Experiment-1

Date: 20/01/25

UiPath installation steps

Installing UiPath involves several steps. Here's a detailed guide on how to install UiPath Studio:

1. **Download UiPath Studio**

- Go to the UiPath website (https://www.uipath.com/start-trial).
- Click on "Start Free" or "Download Community Edition" to download UiPath Studio.

2. **Run the Installer**

- Once the download is complete, run the installer by double-clicking on the downloaded file (e.g., UiPathStudioSetup.exe).

3. **Select Installation Type**

- Choose the installation type:
- **Enterprise** (for licensed users with an Enterprise plan)
- **Community** (for free Community Edition)
- Click "Continue" or "Next" to proceed.

4. **Accept License Agreement**

- Read and accept the license agreement.
- Click "Next" to continue.

5. **Choose Installation Folder**

- Select the folder where you want to install UiPath Studio.

- Update or install any required packages for your projects.
- That's it! You've successfully installed UiPath Studio. You can now start creating, testing, and executing automation projects using UiPath

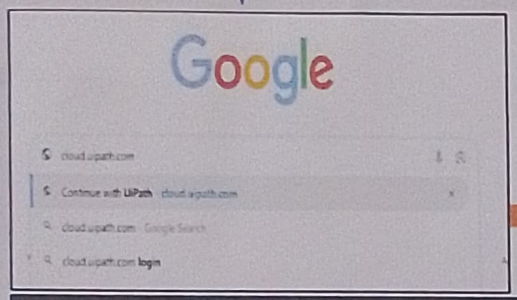
SOURCE CODE

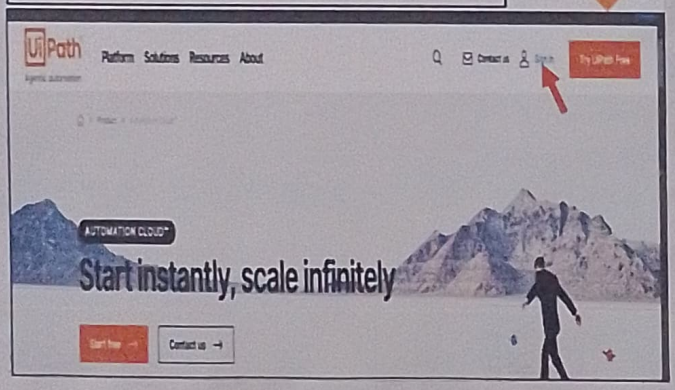
UiPath Installation steps

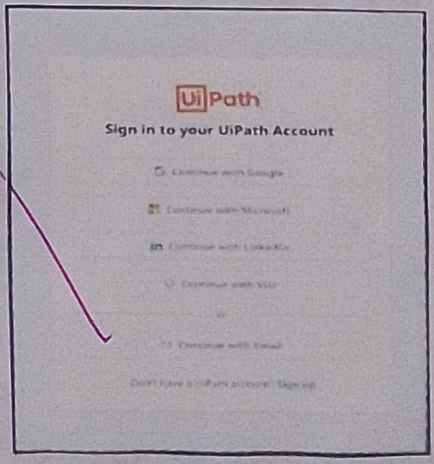
STEP 1 : SIGN UP OR LOG IN

Open your web browser and navigate to cloud.uipath.com.

1) If you already have an account:
   - > click on Log In and enter your credentials.
2) If you don't have an account:
   - > click on Sign Up.
   - > Complete the registration process by filling out the required details.
   - > verify your email address, if prompted.

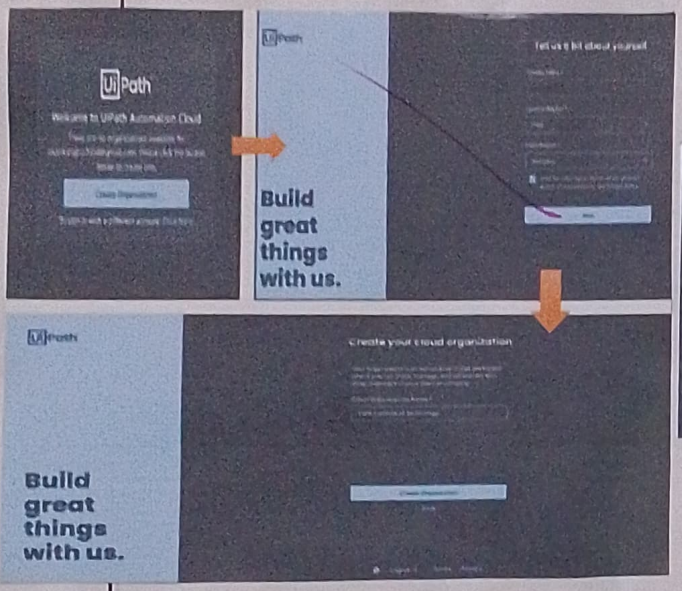


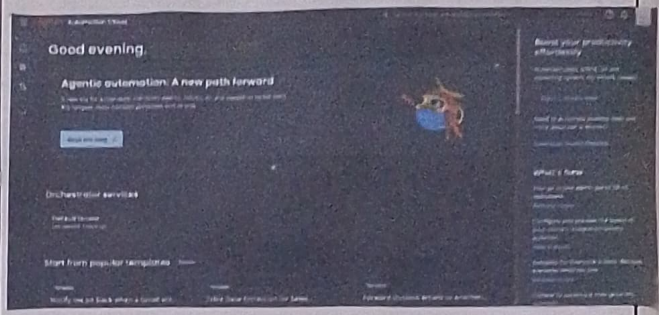




STEP2: ACCESS THE AUTOMATION CLOUD

1. After logging in, you will land on the UiPath Automation Cloud dashboard.
2. If this is your first time:
   - > Fill the basic information
   - > Create an organization if prompted (give it a name of your choice)





Once logged in, the dashboard will automatically open, giving you access to various options like Studio, Orchestrator and more.

STEP3: NAVIGATE TO THE STUDIO OPTION

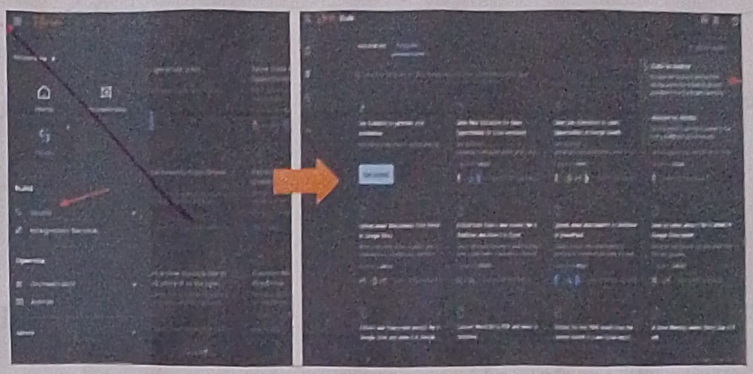
1) On the dashboard, click on the Studio option located in the left-side menu (represented by a dot).
2) After clicking on Studio, you'll be taken to the Studio dashboard.
3) Click on Install locally.
4) Before the download starts, an option will appear prompting you to select Studio for Desktop.
5) Click on the Studio for Desktop option, and then the .msi file will begin downloading.

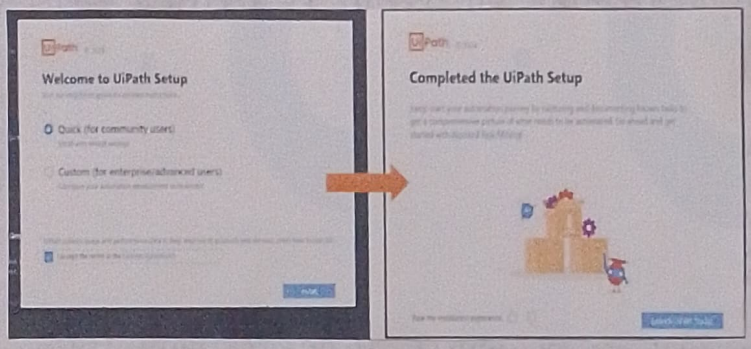
STEP4: Install UIPATH STUDIO

1. After the .msi file finishes downloading, locate the file in your Downloads folder.
2. Double-click on the .msi file to start the installation process.
3. A setup window will open, displaying "Welcome to UiPath Setup".
4. Choose the Quick option (recommended for Community users)

OUTPUT

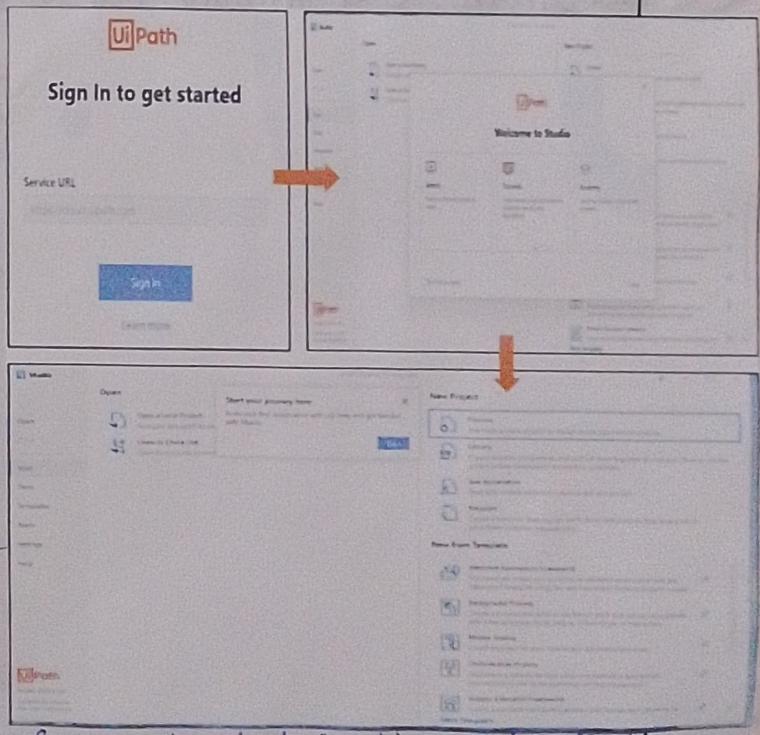
5. Accept the Terms and Conditions by checking the box.
6. Click on Install to begin the installation process.
7. Once the installation is completed, the UiPath Setup window will show a confirmation message.
8. In this window, click on Launch UiPath to open UiPath Studio for the first time.





STEP 5: SIGN IN TO UIPATH STUDIO

1. After clicking Launch UiPath, UiPath Studio will open.
2. You'll be prompted to sign in to your UiPath account.
3. Enter your login credentials (the same ones used for cloud.uipath.com)
4. Once signed in, UiPath Studio will automatically connect to your account and retrieve the license details.
5. After signing in, you will be welcomed directly to the UiPath Studio interface, ready for you to start creating automations.



VIVA QUESTIONS

1. Define RPA?

Ans. Robotic Process Automation (RPA) is a technology that automates repetitive, rule-based tasks using software bots.

2. Write any Five Applications of RPA?

Ans.
- Data entry and migration
- Invoice processing
- Customer service automation
- HR onboarding
- Compliance and reporting.

3. Difference between RPA & Automation?

Ans. RPA mimics human actions to perform tasks, while automation involves scripting or programming to execute predefined workflows

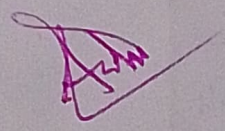
4. Differentiate between Automation Life Cycle & SDLC?

Ans. Automation Life cycle focuses on developing and deploying automated process, whereas SDLC (Software Development Life Cycle) is a structured process for software development.

5. Differentiate between UiPath and Automation Anywhere?

Ans. UiPath : User-friendly, but for beginners, strong community support.

Automation Anywhere : Enterprise-focused, advanced cognitive automation, cloud-based options.



Experiment-2

Date: 27/01/25

2. Perform automation for variables and data types

PROCEDURE

In UiPath, you can perform automation tasks involving variables and data types using various activities within workflows. Here's how you can work with variables and data types in UiPath:

1. Create Variables

- In UiPath Studio, you can create variables by going to the "Variables" panel in the bottom left corner.
- Click on the "Create Variable" button and define the variable name, data type, and default value if needed.
- UiPath supports various data types such as String, Integer, Double, Boolean, Array, DataTable, etc.

2. Assign Values to Variables

Use the "Assign" activity to assign values to variables.

Drag and drop the "Assign" activity onto the workflow canvas.

In the "To" field, select the variable you want to assign a value.

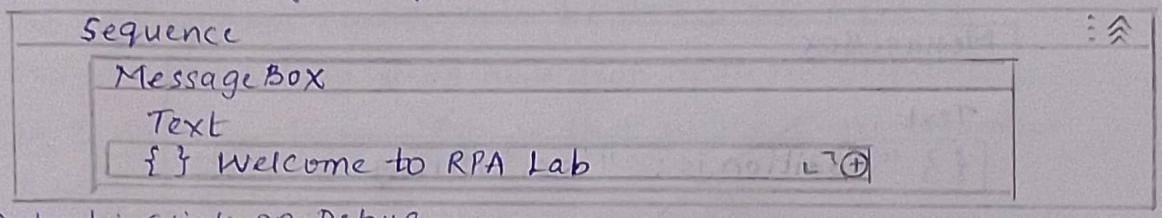
In the "Value" field, specify the value to be assigned, which can be a constant value or another variable.

By following these steps, you can effectively work with variables and data types in UiPath to create robust and efficient automation workflows

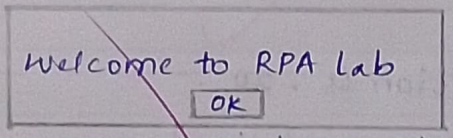
SOURCE CODE

String Datatype

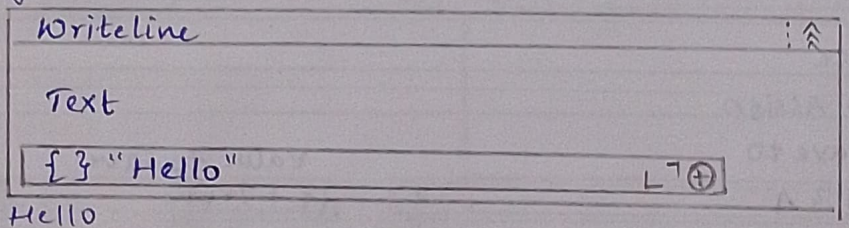
- After creating a process from the leftpane drag sequence panel to the main Panel.
- Click on ⊕ on the searchBar, search for message box and in the textbox write any menage.



Output: Click on Debug



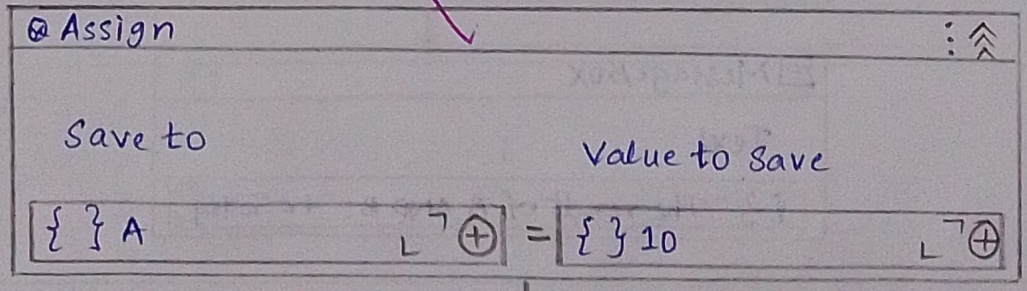
- Now writeline type on searchBar by clicking on ⊕ and type a message on textbar.

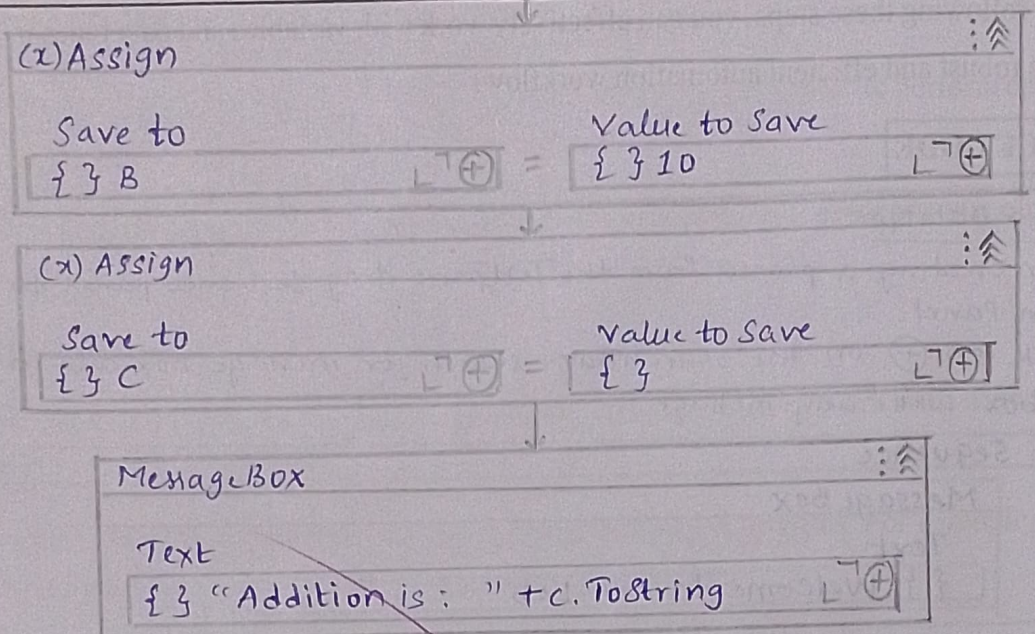


Output: Hello

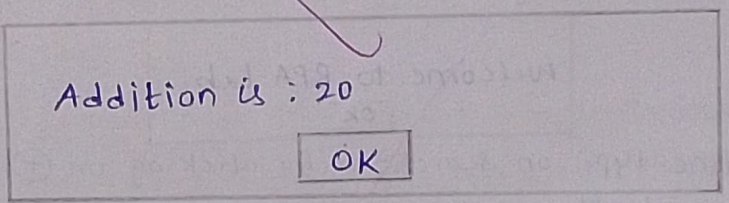
Addition of two numbers

- Click on ⊕ and search for Assign and drag it to the sequence panel.
- Go to variable which in that change type from "String" to "int32".
- Create a menage box by clicking on ⊕ symbol and under space provided given below text.

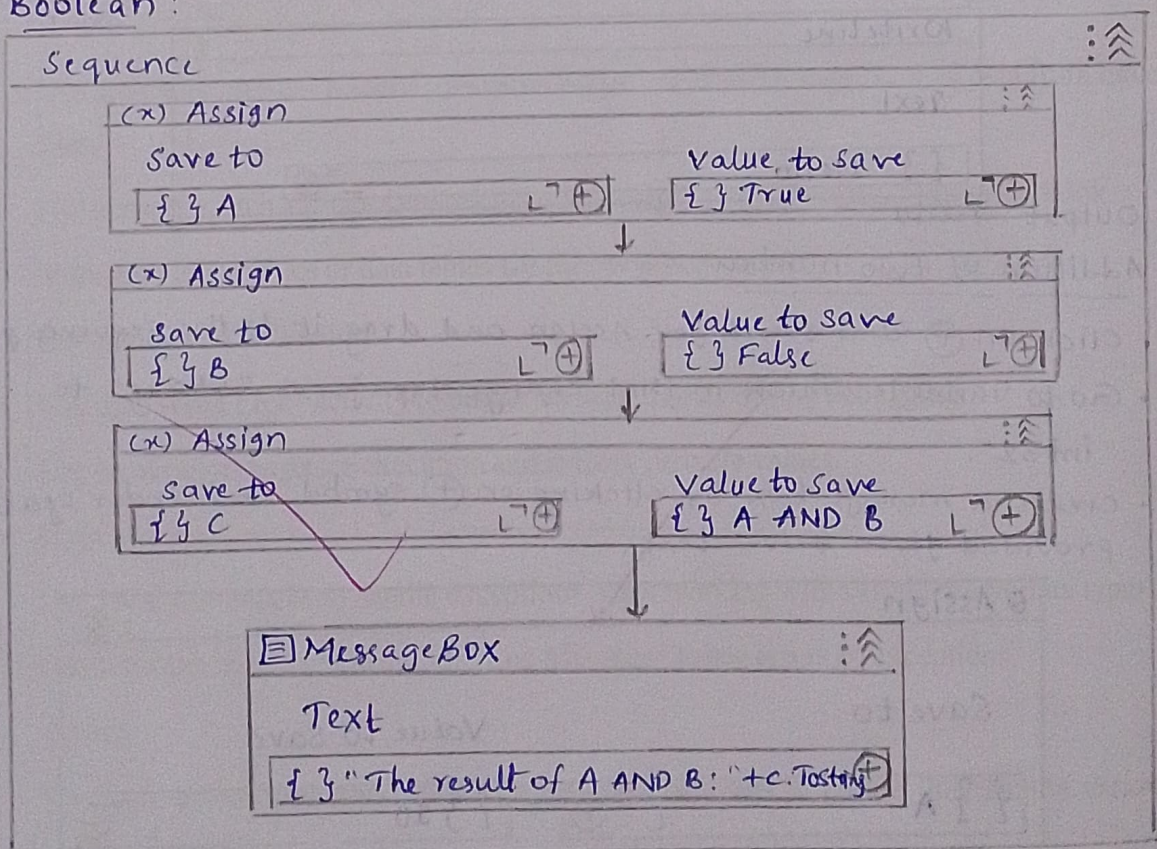




Output:

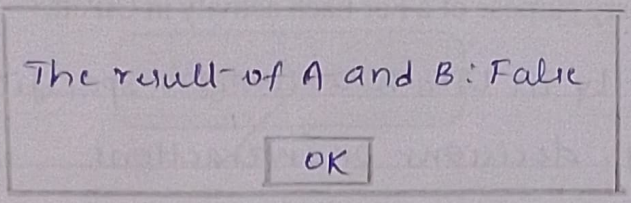


Boolean:



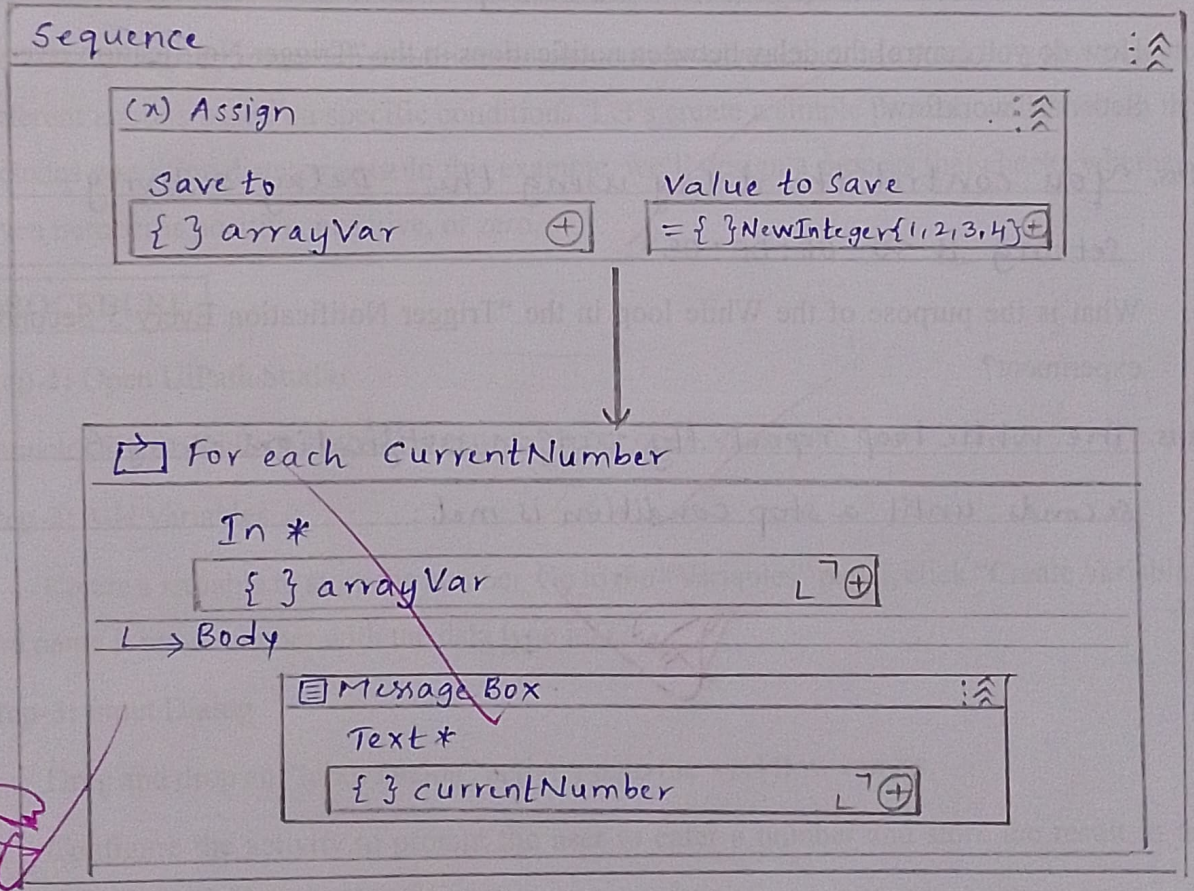
OUTPUT

Output:



Array:

- Create a new sequence
- Drag and drop Assign
- Set the variable type to Array of [T] > Select Int32.
- Take for Each loop drag and drop in to the sequence.
- In Body take Message Box in that write CurrentNumber.
- Debug the file.



OUTPUT : 1
2
3
4

VIVA QUESTIONS

1. What is the primary purpose of a For Each activity in UiPath?

Ans. Each activity in UiPath automates specific tasks like data entry, decisions or interactions.

2. What variable type is used to store an array in the "Iterating Over an Array" experiment?

Ans. Array<T>, where T represents the datatype (ex: String, Integer, Object)

3. In the factorial calculation experiment, what activity is used to get user input?

Ans. The "Input Dialog" activity is used to get user input in the Fractional Calculation experiment.

4. How do you control the delay between notifications in the "Trigger Notification Every 5 Seconds" workflow?

Ans. You control the delay using the "Delay activity, setting it to 00:00:05

5. What is the purpose of the While loop in the "Trigger Notification Every 5 Seconds" experiment?

Ans. The while loop repeatedly triggers notifications every 5 seconds until a stop condition is met.

Experiment-3

Date: 3/2/25

3. Design a process for control flow: Conditional Statements.

Designing a process with conditional statements involves creating a workflow that executes different actions based on specific conditions. Let's create a simple process using UiPath that includes conditional statements. In this example, we'll design a process that checks whether a given number is positive, negative, or zero.

PROCEDURE

Step-1: Open UiPath Studio

Launch UiPath Studio and create a new project or open an existing one.

Step-2: Add Variables

Create a variable to store the number. Go to the "Variables" panel, click "Create Variable," and name it input number with the data type Int32.

Step-3: Input Dialog

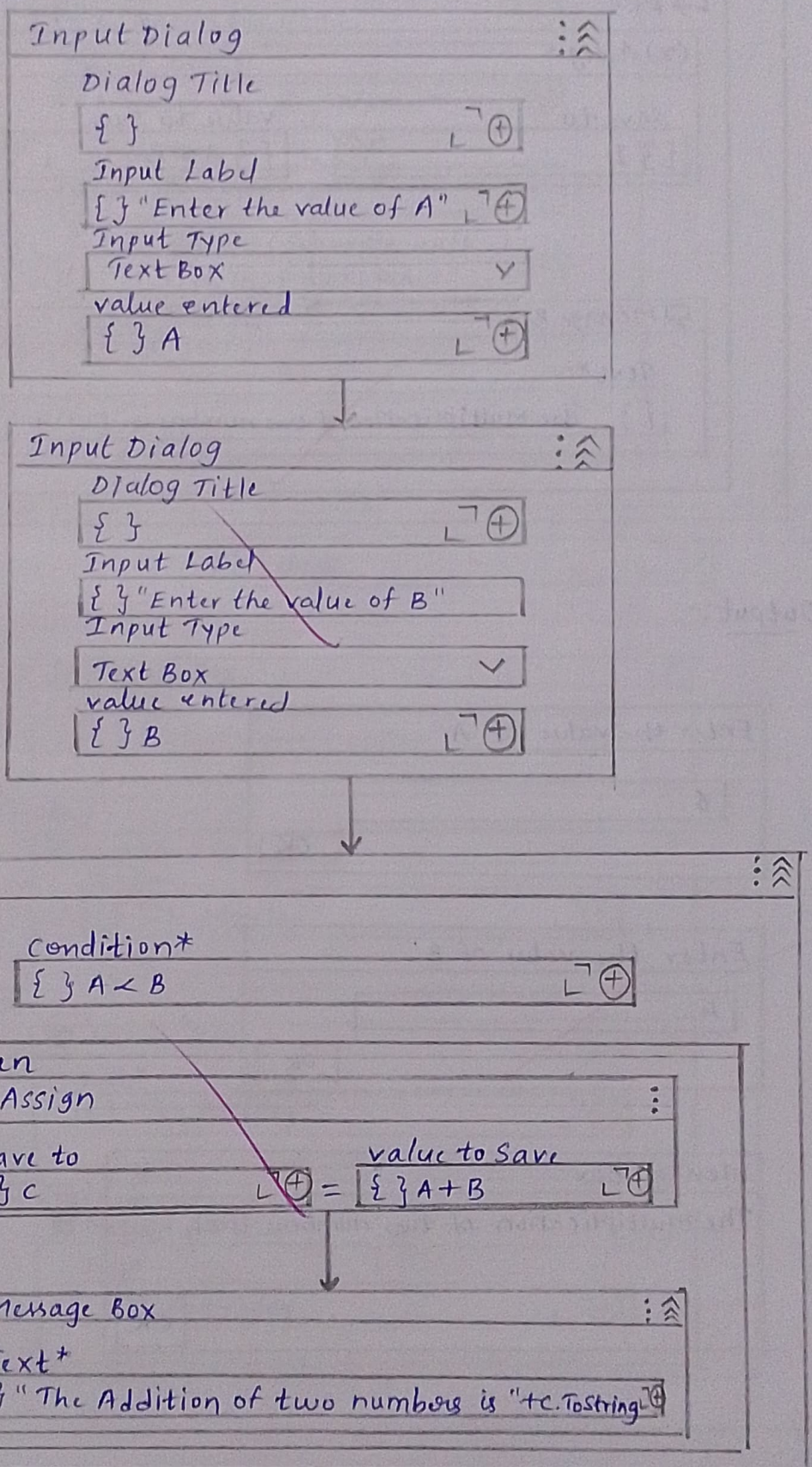
Drag and drop an "Input Dialog" activity onto the workflow canvas.

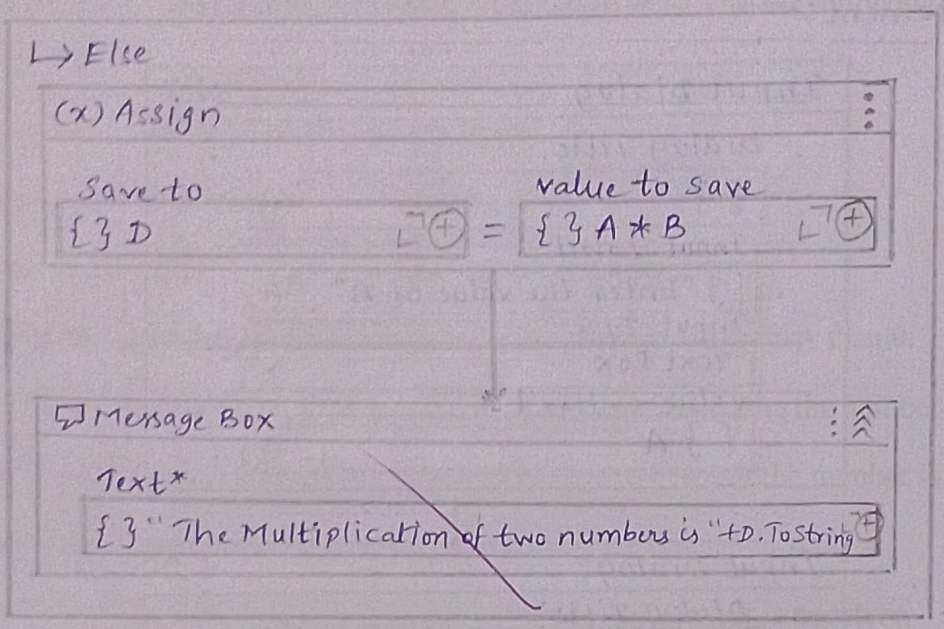
Configure the activity to prompt the user to enter a number and store the result in the inputNumber variable.

Step-4: Assign Activity (Convert to Int32)

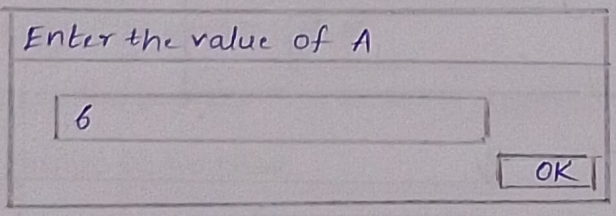
Drag and drop an "Assign" activity below the "Input Dialog."

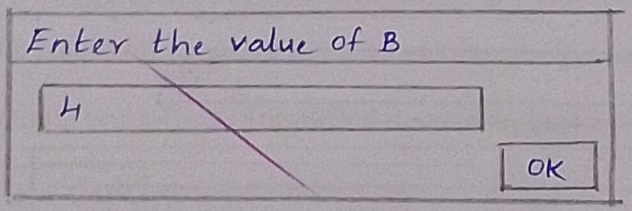
if statement:-

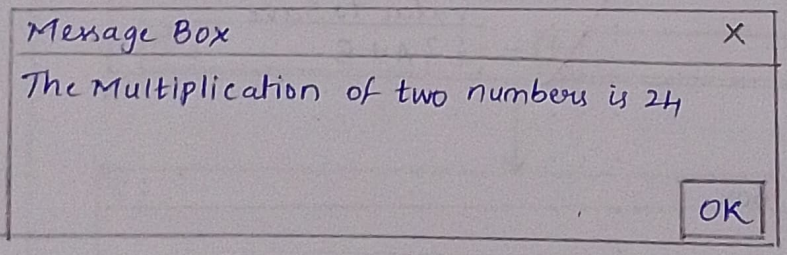



Else
Assign
Save to
{} D
value to save
{} A * B
Message Box
Text*
{} " The Multiplication of two numbers is " +D.ToString

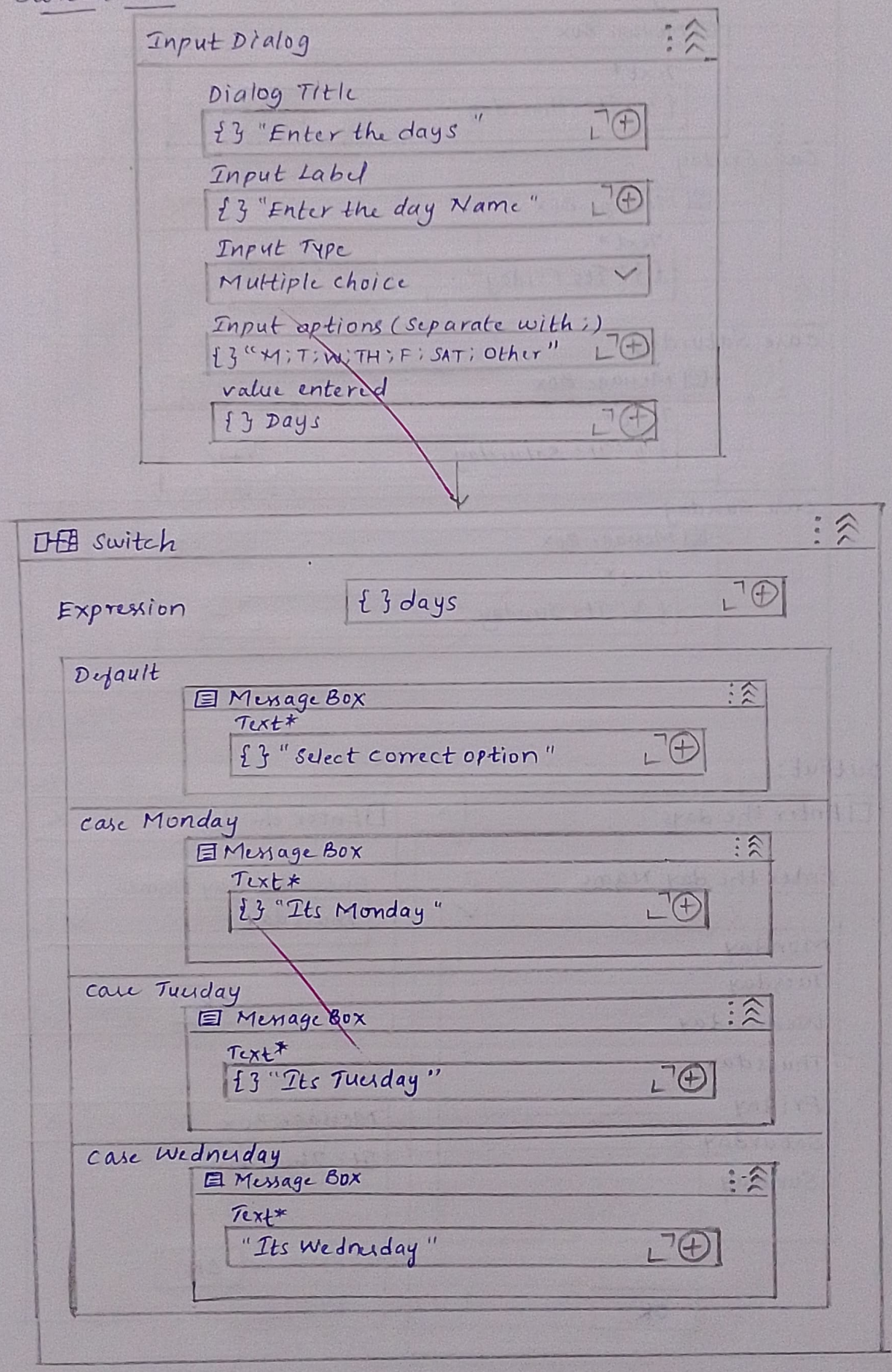
Output :-


Enter the value of A
6
OK


Enter the value of B
4
OK


Message Box
The Multiplication of two numbers is 24
OK

Switch case:-


Input Dialog
Dialog Title
{} "Enter the days"
Input Label
{} "Enter the day Name"
Input Type
Multiple choice
Input options (Separate with ;)
{} "M;T;W;TH;F;SAT;Other"
value entered
{} Days
Switch
Expression
{} days
Default
Message Box
Text*
{} "Select correct option"
case Monday
Message Box
Text*
{} "Its Monday"
case Tuesday
Message Box
Text*
{} "Its Tuesday"
case Wednesday
Message Box
Text*
"Its Wednesday"

case Thursday

Message Box

Text*

{} "Its Thursday"

case Friday

Message Box

Text*

{} "Its Friday"

case Saturday

Message Box

Text*

{} "Its Saturday"

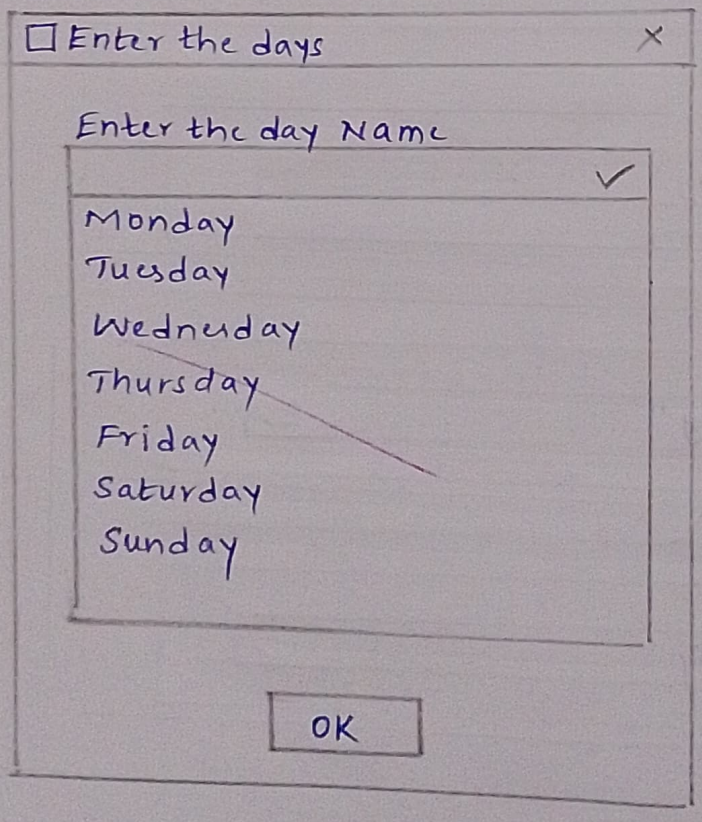
case Sunday

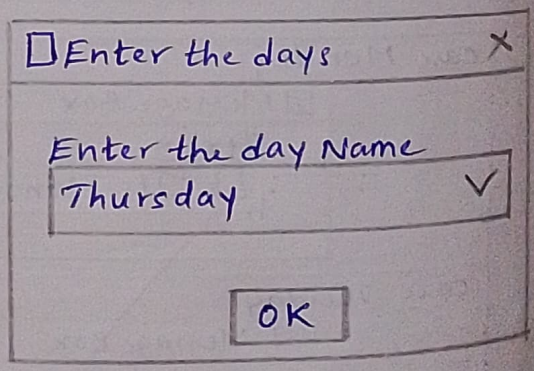
Message Box

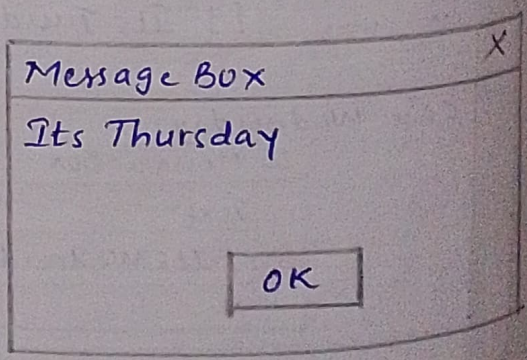
Text*

{} "Its Sunday"

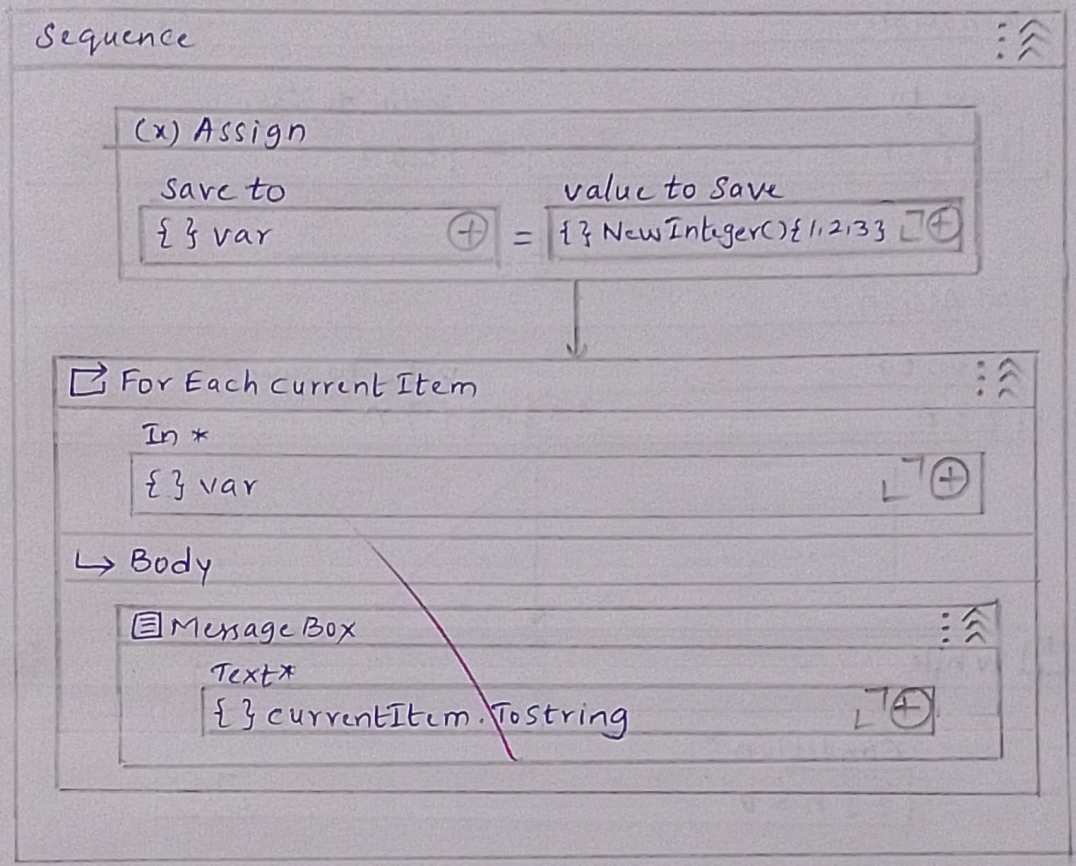
output:-



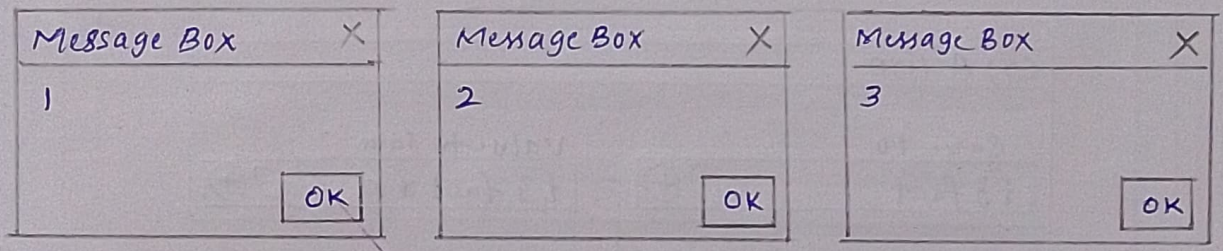




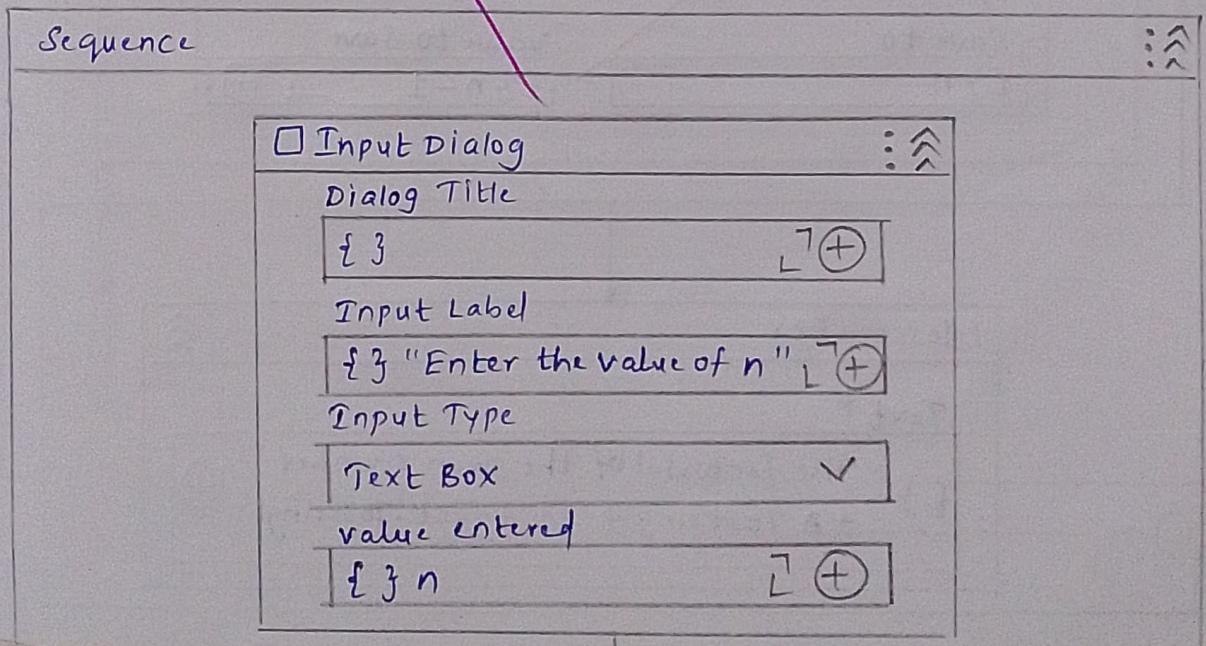
For Loop :-

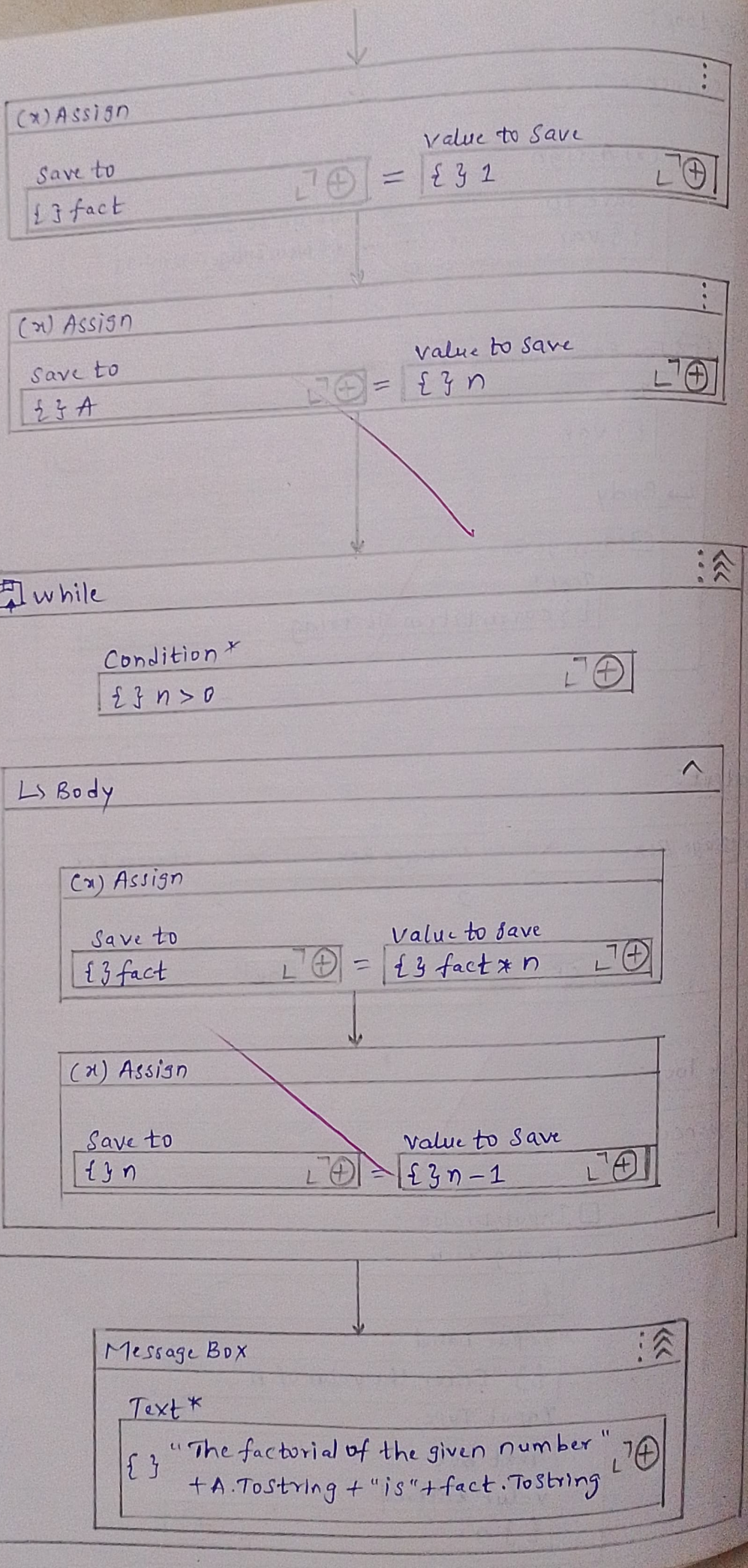


output :-

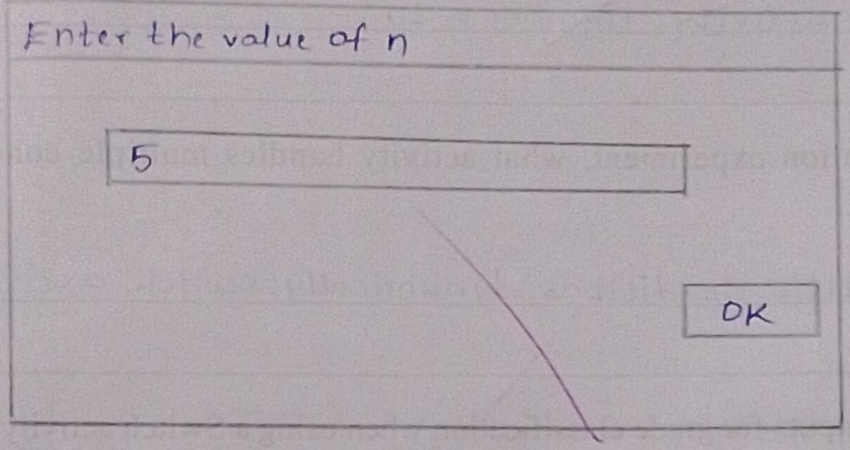


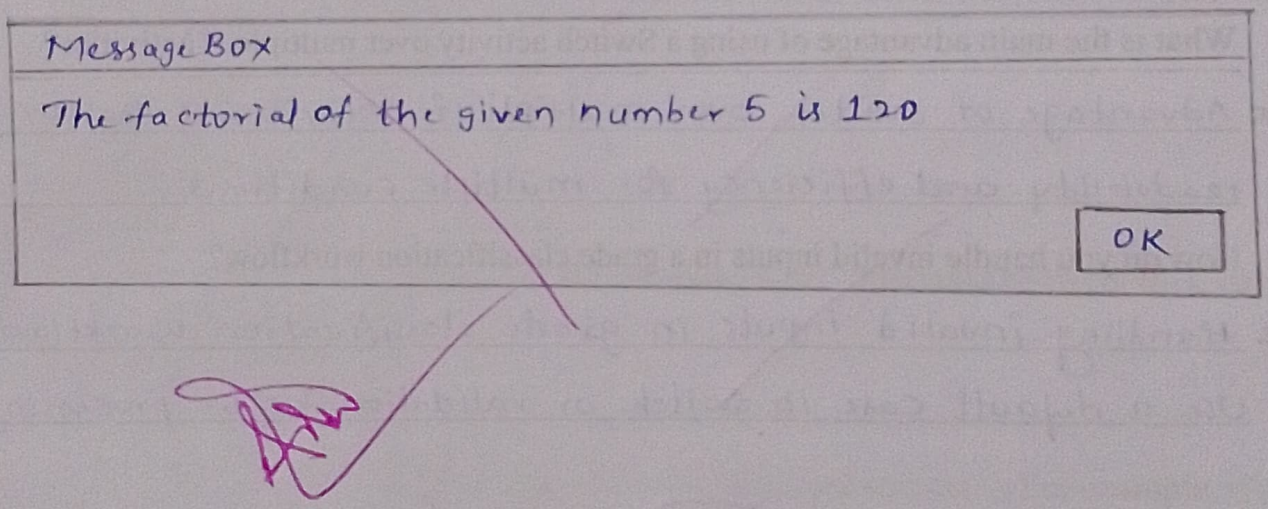
While loop :-




(x) Assign
Save to
{} fact
=
Value to Save
{} 1
(x) Assign
Save to
{} A
=
Value to Save
{} n
while
Condition *
{} n > 0
Body
(x) Assign
Save to
{} fact
=
Value to Save
{} fact * n
(x) Assign
Save to
{} n
=
Value to Save
{} n - 1
Message Box
Text *
{} "The factorial of the given number "
+A.Tostring + "is" + fact.Tostring

OUTPUT


Enter the value of n
5
OK


Message Box
The factorial of the given number 5 is 120
OK

VIVA QUESTIONS

1. What condition would you use in an If activity to check if a number is greater than 10?

Ans. Condition for if activity: number > 10

2. In the grade classification experiment, what activity handles multiple conditions dynamically?

Ans. Activity for multiple conditions dynamically: switch activity

3. What are the possible outputs for grade classification when using a Switch activity?

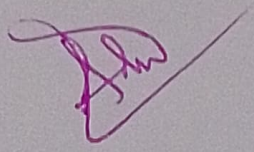
Ans. Possible outputs for grade classification using Switch: A, B, C, D, Fail, Invalid

4. What is the main advantage of using a Switch activity over multiple if activities?

Ans. Advantage of switch over multiple if activities: Better readability and efficiency for multiple conditions.

5. How do you handle invalid inputs in a grade classification workflow?

Ans. Handling invalid inputs in grade classification workflow: Use a default case in switch or validation before processing.



Experiment-4

Date: 10/2/25

4. Create a process for data manipulation-scalar variables, collections, tables, and text manipulation.

PROCEDURE

1. **Identify Data Sources**

- Determine the source(s) of data you'll be working with. This could be Excel files, databases, web pages, or any other source.

2. **Input Data Retrieval**

- Use UiPath activities to retrieve data from the identified source(s). For example, if the data is in an Excel file, use activities like "Excel Application Scope" and "Read Range" to read the data into a DataTable variable.

3. **Scalar Variables Manipulation**

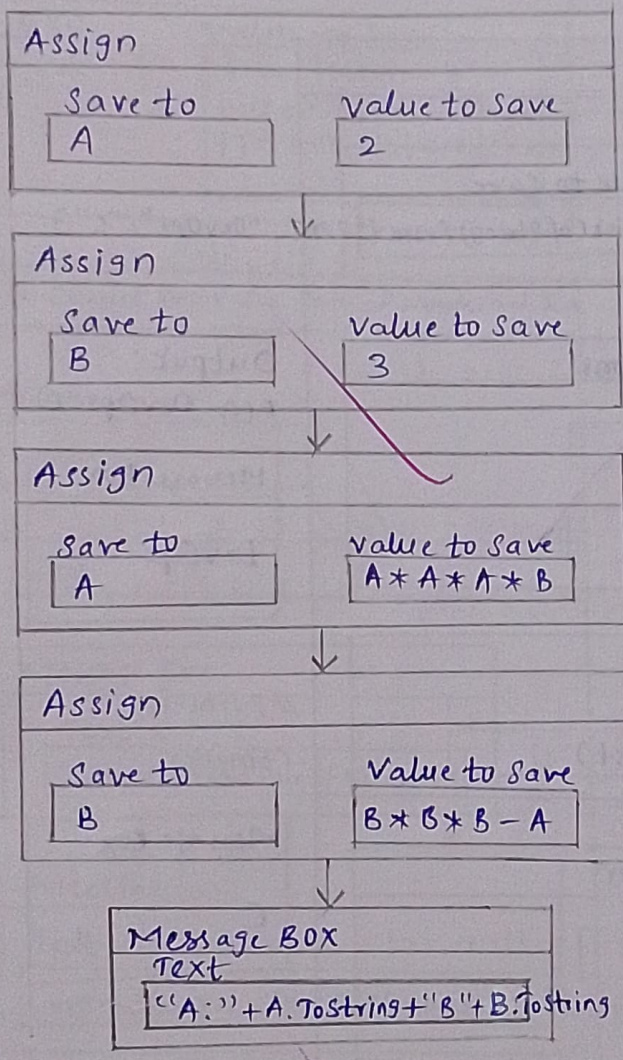
- Perform any necessary operations on scalar variables (individual data points) using UiPath activities such as Assign, Invoke Method, or Write Line.

4. **Collections Manipulation**

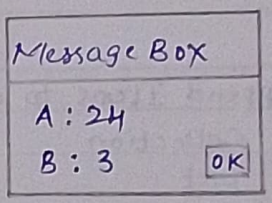
- Manipulate collections (lists, arrays, dictionaries) as needed. Use activities such as Add to Collection, Remove from Collection, For Each, or LINQ queries to manipulate collections of data.

SOURCE CODE

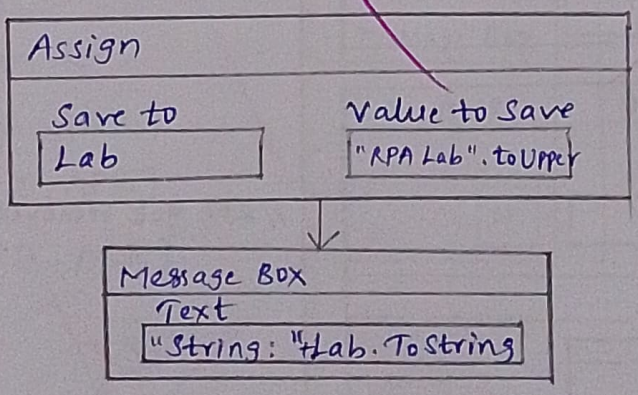
1. Scalar variable : Take a sequence and select assign to assign value to variables. Then select a message box to give output.



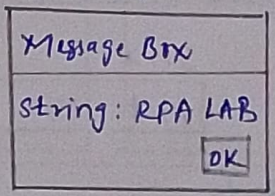
Output:



2. String : use string methods like toUpper

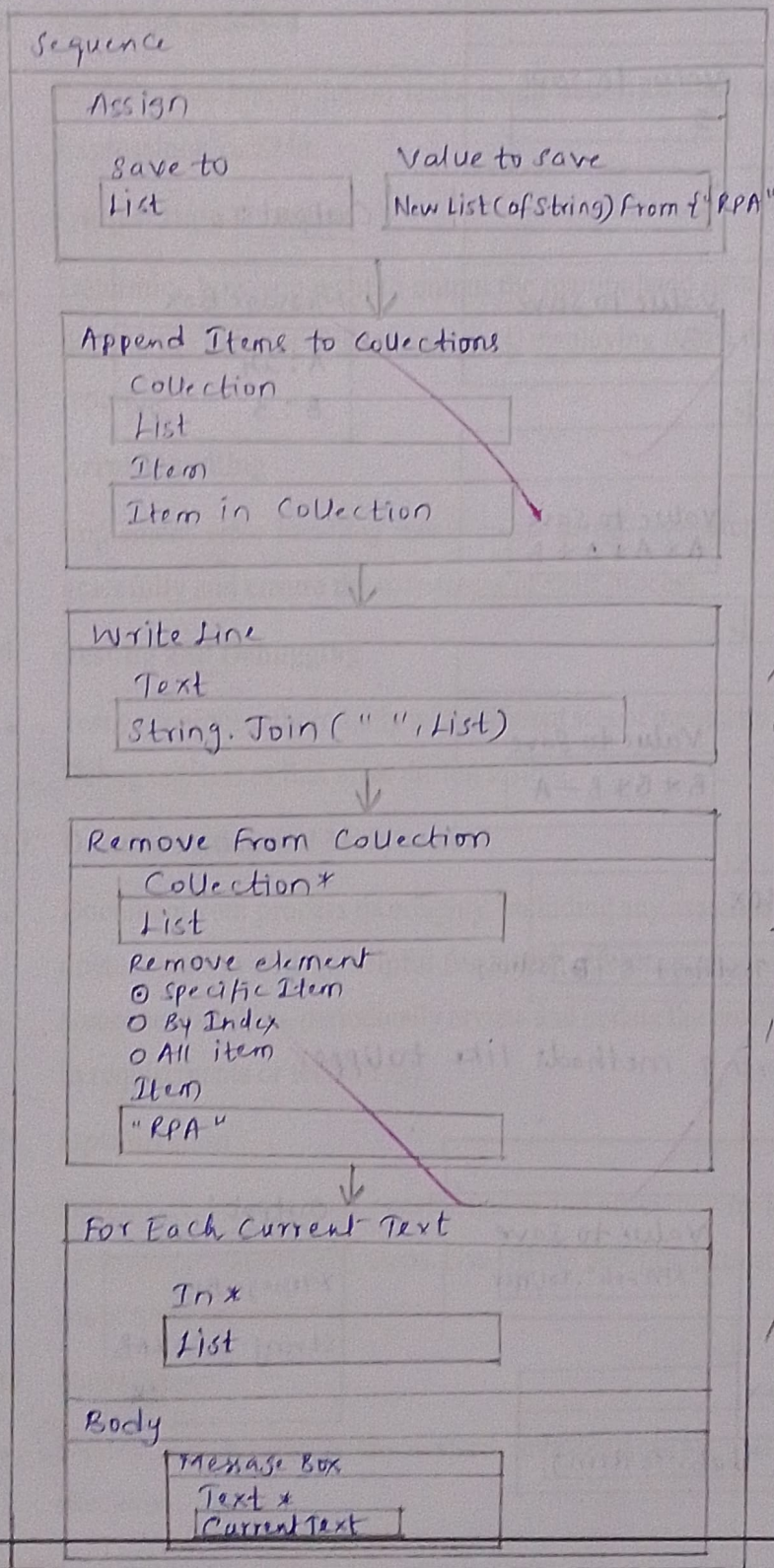


Output:



3. List: use System.Collections.generic → List<T>
set type as string at the top of dialog box.

- Append Item to Collection
- Remove from collection



Output: (In Compiler)
RPA DevOps C

Message Box
DevOps

// Print in Compiler

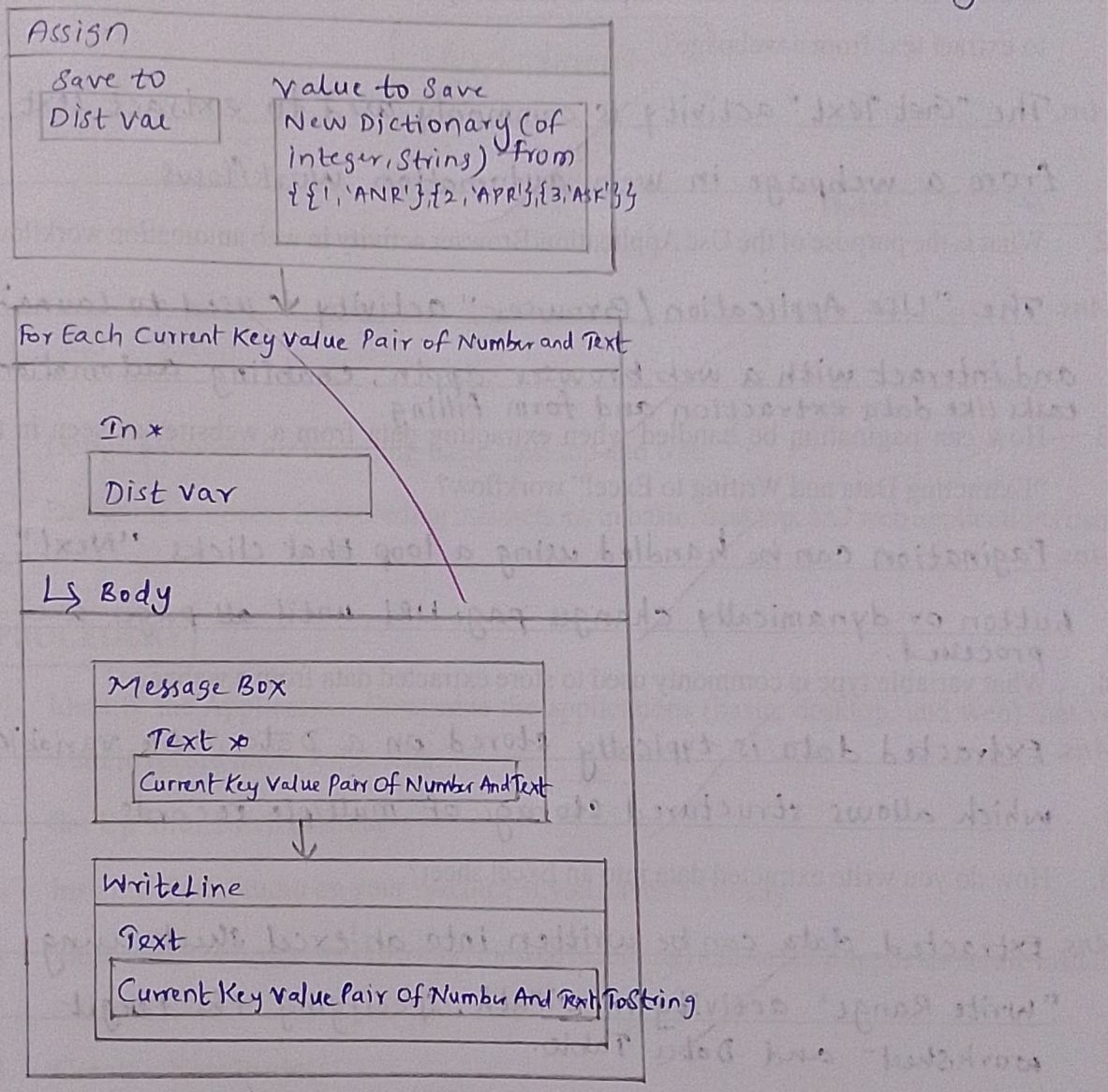
Message Box
C

// Remove RPA

// RPA got removed

OUTPUT

4. Dictionary : Use System.Collections.Generic.Dictionary.



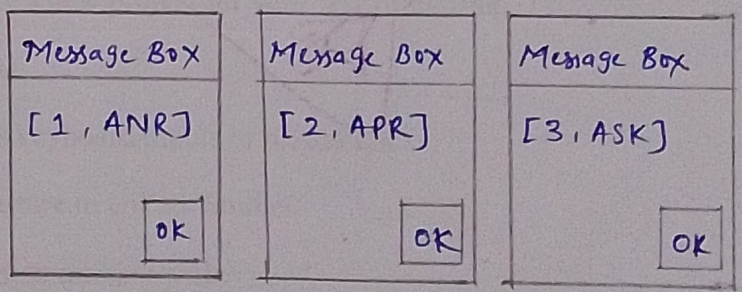
Output :

Compiler :

[1, ANR]

[2, APR]

[3, ASK]



VIVA QUESTIONS

1. In the "Text Automation with Wikipedia and Google Docs" workflow, what activity is used to extract text from a webpage?

Ans. The "Get Text" activity is commonly used to extract text from a webpage in web automation workflows.

2. What is the purpose of the Use Application/Browser activity in web automation workflows?

Ans. The "Use Application/Browser" activity is used to launch and interact with a web browser appln, enabling automation of tasks like data extraction and form filling.

3. How can pagination be handled when extracting data from a website, as seen in the "Extracting Data and Writing to Excel" workflow?

Ans. Pagination can be handled using a loop that clicks "Next" button or dynamically changes page URL until all pages are processed.

4. What variable type is commonly used to store extracted data from a webpage?

Ans. Extracted data is typically stored on a Data Table variable which allows structured storage of multiple records.

5. How do you write extracted data into an Excel sheet?

Ans. Extracted data can be written into an excel sheet using "Write Range" activity in UiPath, specifying the target worksheet and Data Table.