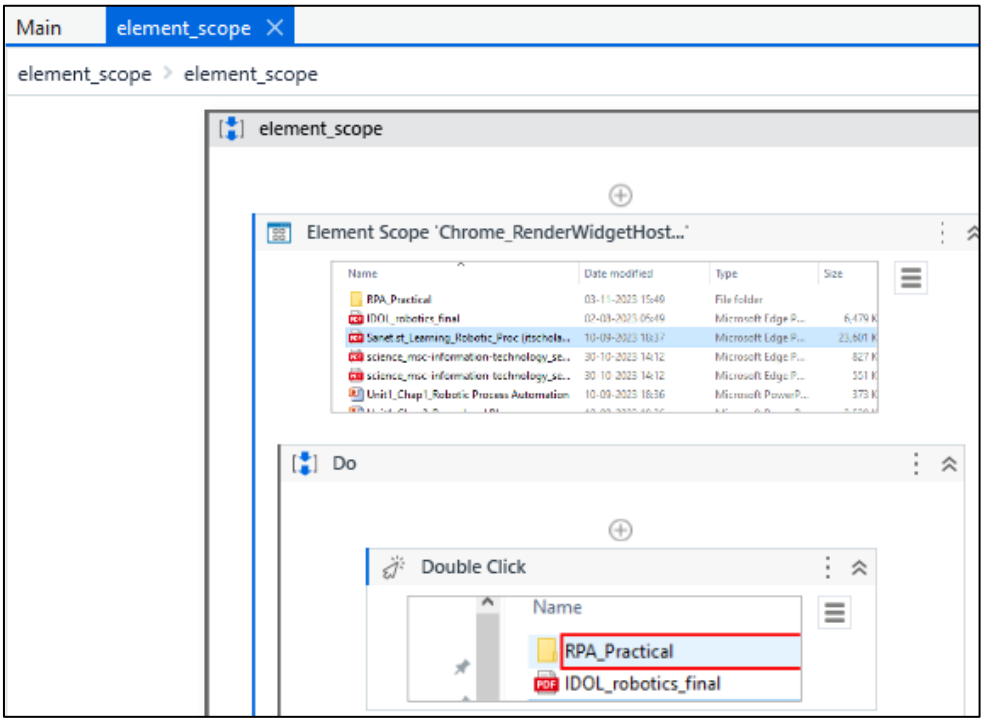
4. Drag find element in anchor position and type into in Activity position inside anchor base.
5. Write text as something and run file. It will write text on element selected in find element activity.



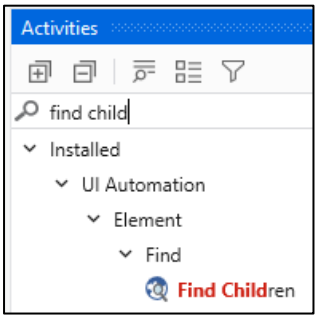
6. Create new sequence, name it as element scope. Drag element scope activity inside it.



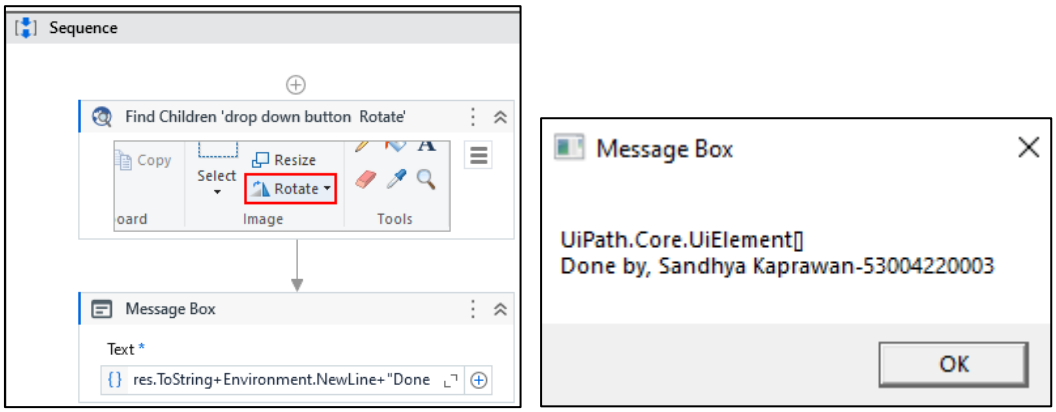
7. Drag click activity inside do block and select something on screen. Run file and it will click on file.



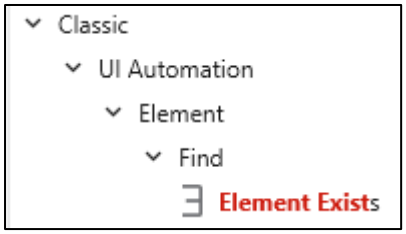
8. Create new sequence, find child and drag find children activity inside it.



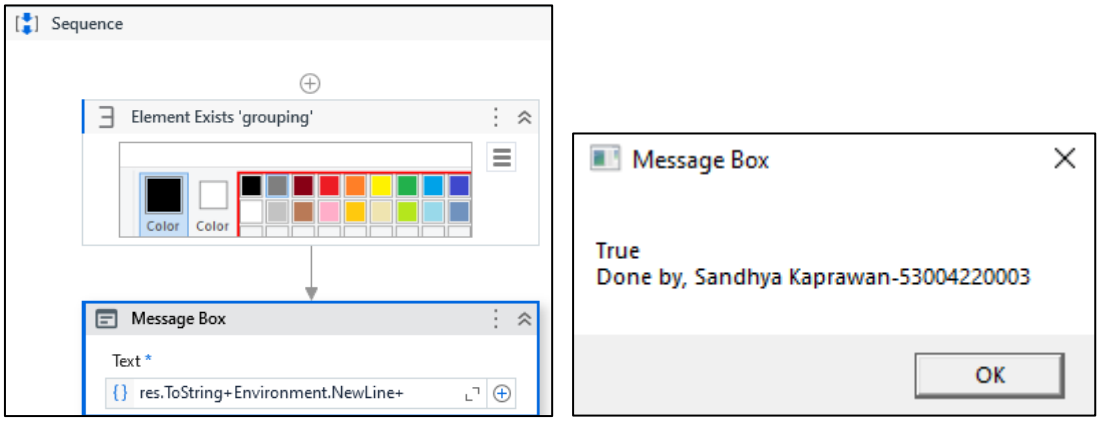
9. Select something on screen and create output variable and display it in message box. Run file it will display UiElement which was found.



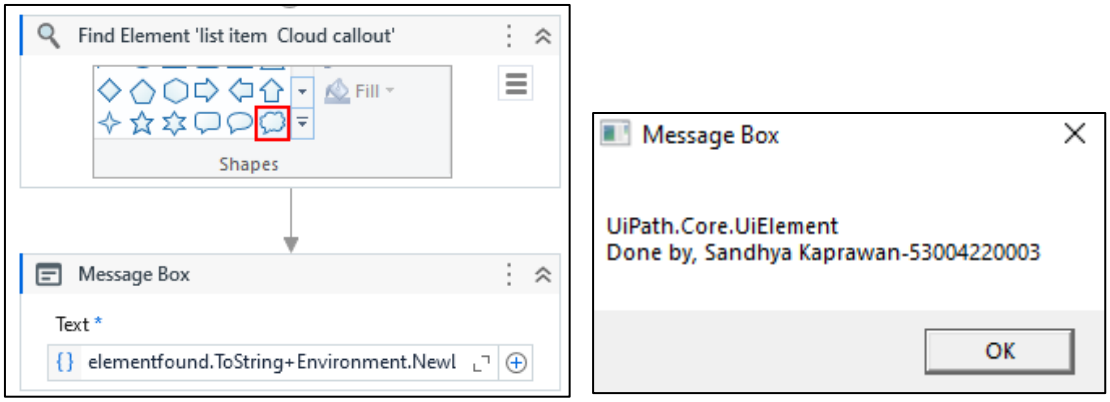
10. Drag element exists into sequence, select some element from screen.



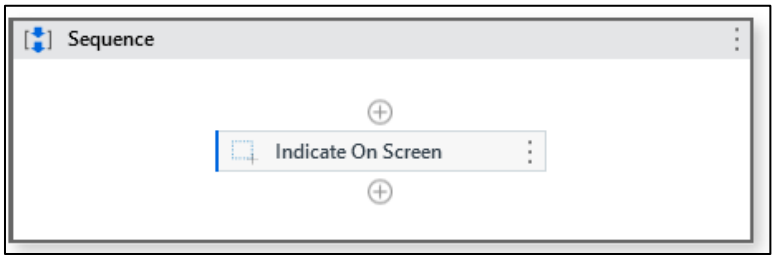
11. Create variable for element exist or not then drag message box and display result in it. Run file, it will display Boolean value for output.



12. Drag find element in sequence, select some element and display message in message box. Run file and it will display Ui element.



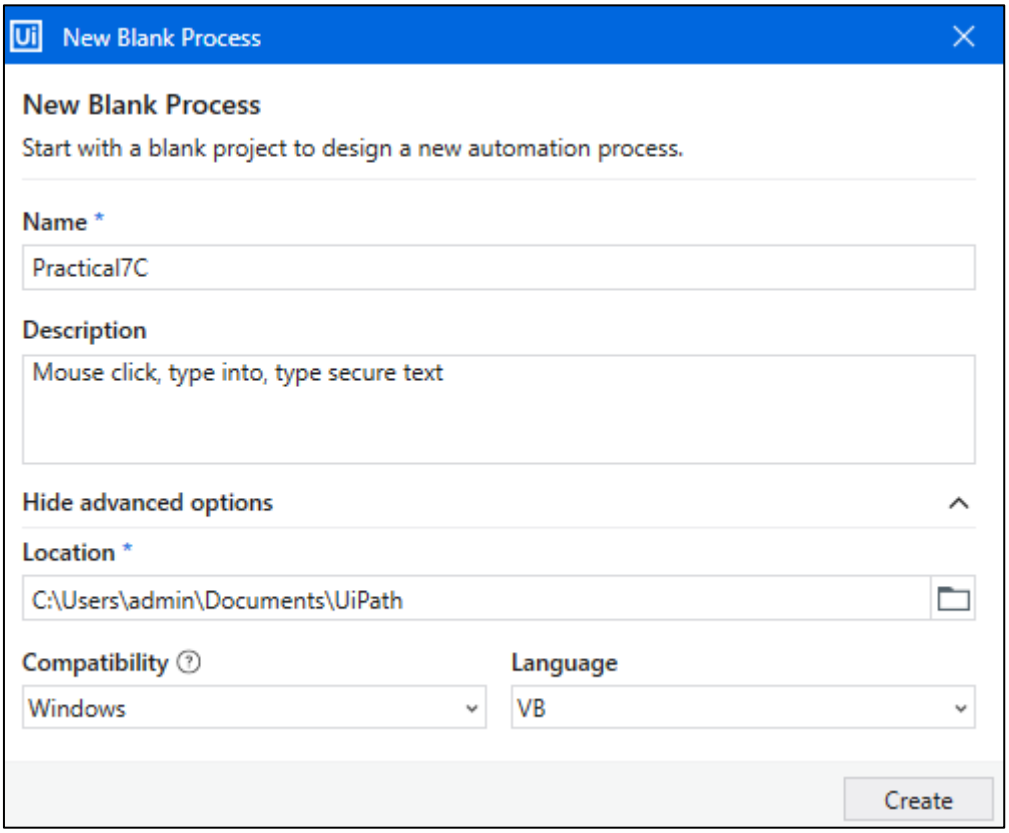
13. Drag Indicate on Screen and run file. It will give clip cursor to indicate something on screen.



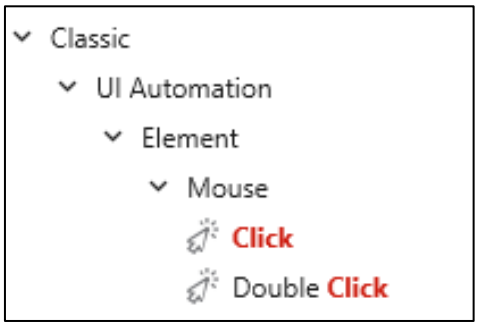
C. Demonstrate the following activities in UiPath:
i. Mouse (click, double click and hover)
ii. Type into
iii. Type Secure text

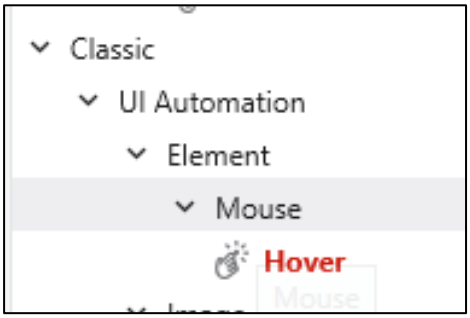
AIM: Using mouse click, type into and secure text activity in UiPath.

1. Click on Process and create process Practical7C, give description and click on create.

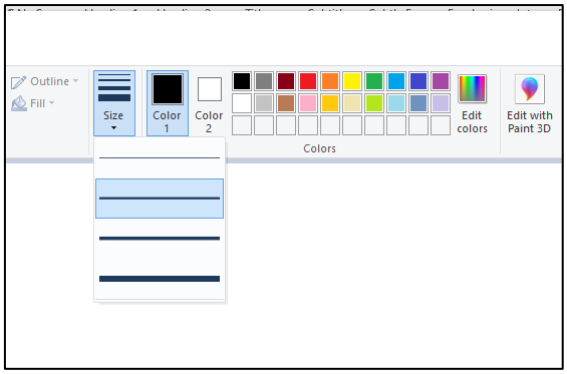


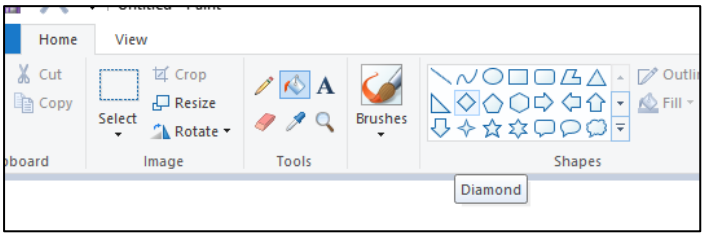
2. Drag click activity, double click and hover activity to main sequence.

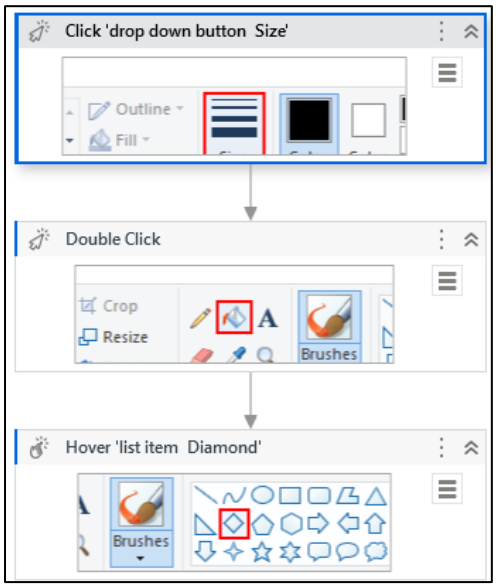




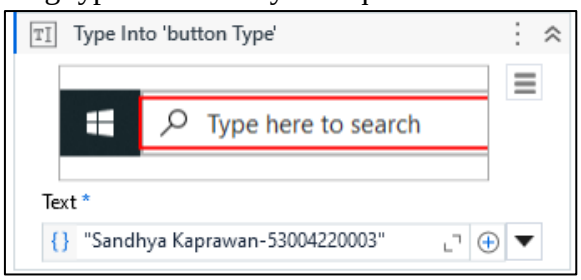
3. Indicate on screen for all and run file.

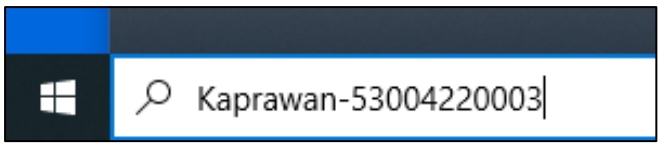




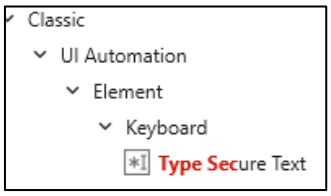


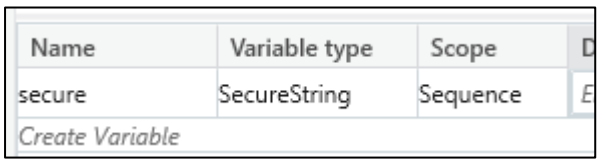
4. Drag type into activity in sequence. Indicate something on screen and in Text field type name.



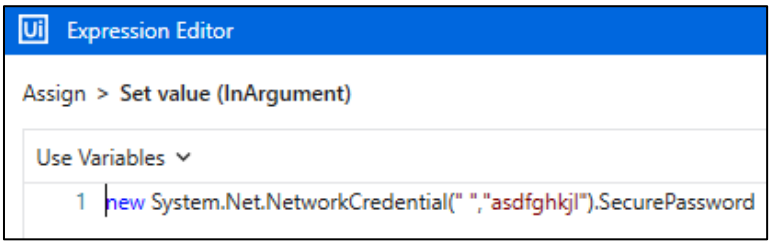


5. Drag type secure text inside sequence. Indicate password field in chrome then create one secure string variable.

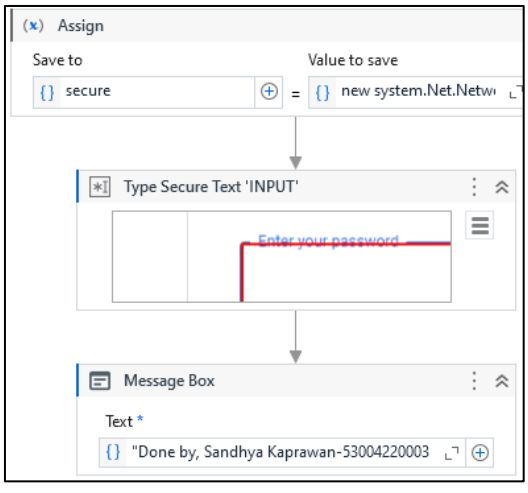


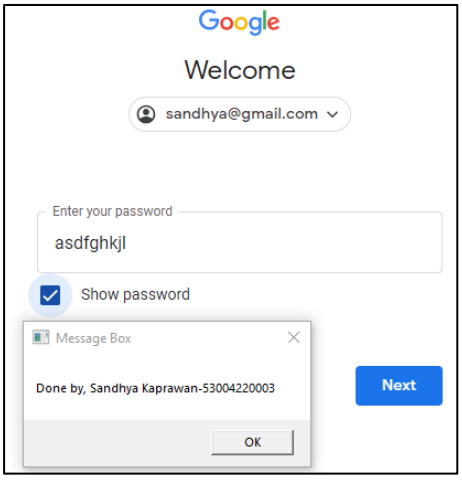


6. Drag assign activity above type secure text and assign value to ‘secure’ variable.



7. Click on run file. It will type the password provided into indicated field.





Practical 8

A. Demonstrate the following events in UiPath.

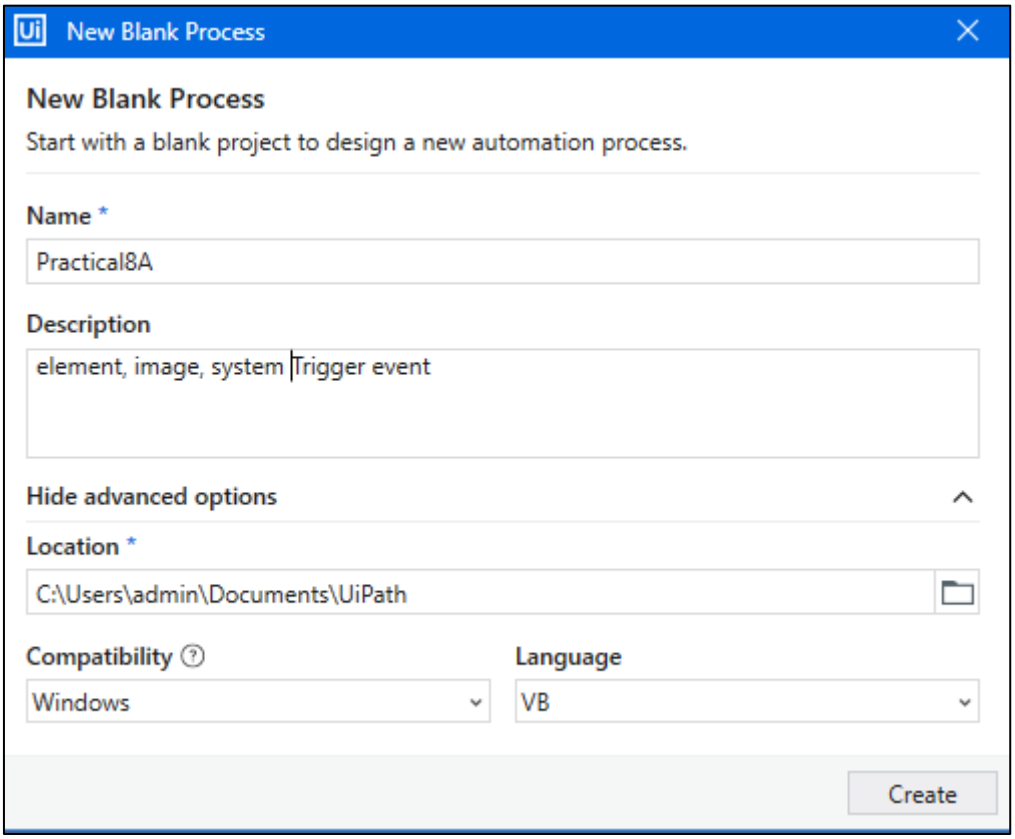
i. Element triggering event

ii. Image triggering event

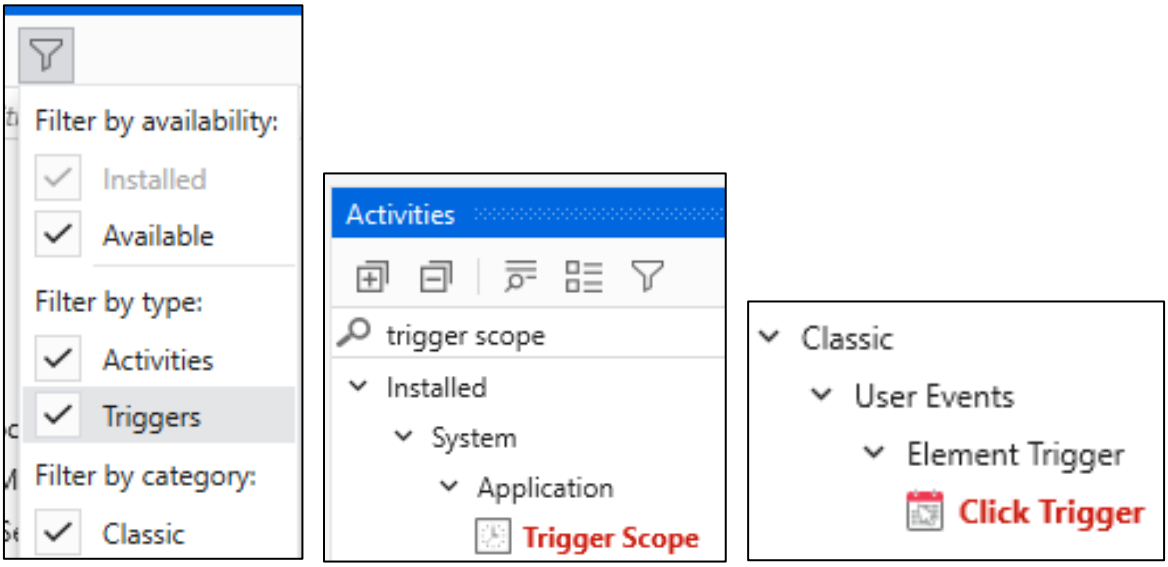
iii. System Triggering Event

AIM: Use different types of trigger in UiPath.

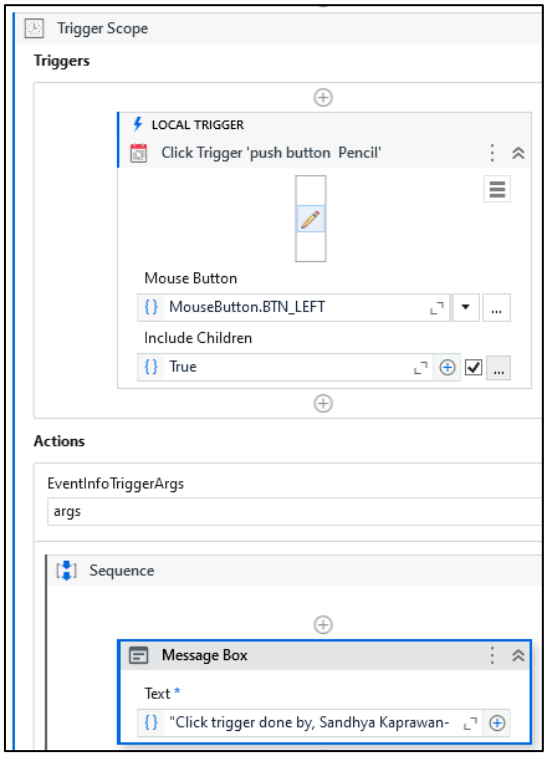
1. Click on Process and create process Practical8A, give description and click on create.

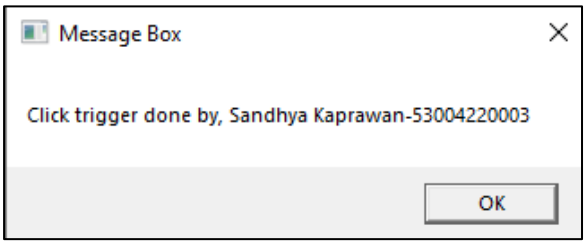


2. Check classic in filter. Drag Trigger Scope inside sequence. Then drag click trigger inside trigger scope and message box inn sequence. Indicate something on screen.

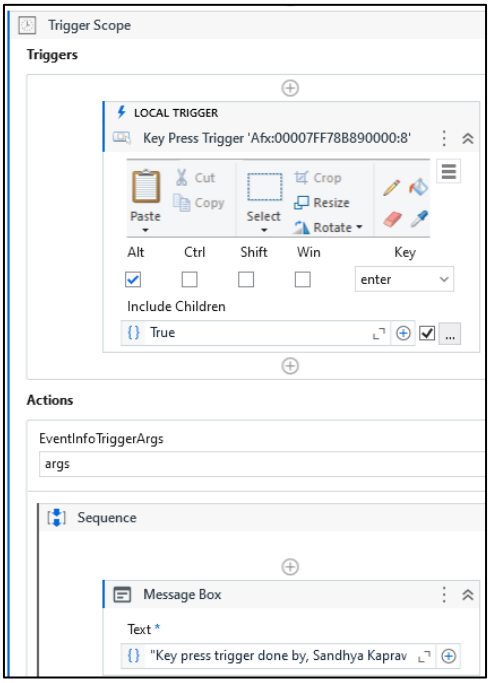


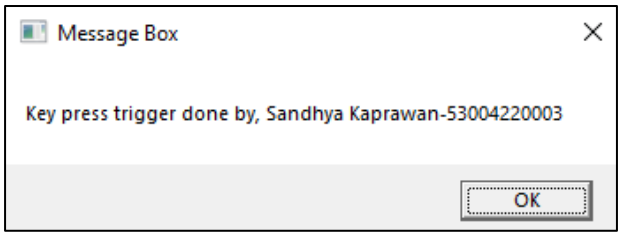
3. In message box, type click trigger done. Run file, on click of mouse the trigger will be activated.



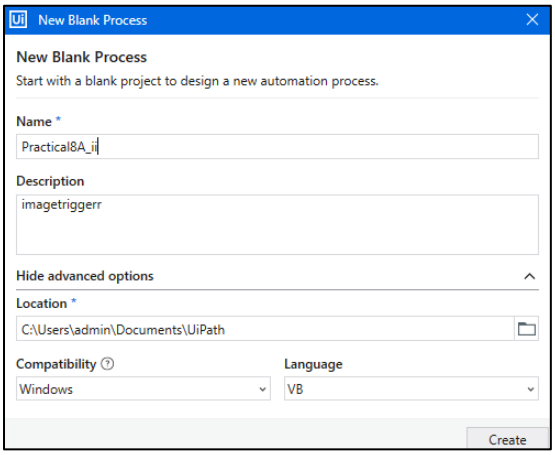


4. Drag key press trigger and do the same steps as for click trigger and run file, on press of alt+enter key the trigger will be activated.

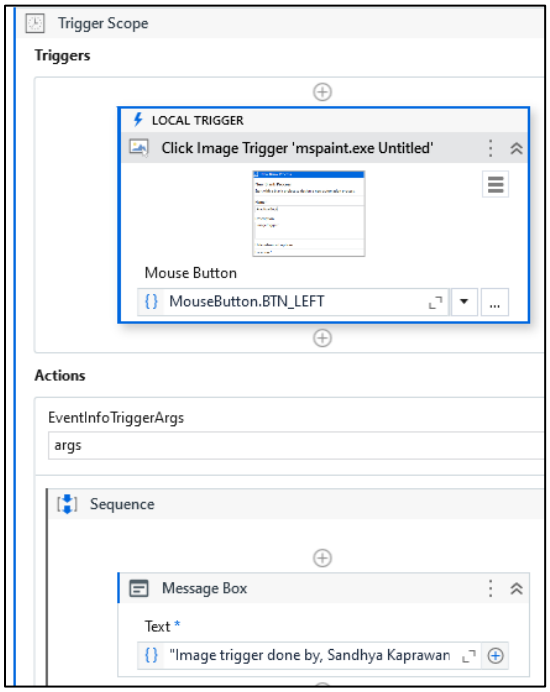




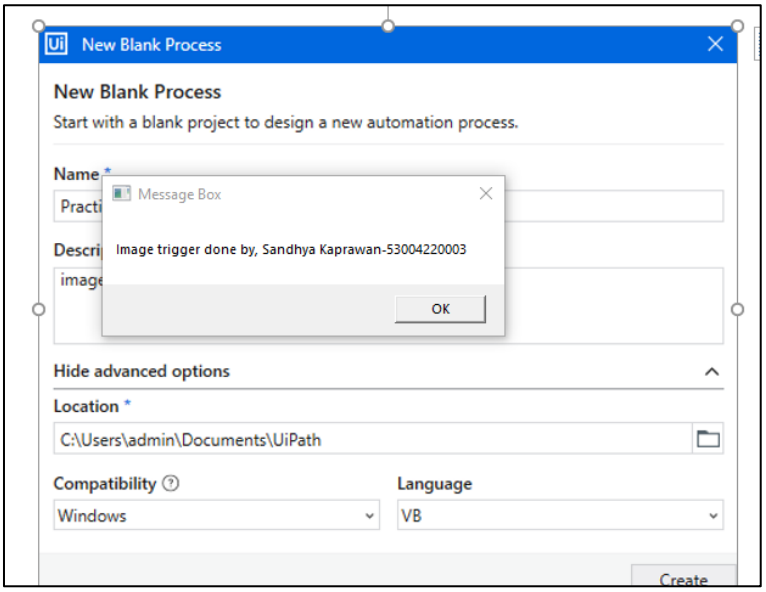
5. For Image trigger, create new Process name it as Practical8A_ii, give description and save it.



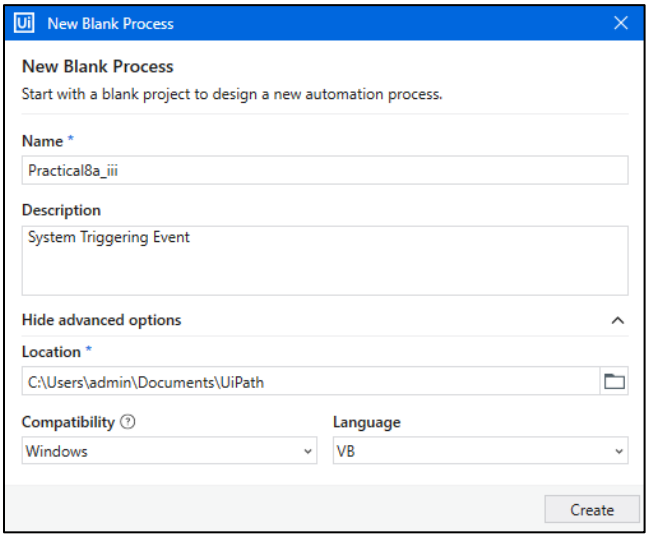
6. Drag Trigger Scope inside main sequence. Drag click image trigger inside trigger scope and select image in selector. Drag message box inside sequence and display message in it.



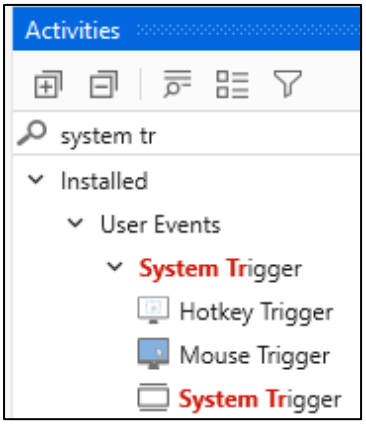
7. Run file and keep the image selected open in background. On click of image the trigger will be activated.



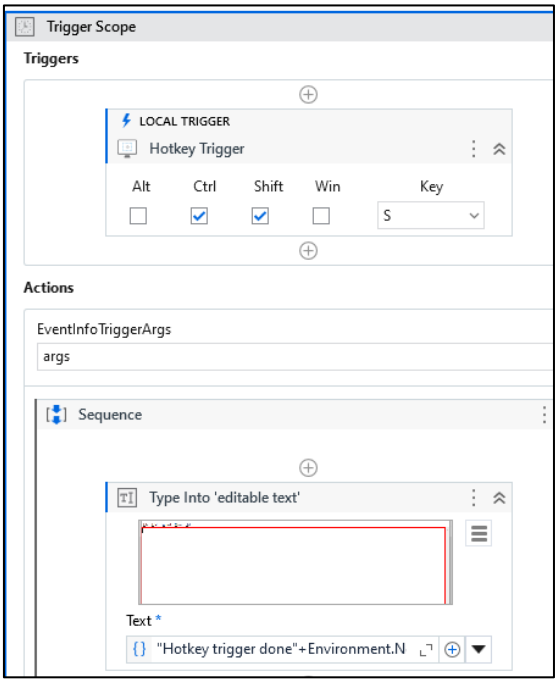
8. For System trigger, create new process Practical8a_iii, give description and click on create.

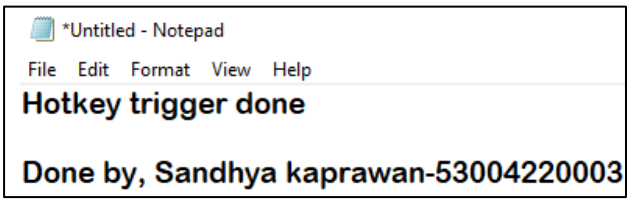


9. Drag Trigger scope activity and inside it drag system trigger.

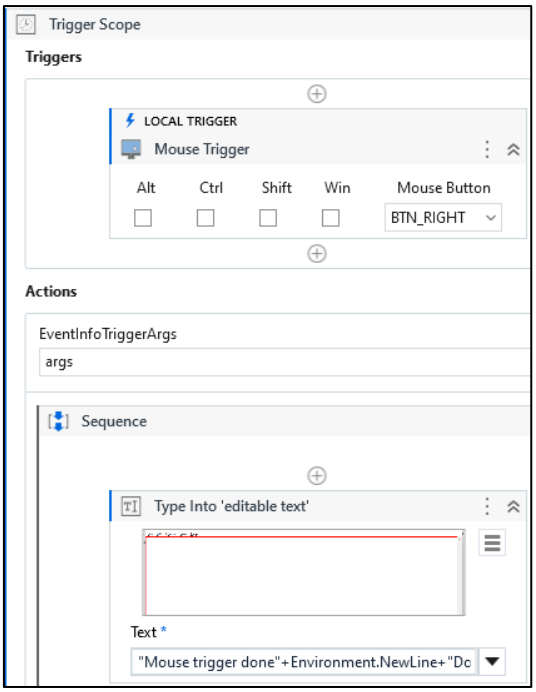


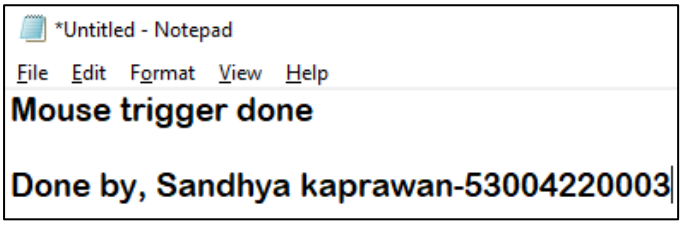
10. First drag hotkey trigger in trigger scope and drag type into activity inside sequence and write something inside it. Run file, on pressing 'ctrl+shift+S key trigger will be activated.



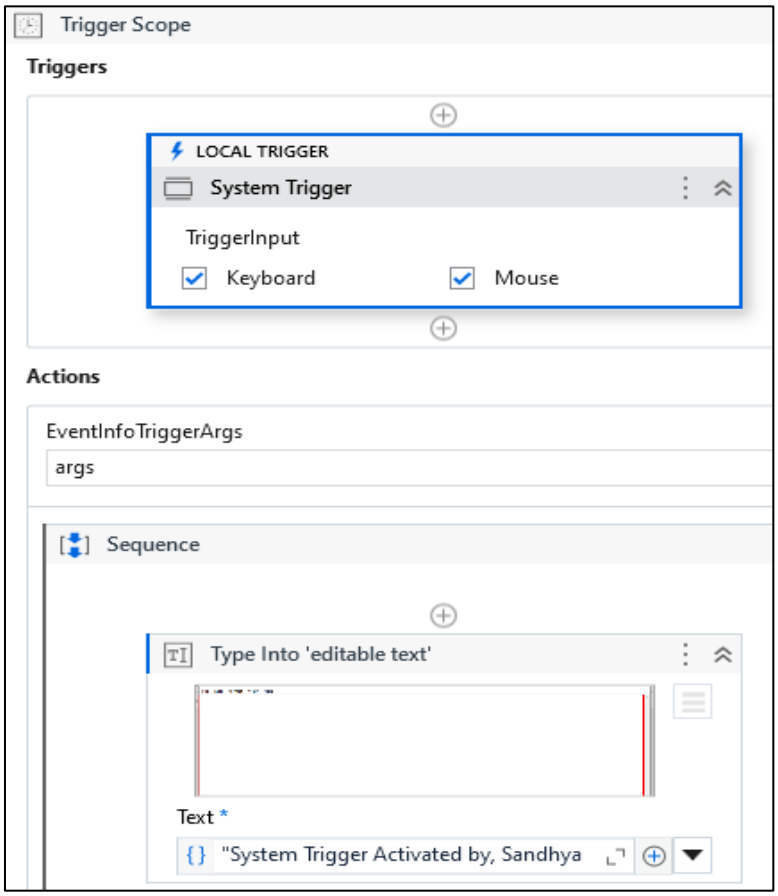


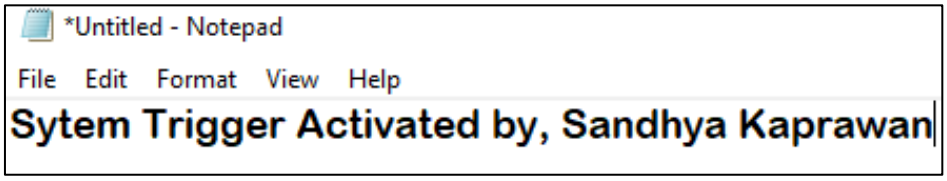
11. Now, drag mouse trigger inside trigger scope and do same for sequence as for previous triggers. On mouse right click trigger will be activated.





12. At last drag System trigger inside trigger scope and check keyboard and mouse or either or. Drag type into inside sequence of trigger, and type message. Click on run file, after pressing any key or mouse click the trigger will get activated automatically.





B. Automate the following screen scraping methods using UiPath.

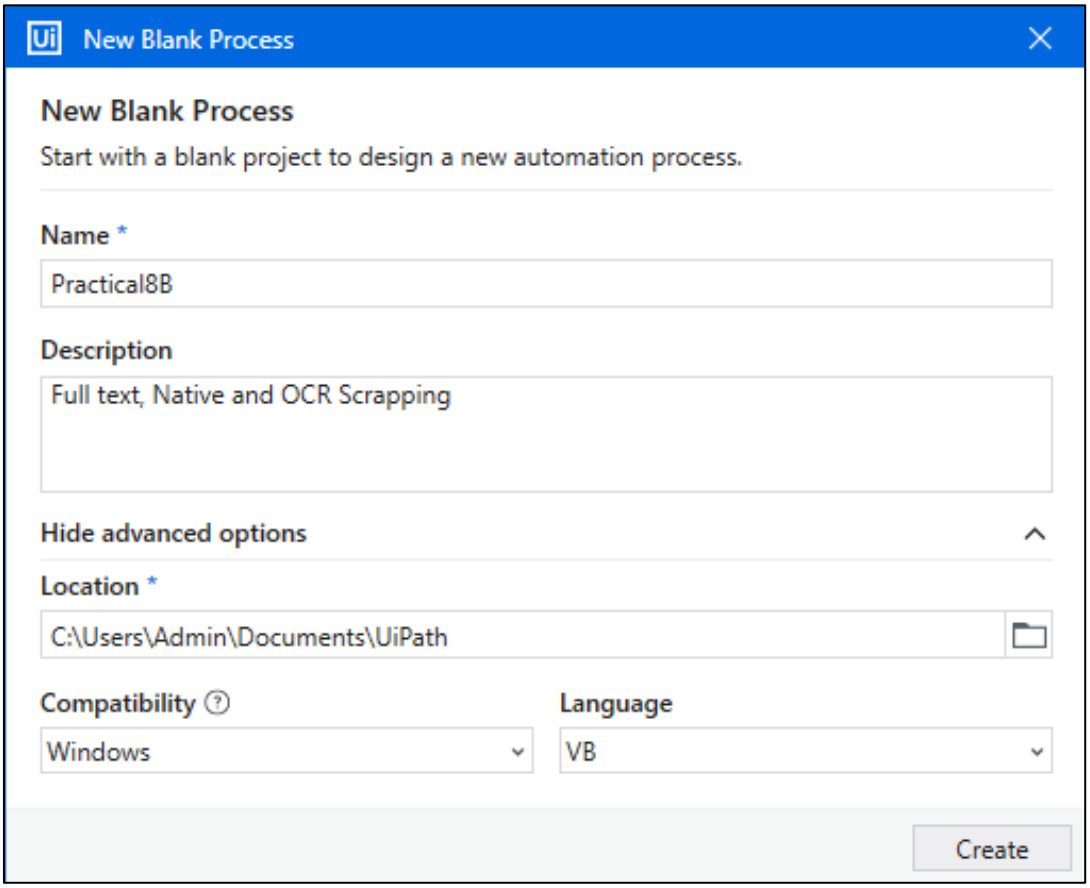
i. Full Test

ii. Native

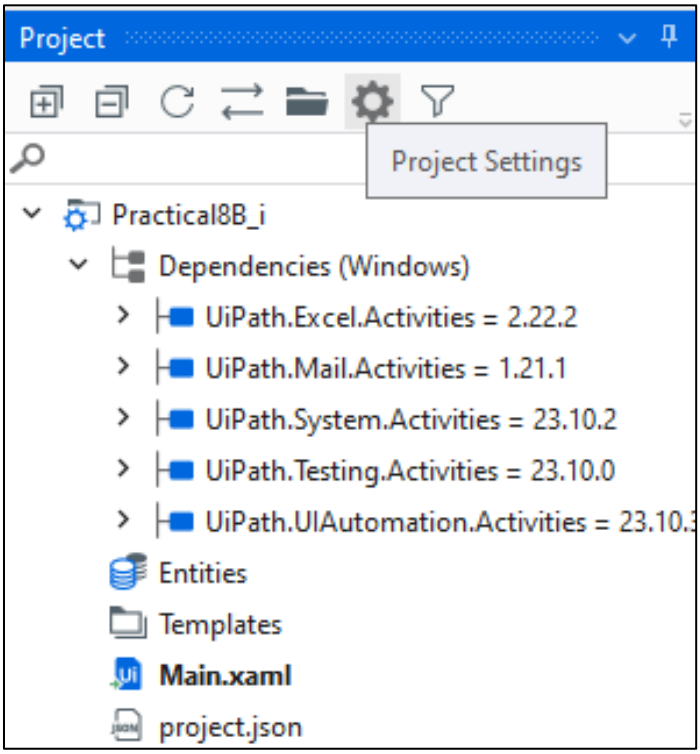
iii. OCR

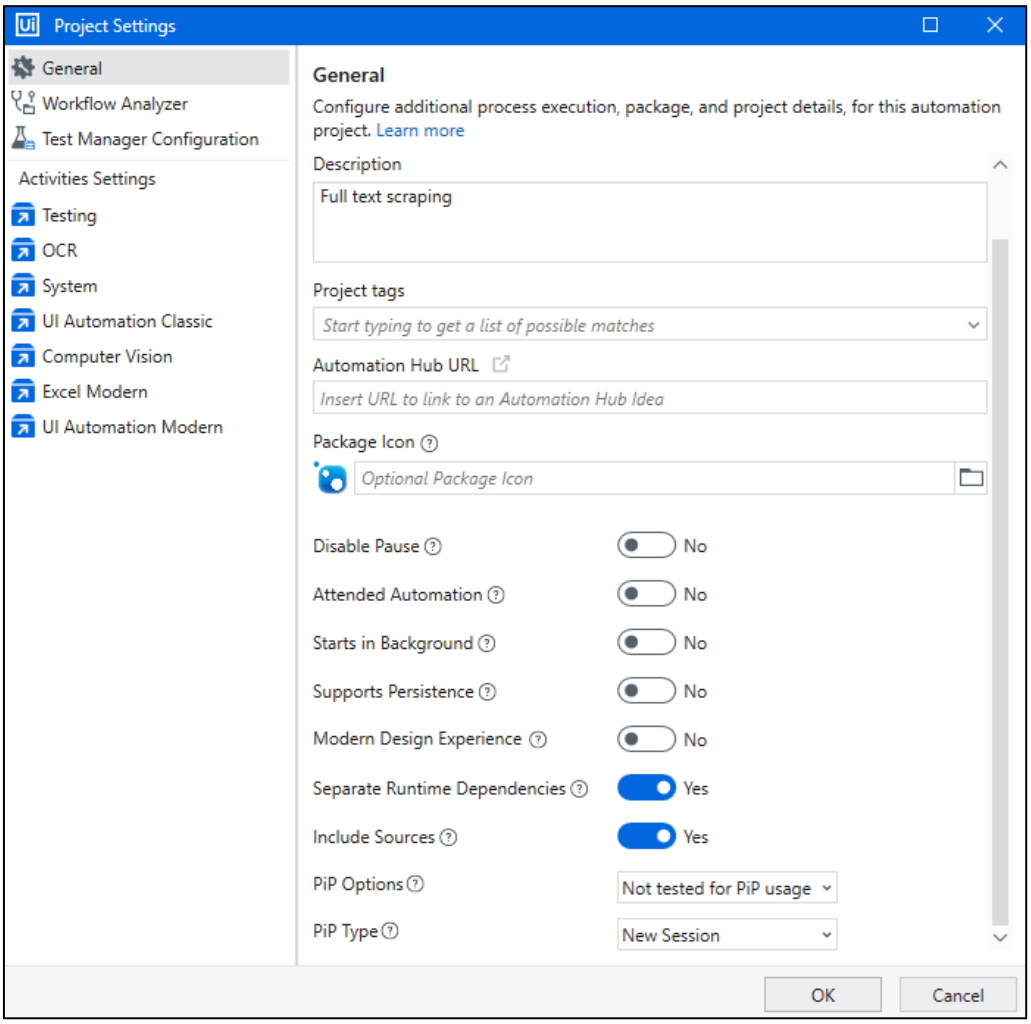
AIM: Using screen scraping in UiPath.

1. Click on Process and create process Practical8B, give description and click on create.

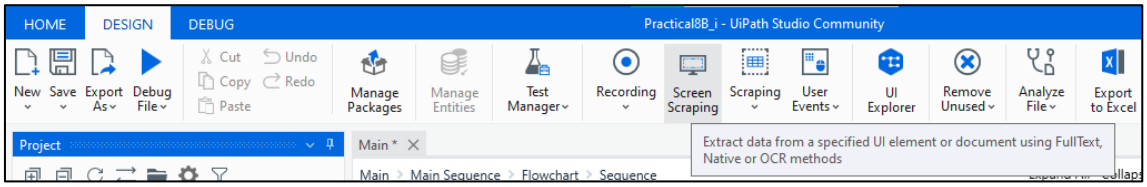


2. Go to Project then settings. Disable the Modern Design Experience from general tab and click ok.

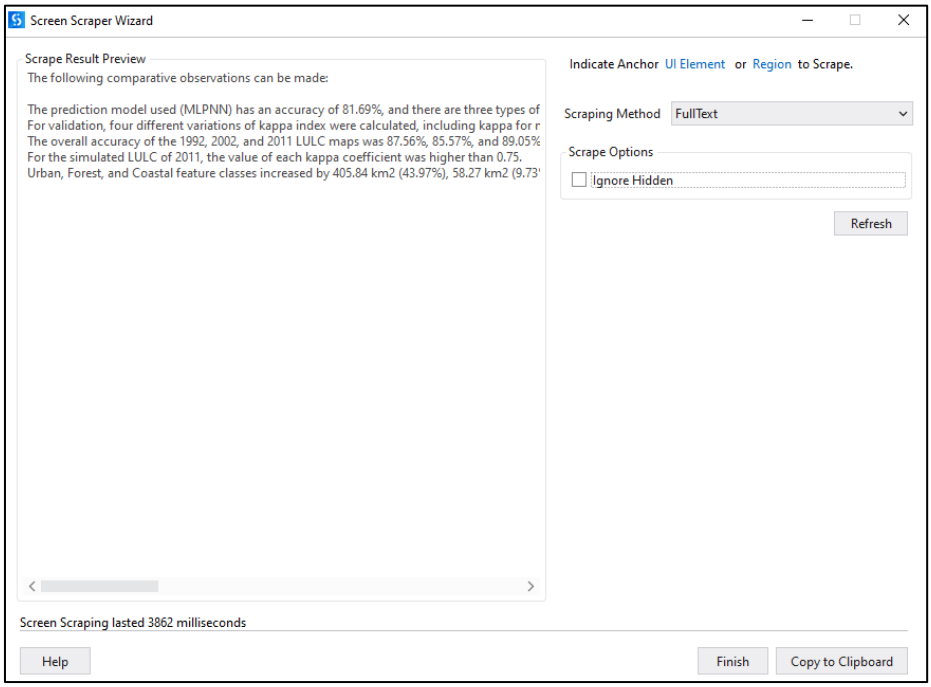


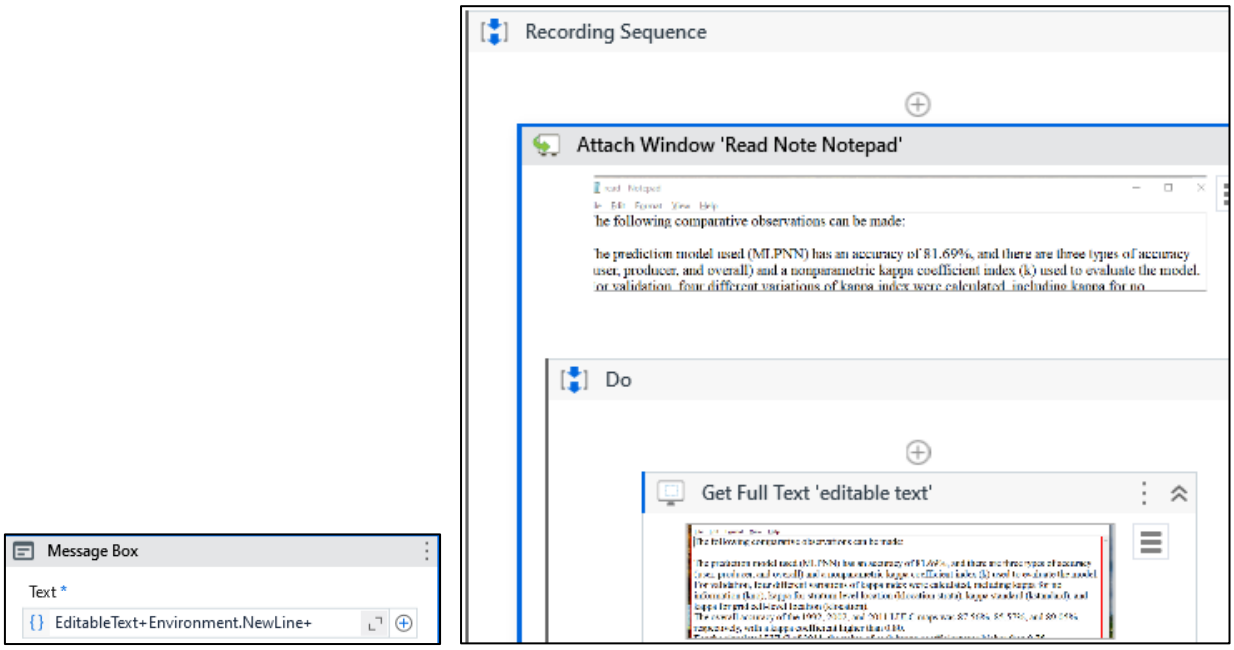


3. Click on Screen scrapping and select notepad file which is open in background.

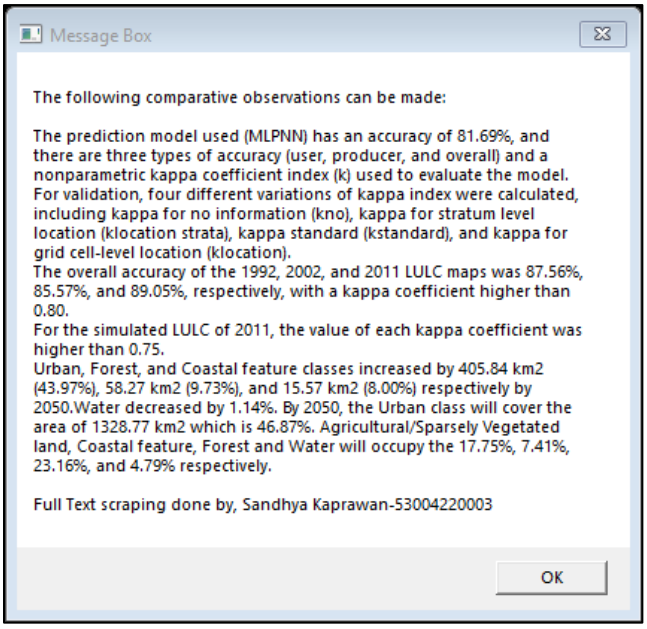


4. In scrapping method, use ‘FullText’ and refresh and click on Finish. Drag message box and display variable in it which store text.

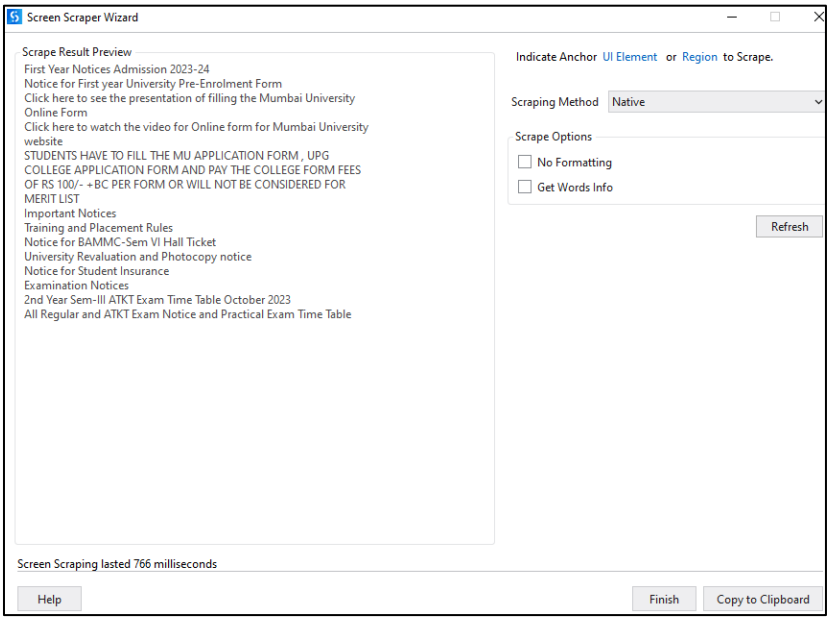




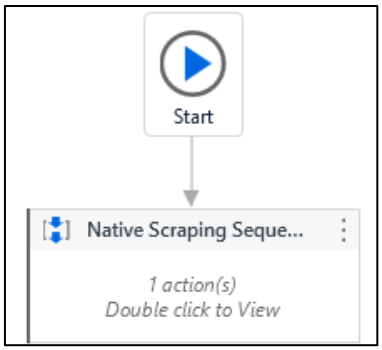
5. Run the file and it will display scrapped text in message box.

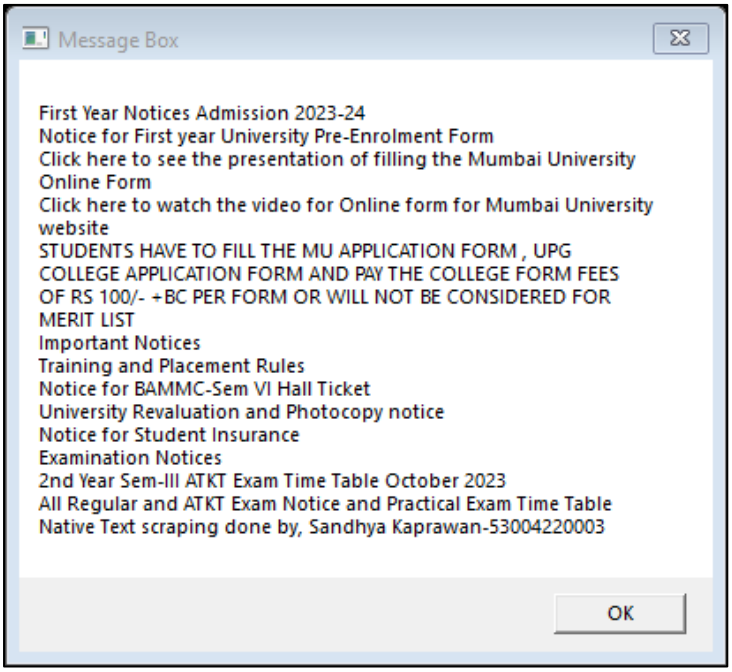


6. For Native scrapping, perform same steps as above just select native from drop down of scraping method and scrap text from website.

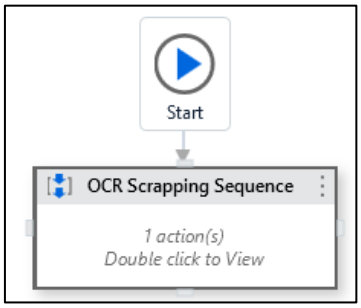


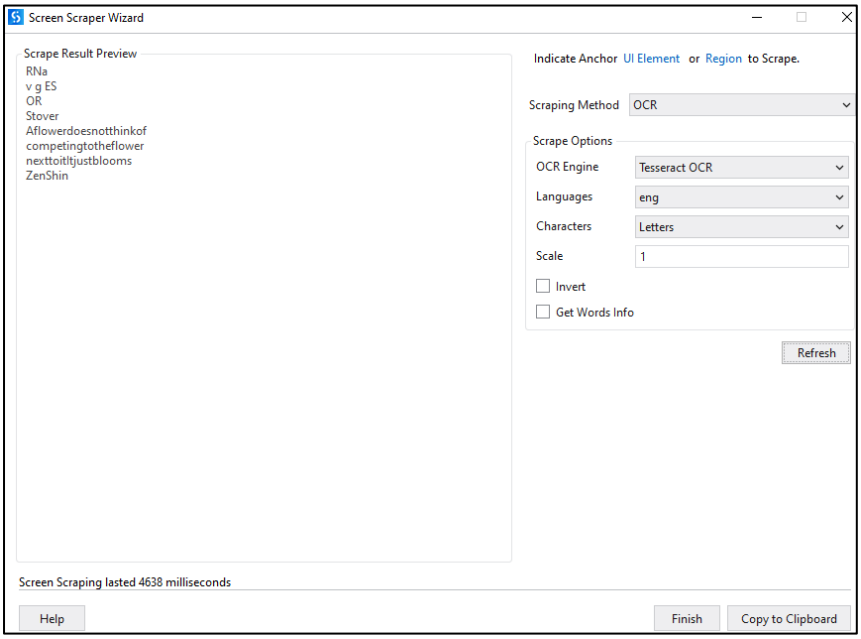
7. Run file and it will display text scrapped from website.



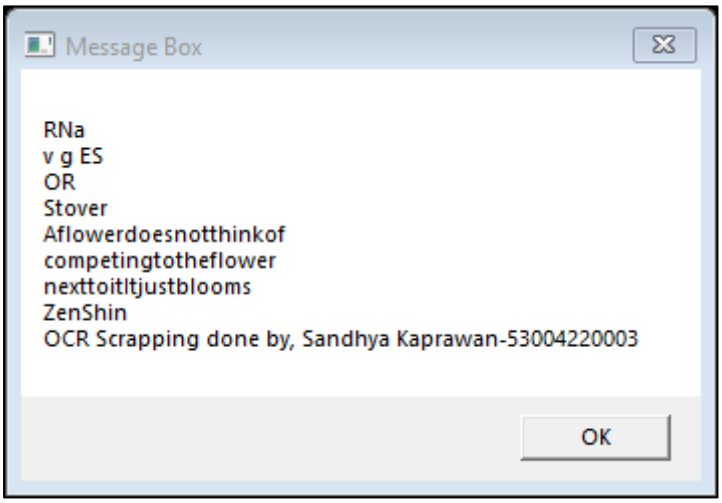


8. For OCR scrapping, use same steps just select OCR from drop down of scraping method and scrap text from image.





9. Run file and it will display scrapped text from below image.



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

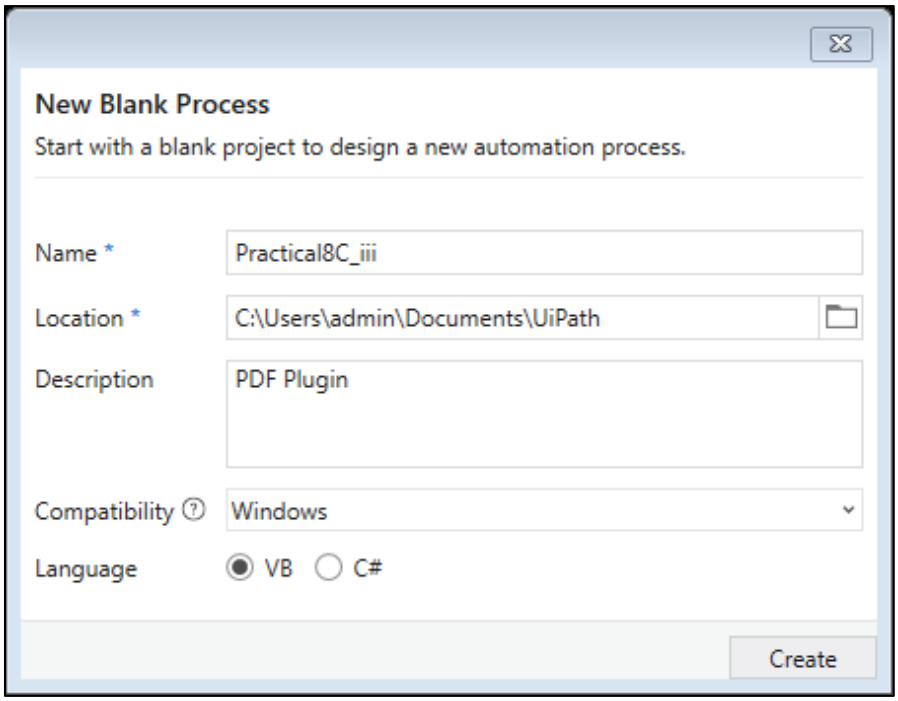
i. PDF Plugin

ii. Excel Plugin

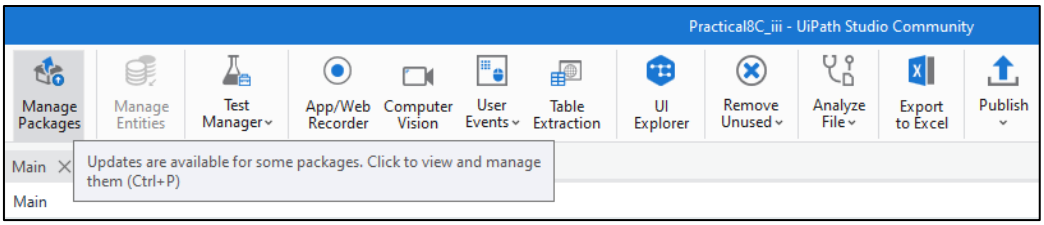
iii. Word Plugin

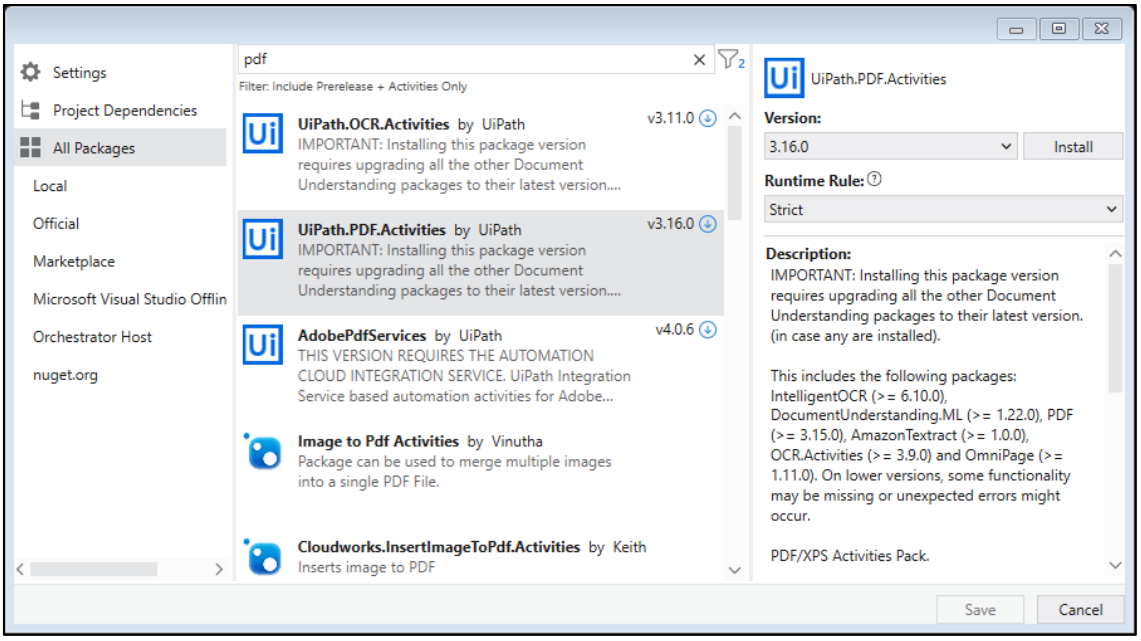
AIM: Use PDF, Excel and word plugins to automate process in UiPath.

1. For PDF plugin, Click on Process and create process Practical8C_iii, give description and click on create.

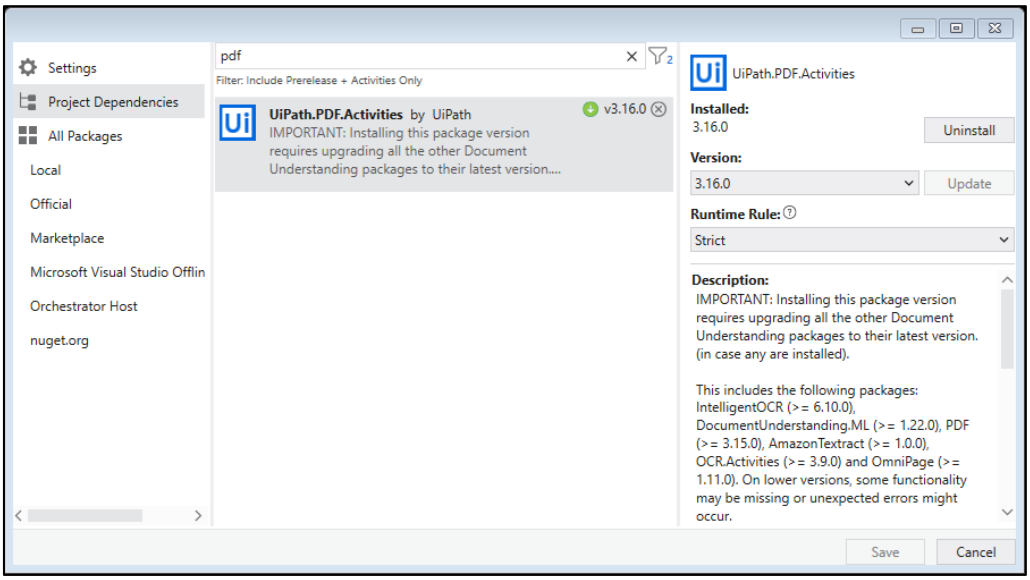


2. Click on Manage Packages, then click on All Packages and search for pdf.

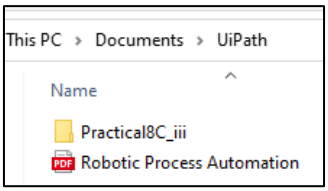


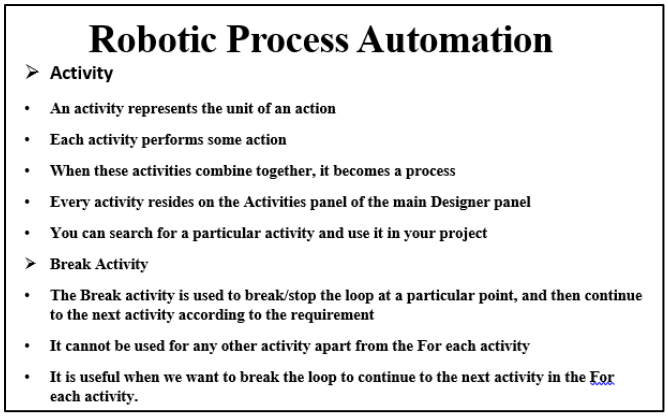


3. Install 'UiPath.PDF.Activities' package and click save. After installation it will be displayed in project dependencies.



4. Create one pdf file where project is located.

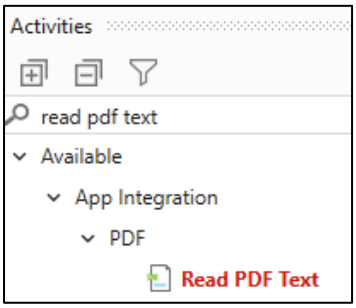




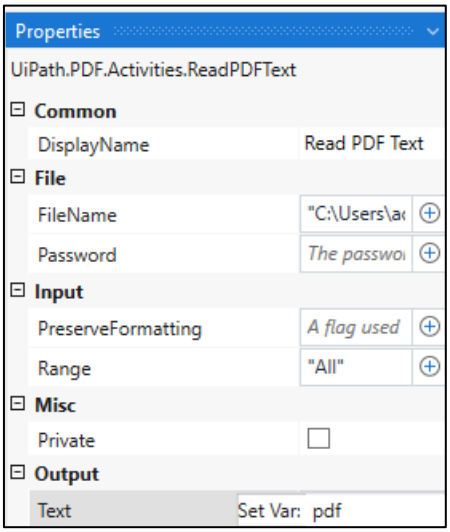
Robotic Process Automation

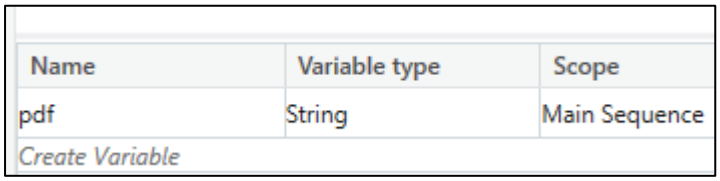
- **Activity**
  - An activity represents the unit of an action
  - Each activity performs some action
  - When these activities combine together, it becomes a process
  - Every activity resides on the Activities panel of the main Designer panel
  - You can search for a particular activity and use it in your project
- **Break Activity**
  - The Break activity is used to break/stop the loop at a particular point, and then continue to the next activity according to the requirement
  - It cannot be used for any other activity apart from the For each activity
  - It is useful when we want to break the loop to continue to the next activity in the For each activity.

5. Search for read pdf text in activities, drag and drop it in main sequence. Locate the file.



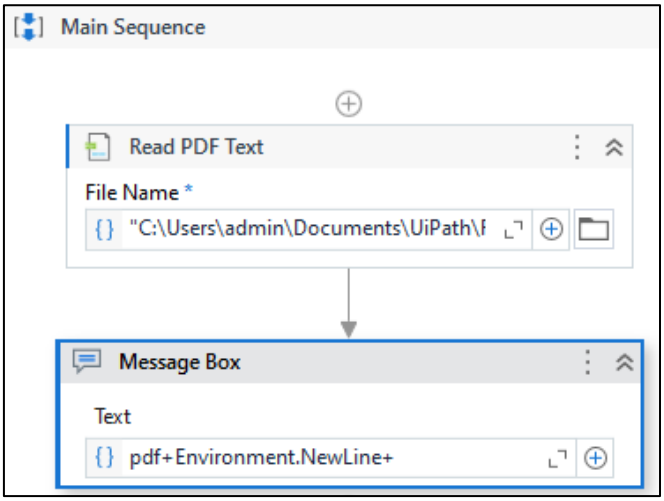
6. In properties, set output as pdf variable.

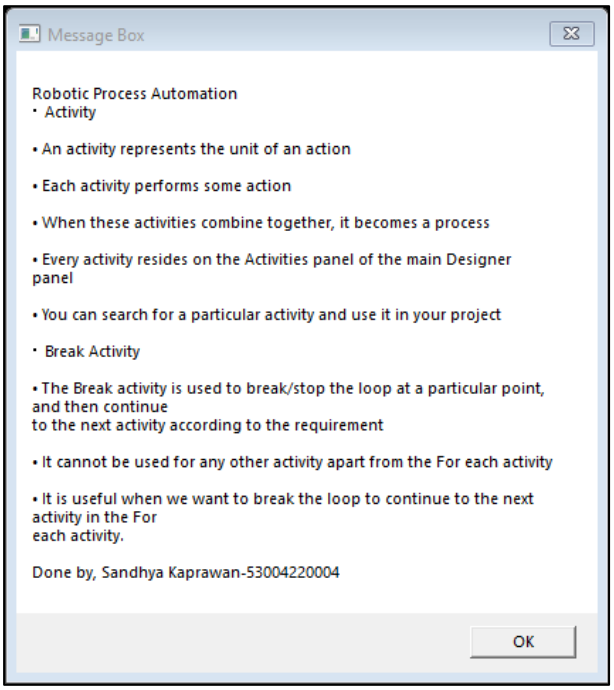




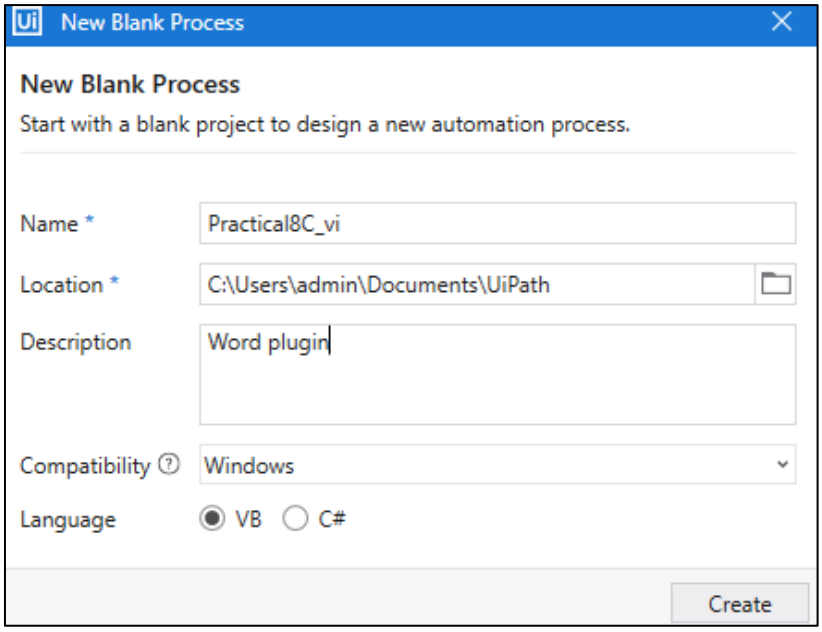
Name	Variable type	Scope
pdf	String	Main Sequence
Create Variable		

7. Drag message box below pdf activities. Display pdf variable in it and Click on run file or ctrl+F6.

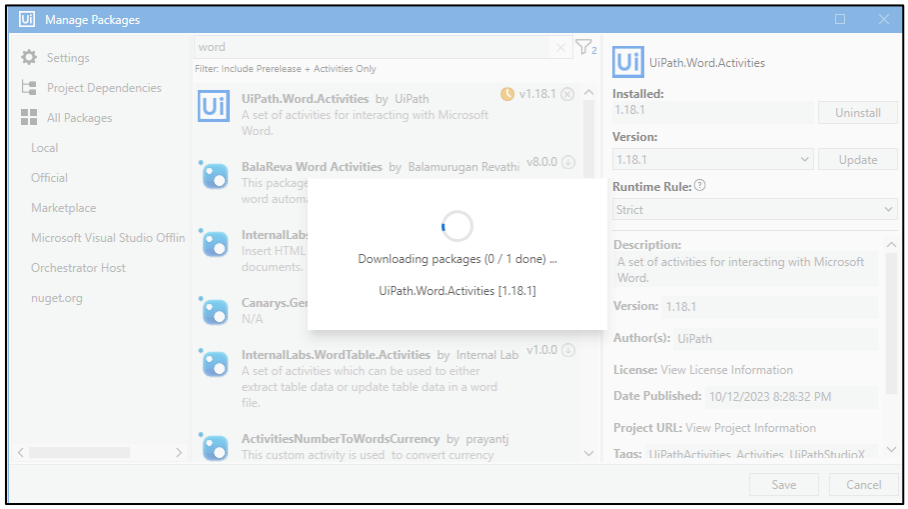




8. For Word plugin, Create process Practical8C_vi, give description and click on create.



9. Click on Manage Packages, then click on All Packages and search for word. Install 'UiPath.Word.Activities' package and click save. After installation it will be displayed in project dependencies.

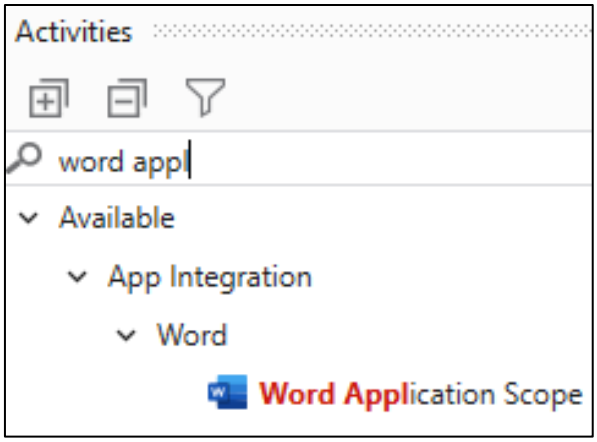


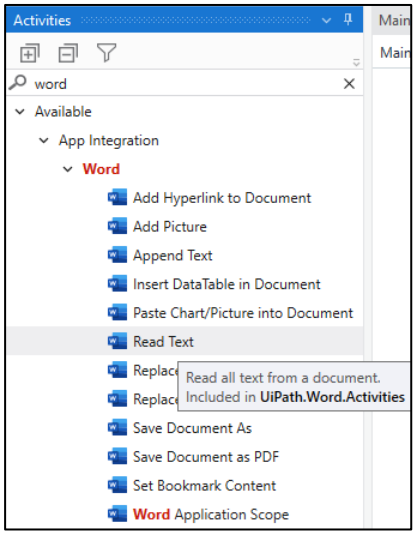
10. Create one word document with something written inside it and save it in project folder.

Robotic Process Automation

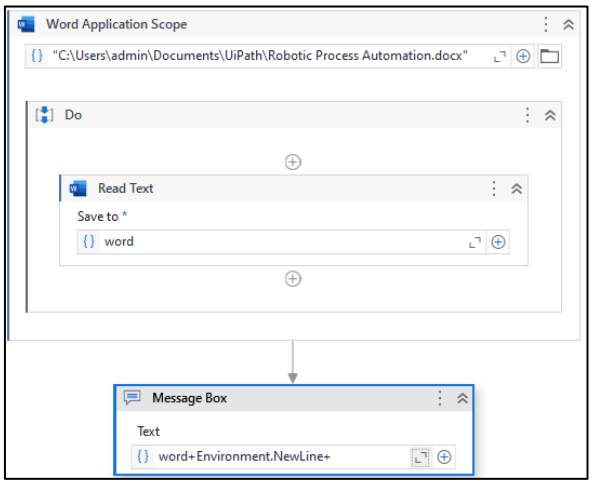
- **Automate Word plugin**
- **Read text from word document**
- **RPA stands for Robotic Process Automation, a software technology that uses software robots or artificial intelligence agents to perform repetitive tasks that humans usually do. For example, RPA can automate tasks like filling in forms, copying and pasting data, logging into applications, and generating reports.**

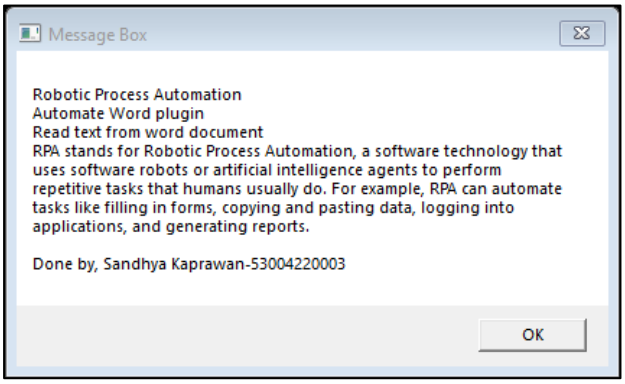
11. Drag and drop word application scope, then drag read text from word inside it.



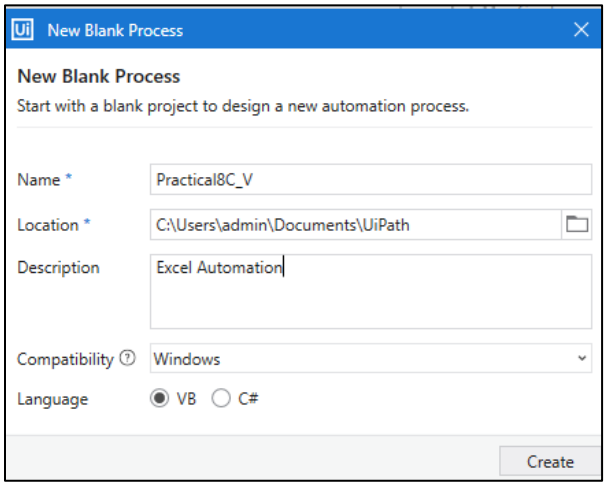


12. Browse for file path and create one variable named word in read text and display it using message box. Click on run file.

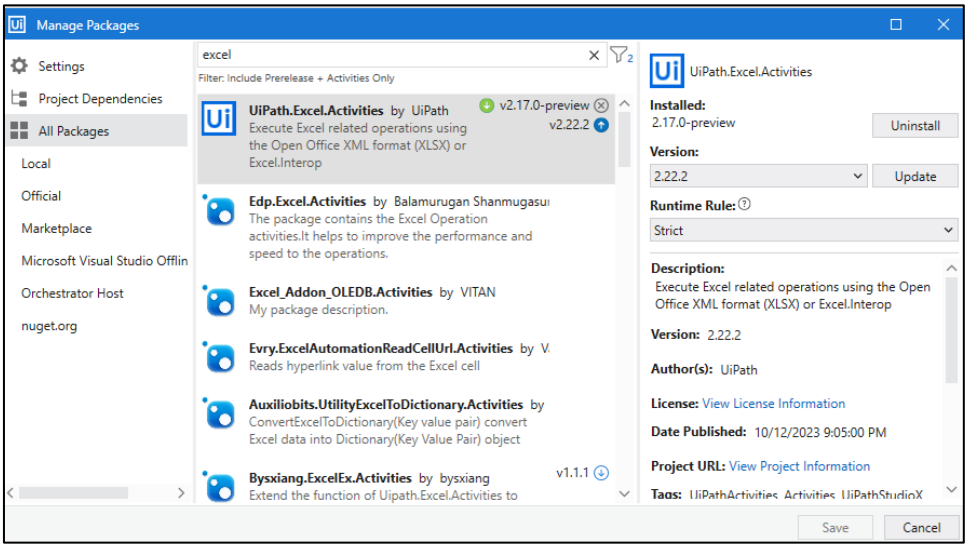




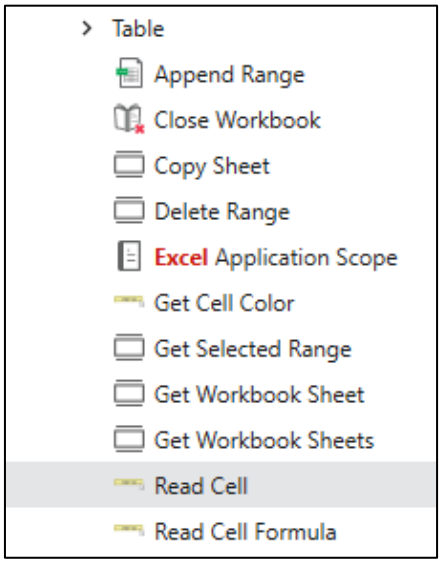
13. For Excel plugin, create process Practical8C_V, give description and click on create.

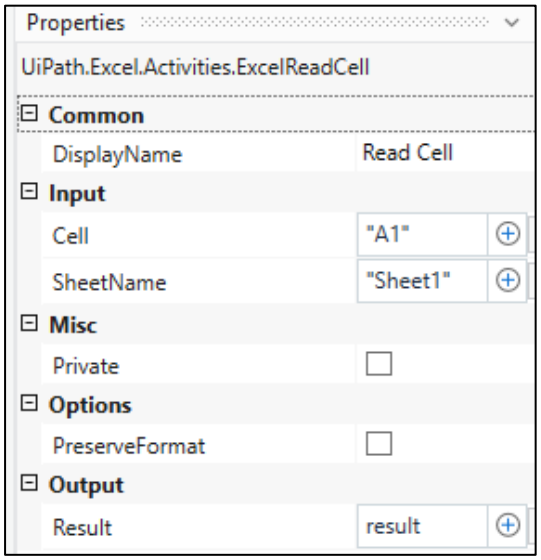


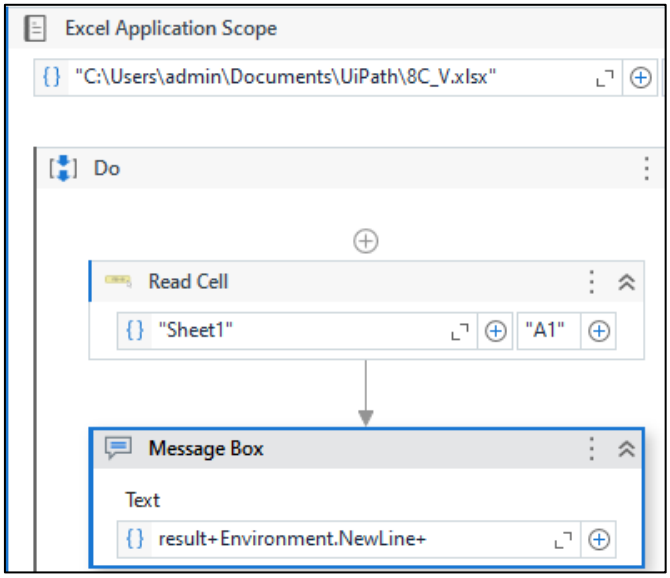
14. Click on Manage Packages, then click on All Packages and search for word. Install 'UiPath.Excel.Activities' package and click save. After installation it will be displayed in project dependencies. If already installed, just update it.

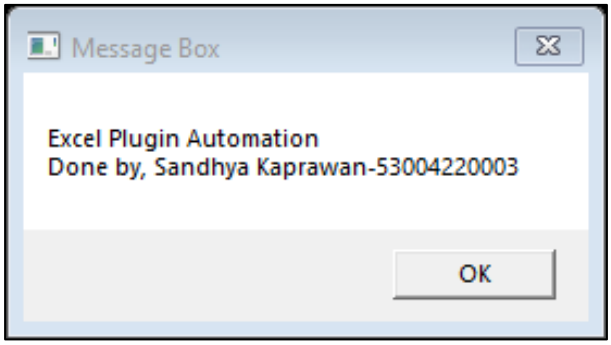


15. Check classic filter. Drag and drop excel application scope. Create one excel file and save it in project folder. Drag read cell set A1 as cell, Sheet Name as Sheet1and output variable as result. Now, drag and drop message box and display the output of read cell in it. Click on run file.







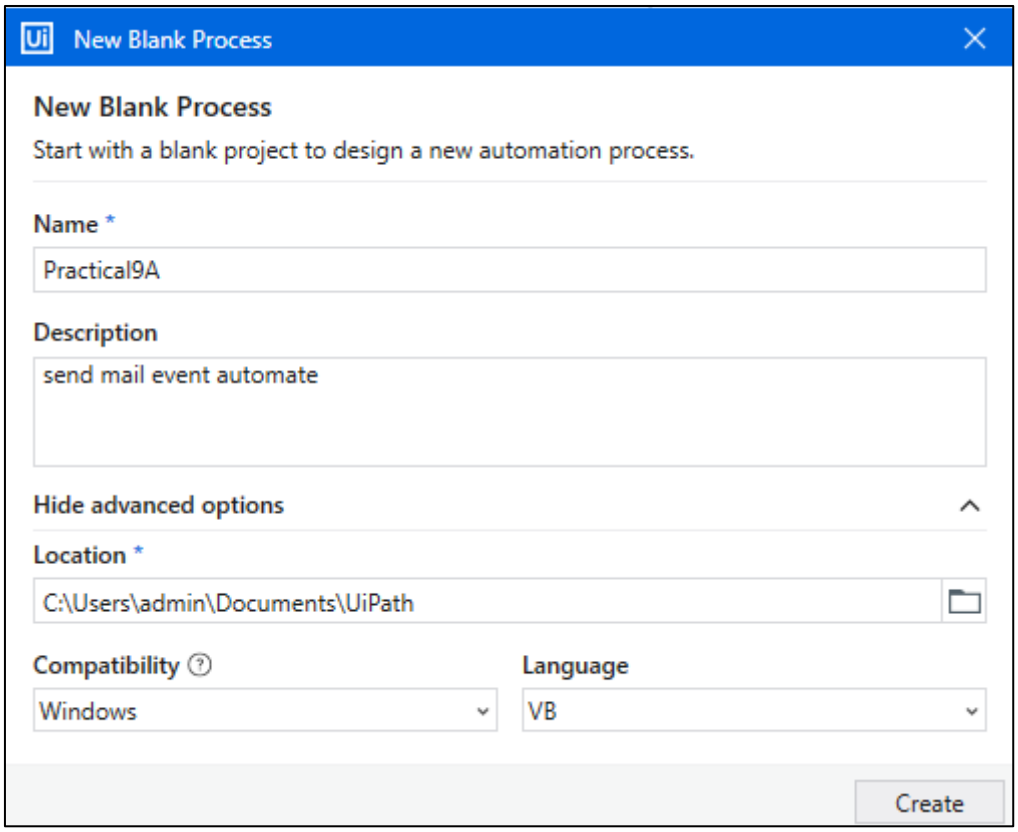


Practical 9

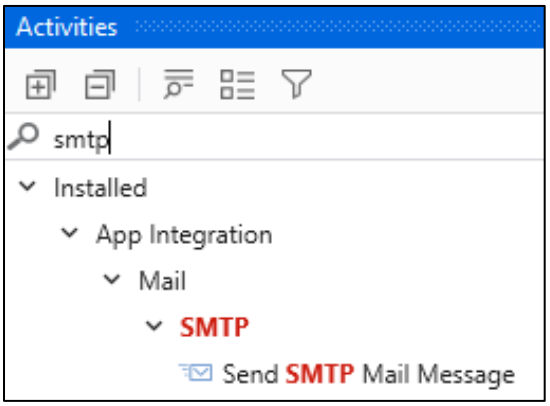
A. Automate the process of send mail event (on any email).

AIM: Use SMTP mail to send mail from Gmail account using app password.

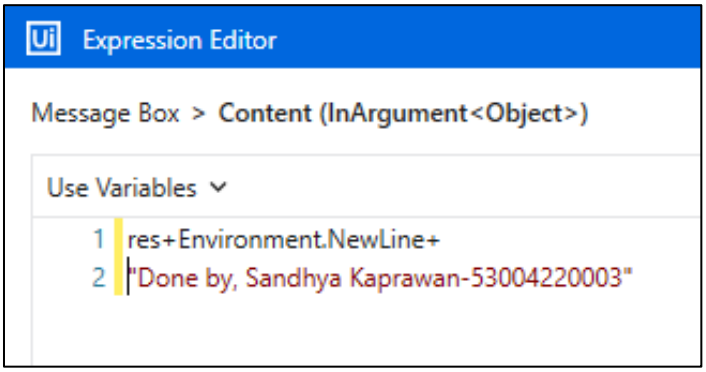
1. Click on Process and create process Practical9A, give description and click on create.

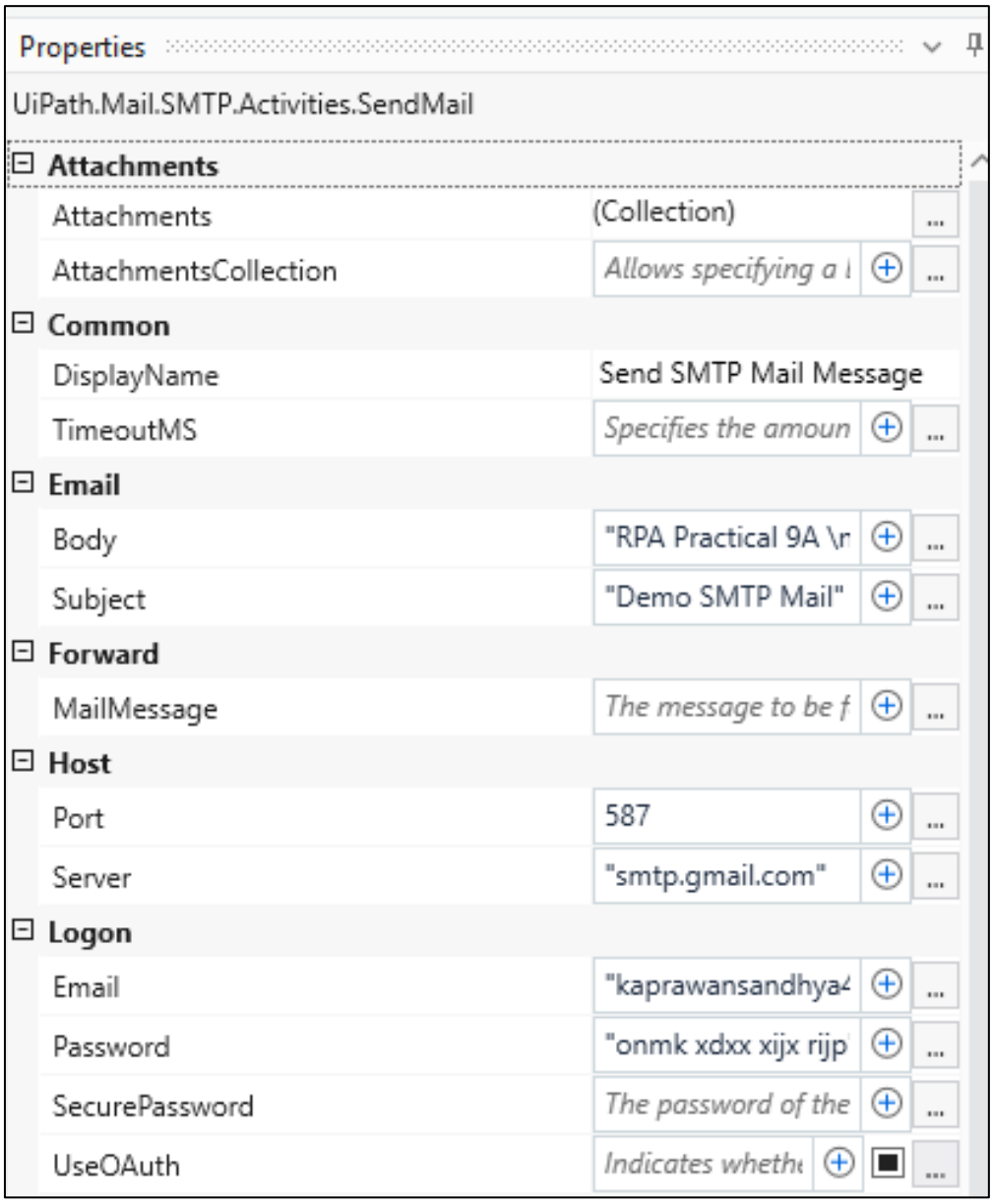


2. In Activities, search for smtp then drag and drop send SMPT mail Message in main sequence.

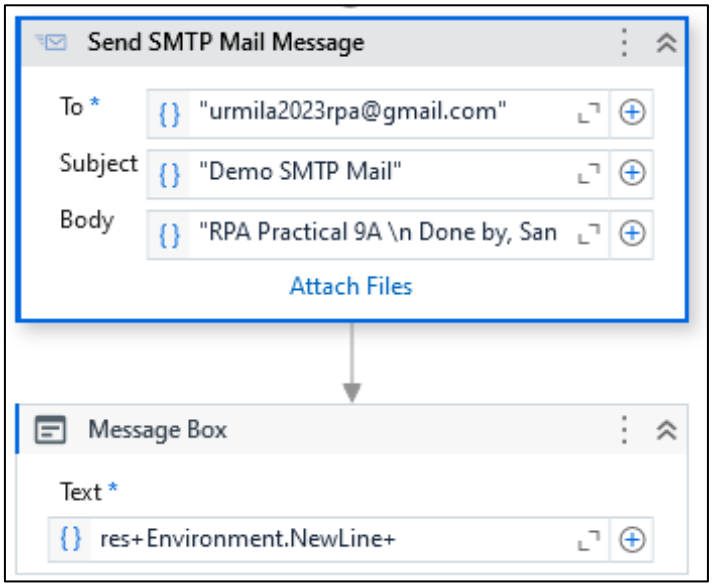


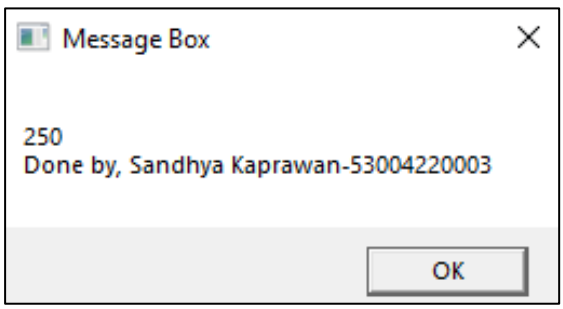
3. Write To, Subject and Body in SMTP activities. In properties panel, set host port number, Server name, login email ID and app password for it. Drag and drop message box and display success message or result of SMTP activity.





4. Click on run file.

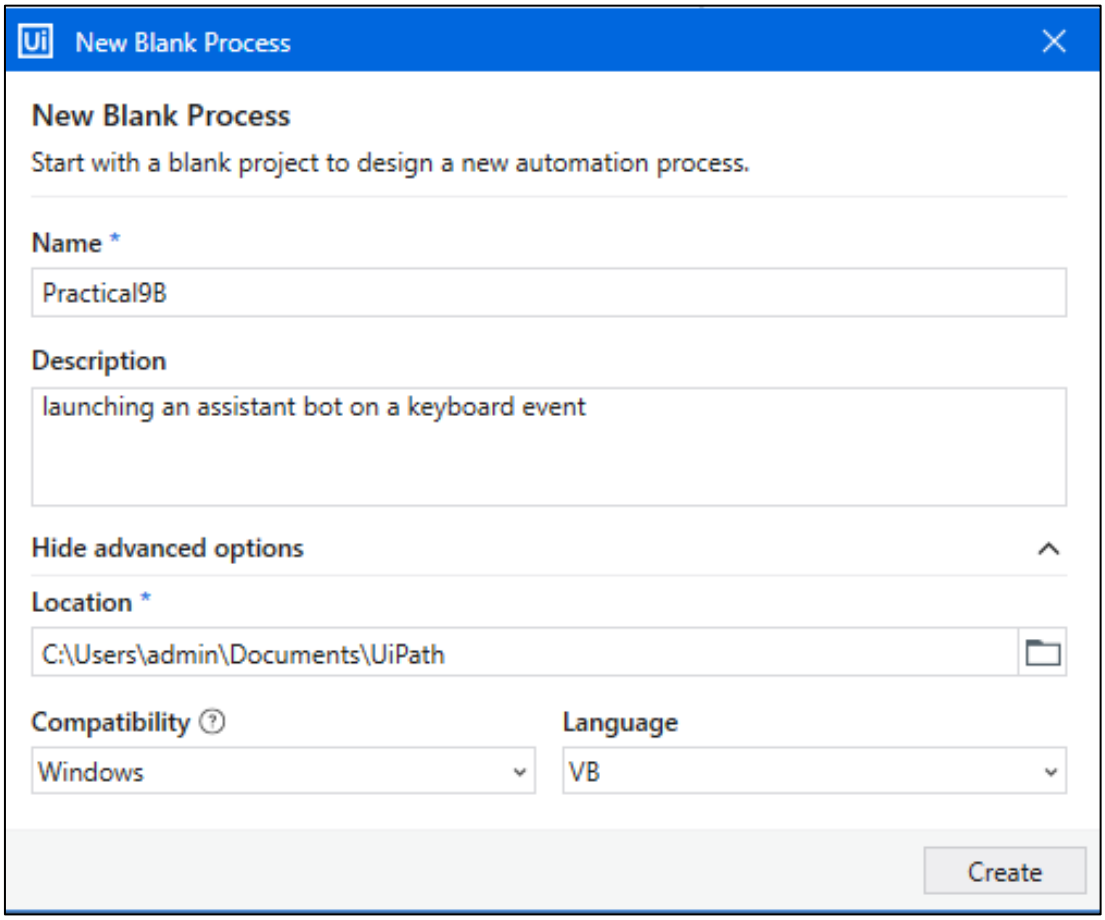




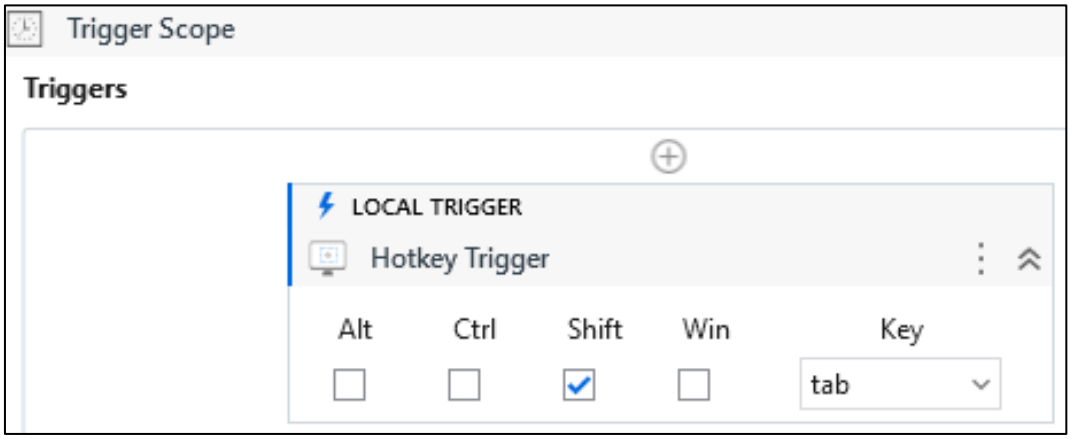
B. Automate the process of launching an assistant bot on a keyboard event.

AIM: Use recorder to record sequence for launching assistant bot for notepad file.

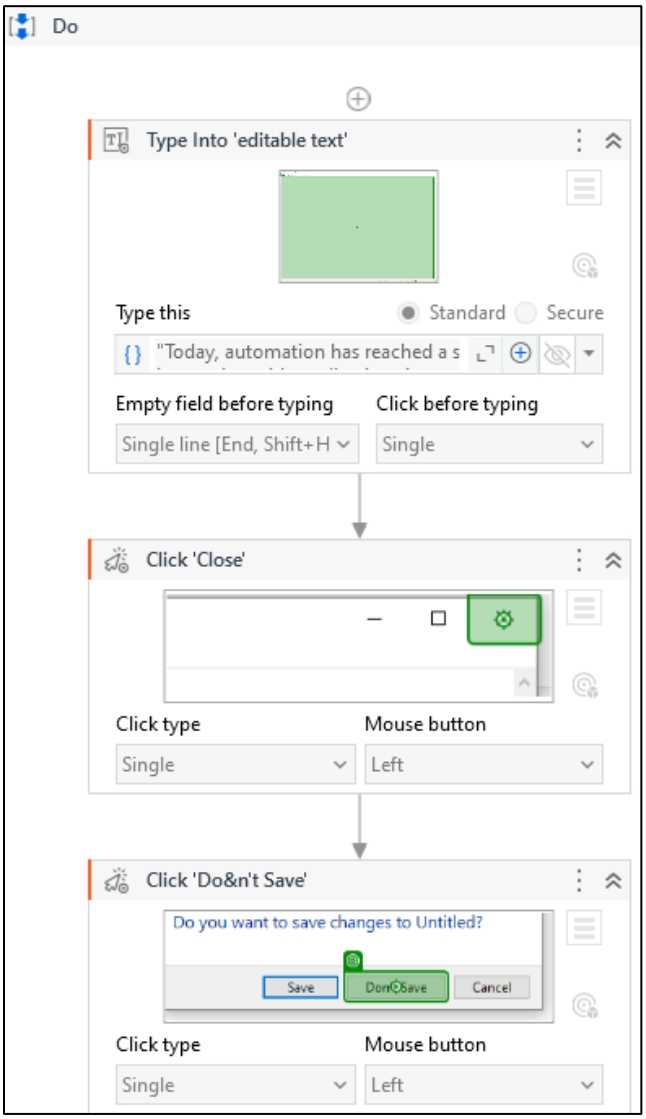
1. Click on Process and create process Practical9B, give description and click on create.

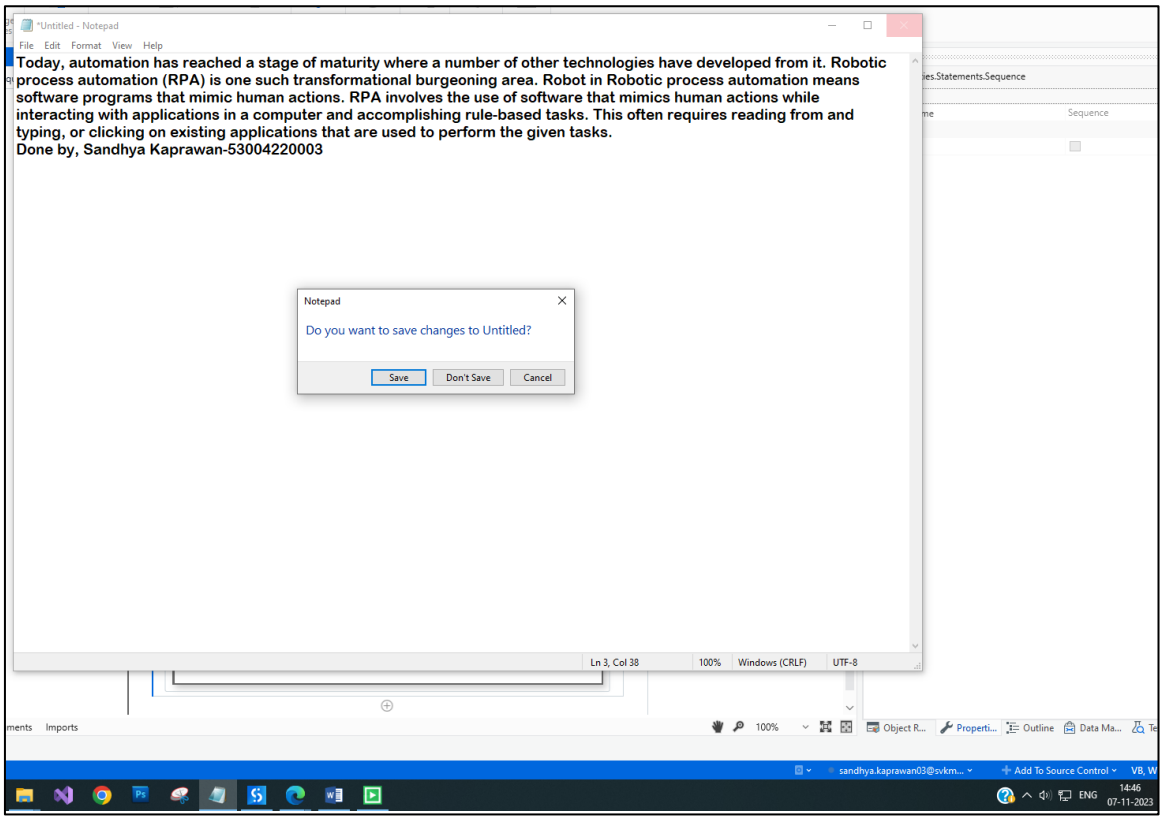


2. Drag and drop trigger scope, drag hotkey trigger and set shift+tab as key trigger. In do section, record sequence for writing one paragraph in notepad and close the application.



3. After all the recording click on run file.

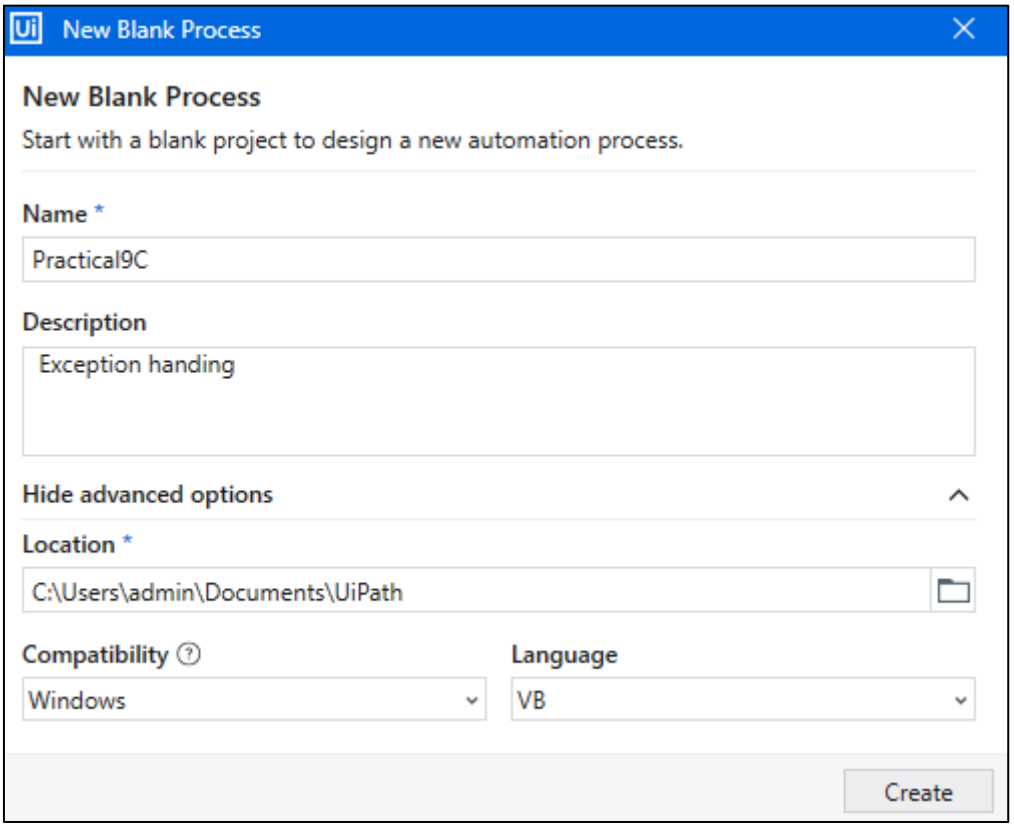

Do
Type Into 'editable text'
Type this
Standard
Secure
"Today, automation has reached a s
Empty field before typing
Click before typing
Single line [End, Shift+H
Single
Click 'Close'
Click type
Mouse button
Single
Left
Click 'Do&n't Save'
Do you want to save changes to Untitled?
Save
Don't Save
Cancel
Click type
Mouse button
Single
Left


*Untitled - Notepad
File Edit Format View Help
Today, automation has reached a stage of maturity where a number of other technologies have developed from it. Robotic process automation (RPA) is one such transformational burgeoning area. Robot in Robotic process automation means software programs that mimic human actions. RPA involves the use of software that mimics human actions while interacting with applications in a computer and accomplishing rule-based tasks. This often requires reading from and typing, or clicking on existing applications that are used to perform the given tasks.
Done by, Sandhya Kaprawan-53004220003
Notepad
Do you want to save changes to Untitled?
Save
Don't Save
Cancel
Ln 3, Col 38
100%
Windows (CRLF)
UTF-8

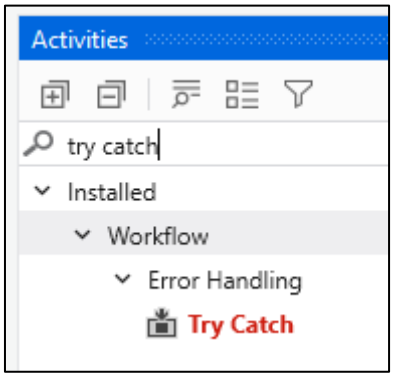
C. Demonstrate the Exception handing in UiPath.

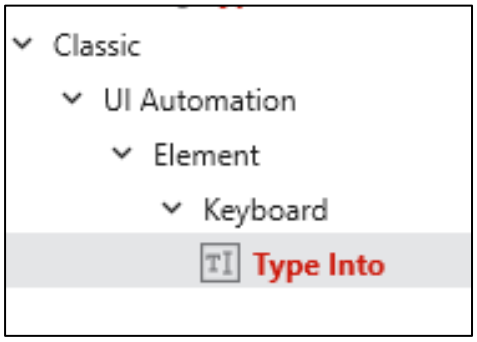
AIM: Use try catch activity to demonstrate exception handling for type into notepad file.

1. Click on Process and create process Practical9C, give description and click on create.

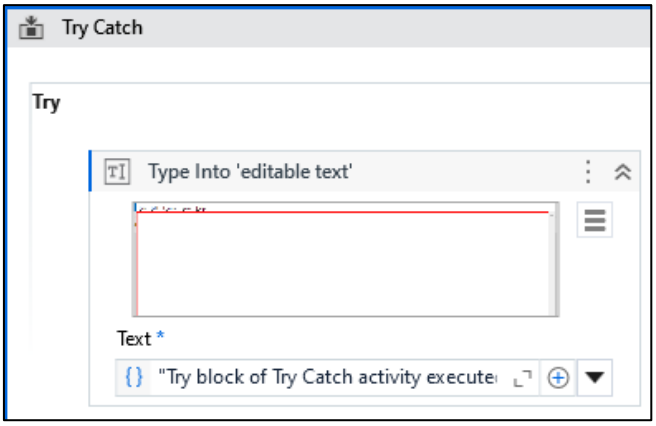


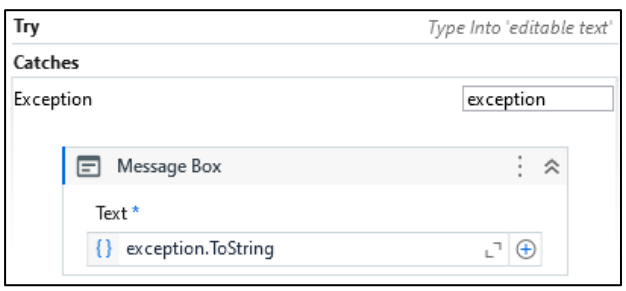
2. Drag and drop try catch block, drag type into block in try section and indicate notepad.

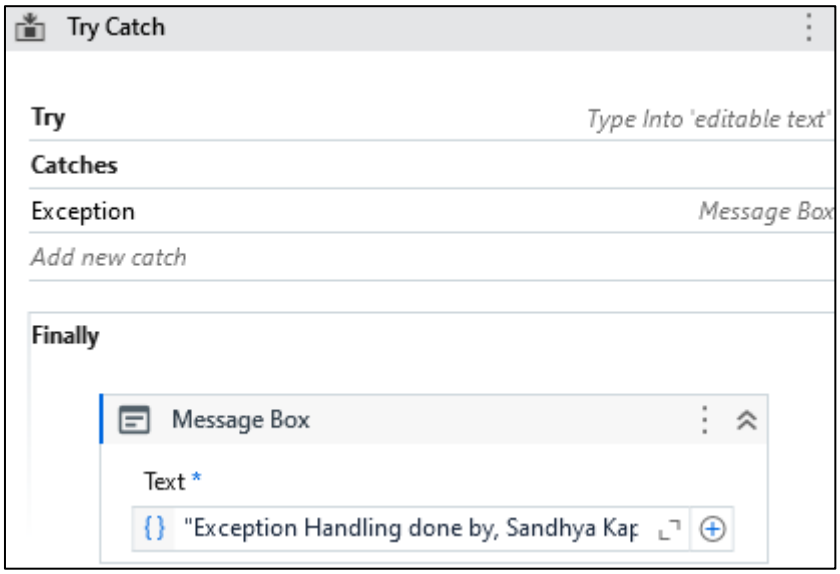


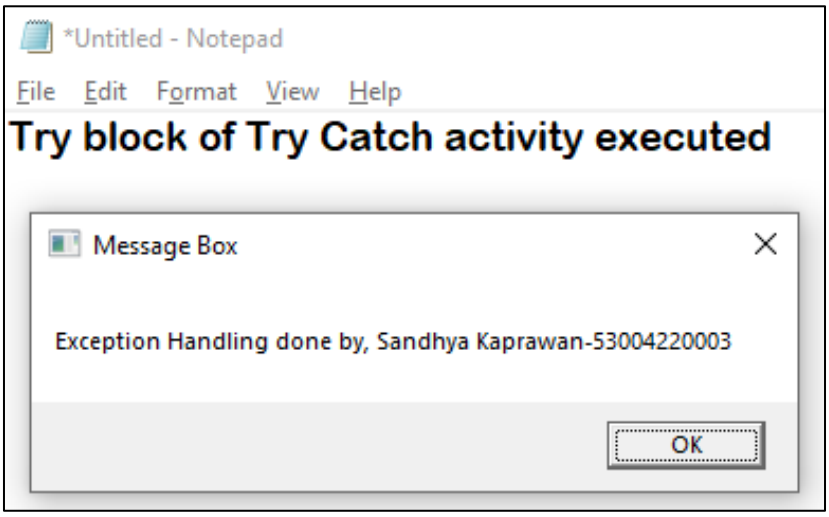


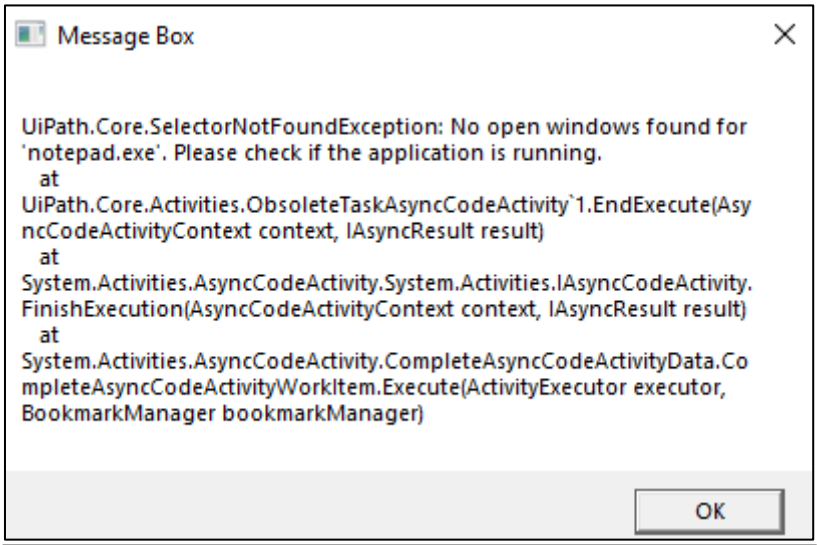
3. In catch block drag message box to display exception. Select System.exception. In finally block, drag message box to display message as Exception handling done. Click on run file.

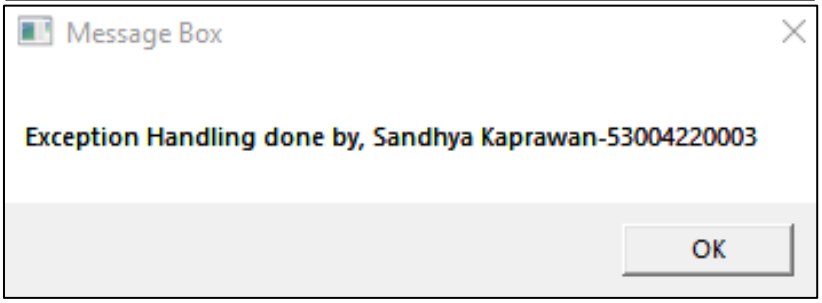





Try Catch
Try
Type Into 'editable text'
Catches
Exception
Message Box
Add new catch
Finally
Message Box
Text *
{} "Exception Handling done by, Sandhya Kap


*Untitled - Notepad
File Edit Format View Help
Try block of Try Catch activity executed
Message Box
Exception Handling done by, Sandhya Kaprawan-53004220003
OK

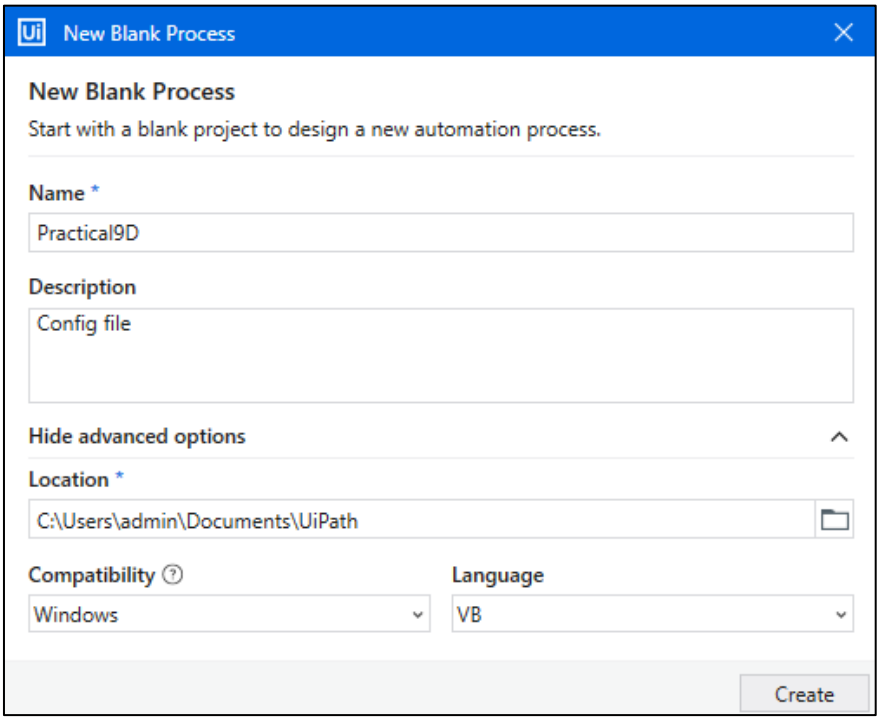

Message Box
UiPath.Core.SelectorNotFoundException: No open windows found for 'notepad.exe'. Please check if the application is running.
at UiPath.Core.Activities.ObsoleteTaskAsyncCodeActivity`1.EndExecute(AsyncCodeActivityContext context, IAsyncResult result)
at System.Activities.AsyncCodeActivity.System.Activities.IAsyncCodeActivity.FinishExecution(AsyncCodeActivityContext context, IAsyncResult result)
at System.Activities.AsyncCodeActivity.CompleteAsyncCodeActivityData.CompleteAsyncCodeActivityWorkItem.Execute(ActivityExecutor executor, BookmarkManager bookmarkManager)
OK


Message Box
Exception Handling done by, Sandhya Kaprawan-53004220003
OK

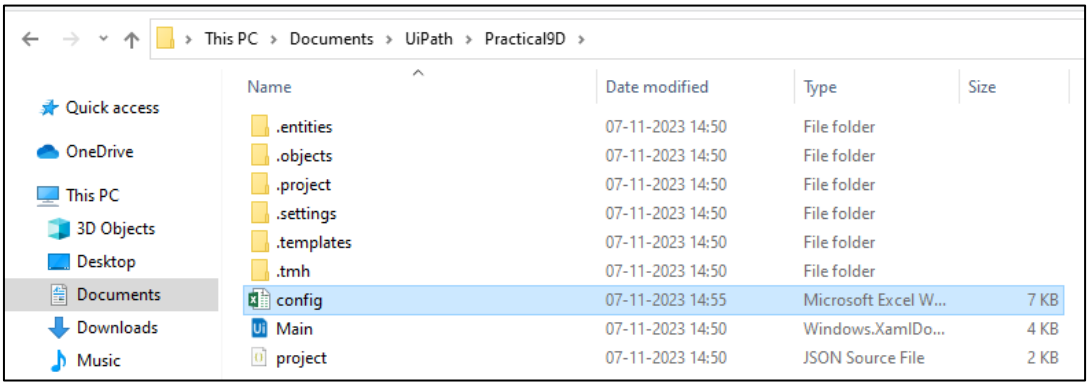
D. Demonstrate the use of config files in UiPath.

AIM: Use config.xlsx file to store username and password and retrieve it.

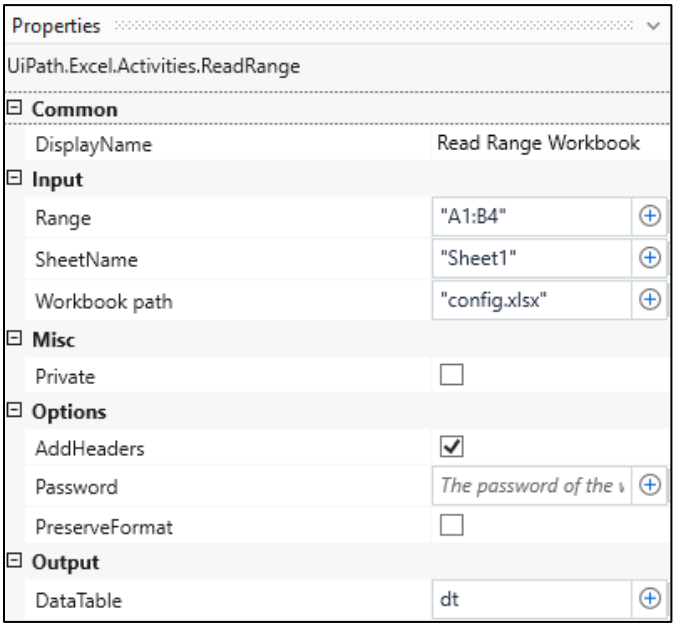
1. Click on Process and create process Practical9D, give description and click on create.



2. Create config.xlsx file and store username and password in it and save it in project folder.



3. Drag read range from activities to main sequence. In properties, select range, give path and set sheet name. Create one variable ‘dt’ as output Data Table.



4. Drag output data table, give ‘dt’ as input and create result as output variable. Display result in message box. Click on Run file.