Practice Exercise - Variables

Build a workflow that swaps two numbers using a third variable.

- Ask the user to input two numeric values and store them in two variables.
- Swap values of both the variables using a third variable.
- Display initial and swapped values of both the variables in the Output panel.

Process Overview

- START
- Use an Input Dialog activity to receive two numeric values from the user.
- Store the received values in two integer variables called **First_Input_Value**, and **Second_Input_Value**
- Declare a third integer variable called **Swapping_Support_Variable**
- Use Assign activity to assign the value of **First_Input_Value** to **Swapping_Support_Variable**
- Use second Assign activity to assign the value of **First_Input_Value** to **Second_Input_Value**
- Use third Assign activity to assign the value of **Second_Input_Value** to **Swapping_Support_Variable**
- Use a Write Line activity to display initial and final values of **First_Input_Value** and **Second_Input_Value** in the Output panel.
- STOP

Step-by-Step Process

Step 1: Open UiPath Studio.

Step 2: Create a process and name it as “Variable Swapping”

Step 3: Drag a Sequence activity from the Activities panel and drop in the Designer panel.

Step 4: Name the Sequence activity as “Sequence – ‘This code is for swapping two numbers using a third variable’”

Step 5: Insert a Comment activity from the Activities panel within the Sequence activity.

Step 6: Add comment “Taking input of two numbers from the user and swap them by using a third variable.”

Step 7: Drag another Sequence activity from the Activities panel and insert it below the Comment activity.

Step 8: Name the Sequence activity as “Sequence – ‘For prompting the user to give the input’”.

Step 9: Right-click on the Sequence activity container and select *Annotations* from the context menu.

Step 10: Enter an annotation “This code is for swapping two numbers by using a third variable.”

Step 11: Insert an Input Dialog activity within the second Sequence activity and name it as “Input Dialog – ‘First Variable by User’”.

Step 12: Right-click on the Input Dialog activity container and select Annotations from the context menu. Add an annotation: “Taking User input and storing the value in "First_Input"”.

Step 13: In the Input Dialog activity, enter values as shown below:

Title	Label
“First Value”	“Please enter the first numeric value: ”

Step 14: In the Variables panel, create a variable for the above Input Dialog activity as shown below:

Name	Variable type	Scope	Default
First_Input_Value	Double	Sequence – ‘This code is for swapping two numbers by using a third variable.’	

Step 15: Go to the Properties panel of the Input Dialog activity and insert **First_Input_Value** in its Output property.

Step 16: Insert a second Input Dialog activity below the previous Input Dialog activity, and name it as “Input Dialog – ‘Second variable by User’”.

Step 17: Right-click on the Input Dialog activity container and select *Annotations* from the context menu. Add an annotation: “Taking User input and storing the value in "Second_Input_Value”.

Step 18: In the second Input Dialog activity, enter values as shown below:

Title	Label
“Second Value”	“Please enter the second numeric value: ”

Step 19: In the Variables panel, create a variable for the second Input Dialog activity as shown below:

Name	Variable type	Scope	Default
Second_Input_Value	Double	Sequence – ‘This code is for swapping two numbers by using a third variable.’	

Step 20: Go to the Properties panel of the Input Dialog activity and insert the variable **Second_Input_Value** in its Output property.

Step 21: Insert a Write Line activity from the Activities panel after the second Sequence activity, and name it as “Write Line – ‘Value entered before swapping’”.

Step 22: Right-click on the Write Line activity container and select *Annotations* from the context menu. Add an annotation: “Enter the text to get the result in the Output Panel”.

Step 23: In the text box of the Write Line activity, enter the expression: **“First Value is: ” + First_Input_Value.ToString + Environment.NewLine + “Second Value is: ” + Second_Input_Value.ToString**

Step 24: Insert another Sequence activity from the Activities panel below the Write Line activity, name it as "Sequence – 'Swapping of numbers'". Annotate it as "This block of code will swap the values of the numbers entered".

Step 25: In the Variables panel, create a new variable as shown below:

Name	Variable type	Scope	Default
Swapping_Support_Variable	Double	Sequence – 'This code is for swapping two numbers by using a third variable.'	

Step 26: Insert an Assign activity in the third Sequence activity, name it as "Assign – 'Move the First_Input_Value to Swapping_Support_Variable'" and enter the annotation: "Swap Swapping_Support with First_Input_Value".

Step 27: In the Assign activity, enter values as shown below:

To	Value
Swapping_Support_Variable	First_Input_Value

Step 28: Insert a second Assign activity below the previous Assign activity, name it as "Assign – 'Move the Second_Input_Value to First_Input_Value'" and Enter the annotation "Swap First_Input_Value with Second_Input_Value".

Step 29: In the second Assign activity, enter values as shown below:

To	Value
First_Input_Value	Second_Input_Value

Step 30: Insert a third Assign activity below the second Assign activity, name it as "Assign – 'To swap Swapping_Support_Variable with Second_Input_Value'" and enter annotation: "Swap Second_Input_Value with Swapping_Support".

Step 31: In the third Assign activity, enter values as shown below:

To	Value
Second_Input_Value	Swapping_Support_Variable

Step 32: Insert a Write Line activity below the third Sequence activity, name it as "Write Line – 'Swapped Result'" and enter annotation: "Enter the text to get the result in Output Panel".

Step 33: In the text box of the Write Line activity, enter the expression: **"First Value after swapping is: " + First_Input_Value.ToString + Environment.NewLine + "Second Value after swapping is: " + Second_Input_Value.ToString"**

Step 34: Save and run the workflow.