

Practice Exercise - Do While Loop

Objective

Build a workflow for a 'Guessing Game' with the following conditions:

- Prompt the user to input a number to check it against the specified number.
- In case of a wrong input, a message is displayed to the user stating, 'Please enter a lesser/greater number'.
- The loop keeps on running until the input number equals the generated number.

Process Overview

- START
- Use an **Input Dialog** activity within a **Do While** activity to get the guessed number from the user.
- For **Do While** activity, set the condition to check whether the guessed number is equal or not equal to the specified number.
- Use a **Message Box** activity to display “You Guessed it correct” for the correct match.
- Use an **If** activity within the Do While loop to check if the guessed number equals the actual number.
 - If correct, use a **Message Box** activity to display “You Guessed it correct” for the correct match.
 - Use another **If** activity within the Else section to check if the guessed number is greater than the actual number.
 - If correct, use a **Message Box** activity to display “Please try a smaller number”.
 - If incorrect, use a **Message Box** activity to display “Please try a greater number”.
- STOP

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Step-by-Step Process

- Step 1:** Open UiPath Studio.
- Step 2:** Create a new process and name it “Do While Loop”.
- Step 3:** Drag a **Sequence** activity from the Activities panel and drop it in the Designer panel.
- Step 4:** Name the **Sequence** activity as “Sequence – ‘Guessing Game’”.
- Step 5:** Right-click on the **Sequence** activity container and select *Annotations* from the context menu.
- Step 6:** Enter the annotation :
“This block of code demonstrates a workflow using a Do While statement for creating a 'Guessing Game' with the following conditions:
1. Generate a random number and prompt the user to input a number.
2. In case of a wrong input, a message is displayed to the user stating, 'Please enter a lesser/greater number’.
3. The loop keeps on running until the input number equals the generated number.”
- Step 7:** Create variables using the Variables panel as shown below:

Name	Variable type	Scope	Default
intRandomNo	Int32	Sequence – Guessing Game	25
intGuessedNo	Int32	Sequence – Guessing Game	

- Step 8:** Insert a **Do While** activity within the **Sequence** activity, name it as “Do While - Guessed Number <> Random Number”, add an annotation “The loop iterates until it reaches the given condition”.
- Step 9:** Set its condition to **int intGuessedNo<> intRandomNo**
- Step 10:** Insert an **Input Dialog** activity within the **Do While** activity, name it as “Input Dialog - Guessed Number”, add an annotation: “Take Guessed Number as User input”, and enter values as shown below:

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Title	Label
"Number"	"Guess a number."

- Step 11:** In the Properties panel of the **Input Dialog** activity, enter **intGuessedNo** in the Output property.
- Step 12:** Insert an **If** activity below the **Input Dialog** activity, name it as "If - User input equals Random Number", add an annotation: "This activity checks whether the user input is equal to the Random Number or not" and enter the condition **intGuessedNo= intRandomNo**
- Step 13:** In the Then section, insert a **Message Box** activity and name it "Message Box - Correct Guess". Add an annotation: "Prints Correct Guess message".
- Step 14:** Enter the text "You Guessed it correct".
- Step 15:** In the Else section of the first If activity, insert another **If** activity, and enter condition **intGuessedNo> intRandomNo**. Name it as "If- Guessed number is greater or smaller than Random Number", add an annotation: "This activity checks whether the user input is greater or smaller than the Random number."
- Step 16:** In the Then section, insert a **Message Box** activity, name it as "Message Box - Try Smaller Number", add an annotation: "Prints Smaller Number message", and enter the text "Please try a smaller number".
- Step 17:** In the Else section, insert a **Message Box** activity, name it as "Message Box - Try Greater Number", add an annotation: "Prints Greater Number message", and enter the text "Please try a greater number".
- Step 18:** Save and run the workflow.