

**All termworks will have these common packages listed below:**

UiPath.Excel.Activities  
UiPath.Mail.Activities  
UiPath.System.Activities  
UiPath.UIAutomation.Activities

If any extra packages, will be mentioned with the termwork

**Termwork 1**

**Theory:**

The objective is to know how the UiPath Studio works so for that every beginner starts with a simple workflow and that is printing "Hello, world!"

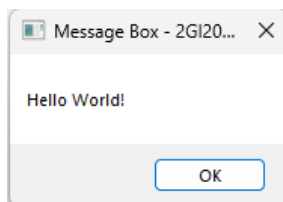
In this termwork we learn how to print "Hello, World!" using UiPath Studio by following the steps given below:

List of activities used in this workflow:

- **Sequence:** Creates a sequence of actions.
- **Message Box:** Displays a message box with a specified message.

By using these activities, you can create a simple workflow in UiPath Studio that will display the "Hello World" message in a message box when executed.

**Output:**



**Termwork 2:**

**Theory:**

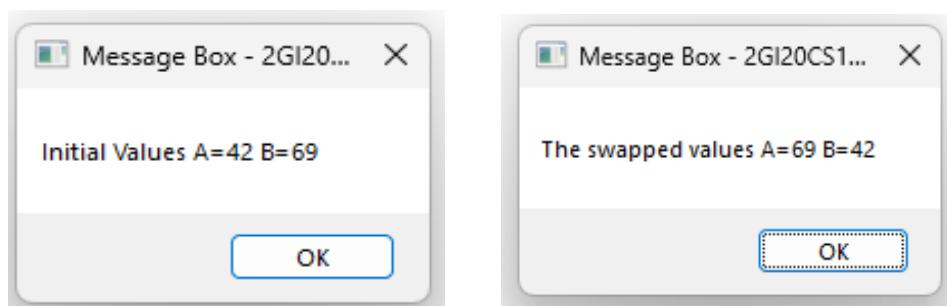
Swapping the values of two variables using a third variable is a common programming task that involves exchanging the values stored in two variables without losing any data. This operation can be implemented using various programming languages and automation tools, such as UiPath Studio.

Variable swapping is achieved by temporarily storing the value of one variable in a third variable, assigning the value of the second variable to the first variable, and finally assigning the value stored in the third variable to the second variable. This process ensures that the values of both variables are interchanged accurately.

Activities

1. **Sequence:** Creates a sequence of actions.
2. **Assign:** This activity is used to assign values to variables. In this case, we assign the initial values of the two variables to be swapped.
3. **Input Dialog:** Lets a user to enter a number or any type assigned to it

**Output:**



### Termwork 3:

#### Theory

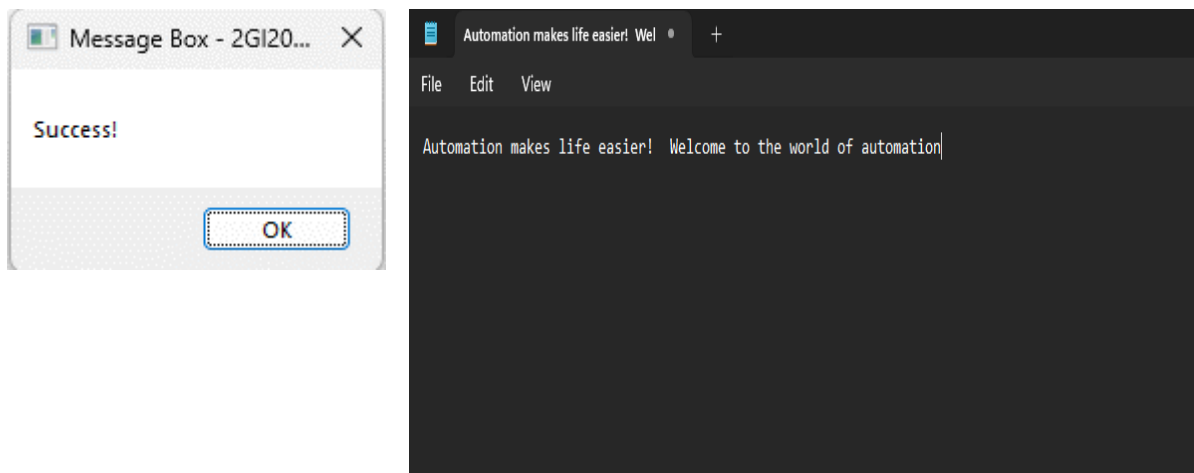
In UiPath Studio, you can create workflows that automate various tasks, including data input in applications such as Notepad. This can be achieved using different input methods, such as `TypeInto`, `SimulateClick`, and `SendWindowMessages`.

The topic of using different input methods to input data into Notepad is essential for automating various tasks and processes that involve interacting with applications and entering data. Different input methods provide flexibility and cater to different scenarios, making the automation process more robust and reliable.

#### List of Activities:

- **Open Application:** Opens the Notepad application.
- **TypeInto:** Enters text into the Notepad window.
- **SimulateClick:** Simulates mouse clicks on specific elements.
- **SendWindowMessages:** Sends window messages to interact with the application.

#### Output:



### Termwork 4:

#### Theory:

Robotic Process Automation (RPA) is revolutionizing the way businesses streamline their repetitive tasks. One such task is form filling, which can be automated using RPA tools like UiPath Studio. In this scenario, we will explore how to build a workflow using UiPath Studio to extract organized data from an Excel file and populate an online form on the [RPACHallenge.com](https://rpachallenge.com) website.

#### List of Activities:

1. **Excel Application Scope:** Extract the relevant information and store it in variables or data tables.
2. **Open Browser:** to launch the [RPACHallenge.com](https://rpachallenge.com) website.
3. **Find Element:** to locate the input fields on the form using selectors. Set the appropriate attributes to uniquely identify each field.
4. **Type Into:** to enter the data extracted from the Excel file into the respective form fields. Map the variables or data tables to the appropriate fields.

#### Additional package:

UiPath.Testing.Activities

Output:

The screenshot shows a web browser window with the URL 'rpachallenge.com'. The page has a blue header with the title 'RPA Challenge' and navigation links: 'Input Forms', 'Shortest Path', 'Movie Search', 'Invoice Extraction', and 'RPA Stock Market'. On the left, there is a sidebar with 'Instructions' and a 'DOWNLOAD EXCEL' button. The main content area contains a form with the following fields: 'Phone Number' (40718543298), 'First Name' (John), 'Last Name' (Smith), 'Email' (jsmith@itsolutions.co.uk), 'Role in Company' (Analyst), 'Company Name' (IT Solutions), and 'Address' (98 North Road). A red 'SUBMIT' button is at the bottom of the form. A 'Message Box - 2GI20...' window is open on top of the browser, displaying 'Success!' and an 'OK' button.

## Termwork 5:

### Theory:

#### For Termwork 5a:

In UiPath Studio, the Switch activity is used to execute different actions based on multiple possible values of a variable. It acts as a decision-making tool and allows for branching the workflow based on various conditions. In the given scenario, the workflow will prompt the user to enter their eye color and display their personality traits based on the input.

List of activities to be used:

1. **Input Dialog:** Used to prompt the user to enter their eye colour.
2. **Switch:** Helps in branching the workflow based on the eye colour input.
3. **Message Box:** Displays the personality traits associated with the user's eye colour.
4. **Variables:** Used to store and manipulate the eye colour input.

#### For Termwork 5b:

A prime number is a positive integer greater than 1 that has no positive divisors other than 1 and itself. In this task, we will build a workflow using a While loop to determine whether a given number is a prime number or not.

To determine if a number is prime, we can follow a simple approach. We start by checking if the number is divisible by any integer from 2 to the square root of the number. If it is divisible by any number within this range, it is not a prime number. Otherwise, it is a prime number.

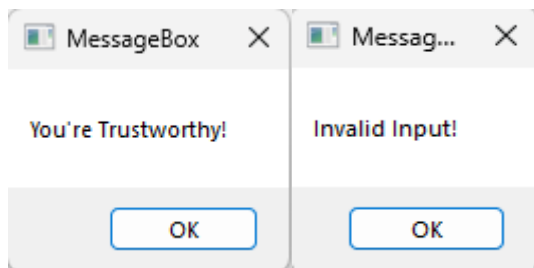
activities:

1. **Input Dialog:** Prompt the user to enter a number and store the value in the input variable.
2. **Assign:** Initialize the divisor variable to 2 and the prime flag variable to true.

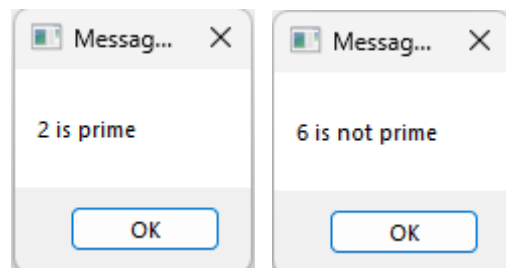
3. **While Loop:** Set the condition for the loop to continue while the divisor is less than or equal to the square root of the input number.
4. **If Activity:** Check if the input number is divisible by the current divisor. If it is, set the prime flag to false and exit the loop.
5. **Assign:** Increment the divisor by 1.

#### Output:

##### For Termwork 5a:



##### For Termwork 5b:



#### Termwork 6:

##### Theory:

In UiPath Studio, you can develop powerful workflows to extract and manipulate key information from text using various methods such as Format, Join, IndexOf, Split, and Substring. These methods allow you to perform operations like string formatting, concatenation, searching for specific patterns, and extracting substrings based on predefined rules. By combining these methods, you can create an efficient workflow to extract and transform data from unstructured text into a structured format.

The Split method splits a string into an array of substrings based on a specified delimiter. This is particularly helpful when dealing with text that has a consistent structure but needs to be divided into separate fields. Finally, the Substring method extracts a portion of a string based on its position and length, enabling you to extract specific information within a larger text.

To develop a workflow that extracts and formats key information from text, you can use the following activities in UiPath Studio:

1. **Assign:** Use variables to store and manipulate data.
2. **Message Box:** Displays a message box with a specified message.

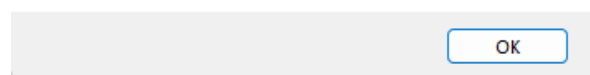
#### Output:

##### Initial string:

"You always wanted to study Automation Training. The materials are available in the following places: UiPath Blog, UiPath Academy.

##### After formatting:

Get Automation Training. from UiPath Blog, UiPath Academy.



## Termwork 7:

### Theory:

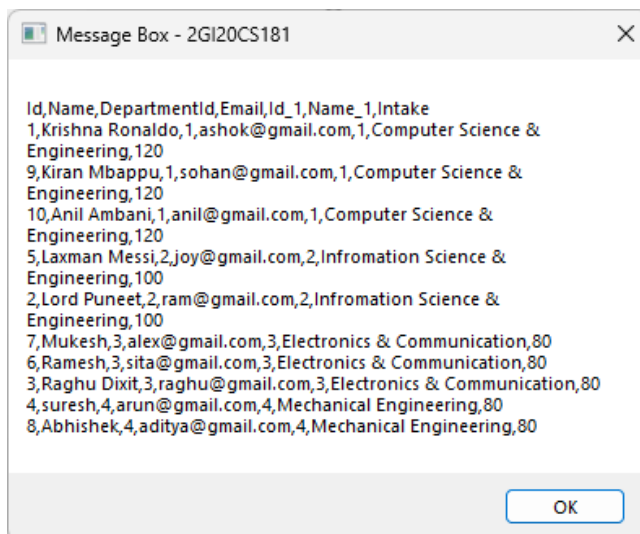
UiPath Studio provides a comprehensive platform for automating repetitive tasks. One common use case is joining databases to retrieve and manipulate data efficiently. In this scenario, we will explore how to build a workflow using data table activities in UiPath Studio to join two library databases based on matching student IDs and display the output in a message box.

Data table activities in UiPath Studio allow for effective manipulation and analysis of structured data. These activities provide a range of functionalities, including data extraction, filtering, sorting, and merging. By leveraging these activities, we can establish a workflow to join two library databases using matching student IDs.

List of Activities: To execute the workflow successfully, the following activities are essential:

1. **Excel Application Scope:** Extract the relevant information and store it in variables or data tables.
2. **Join Data Table Activity:** Performs the join operation based on student IDs.
3. **Read Range:** Reads the value of an Excel range and stores it in a DataTable variable.
4. **Write Range:** Writes the data from a DataTable variable in a spreadsheet starting with the cell indicated in the StartingCell field.
5. **Message Box Activity:** Displays the output data table in a message box.

### Output:



## Termwork 8:

### Theory:

#### For Termwork 8a:

Screen scraping is a technique used to extract data from the user interface of an application or website. It involves automating the process of capturing text, images, or other data displayed on the screen. In UiPath Studio, the Screen Scraper Wizard is a powerful tool that enables users to extract data using various scraping methods.

**Screen Scraper Wizard:** The Screen Scraper Wizard in UiPath Studio allows users to create scraping activities to extract data from applications or websites. It provides multiple scraping methods, including Full-Text scraping, which is used to extract complete textual content from an application or webpage.

**List of Activities:** The following activities can be used to execute the workflow successfully:

- **Open Browser** To open the default browser application.
- **Screen Scraping Wizard:** To choose the Full-Text scraping method and configure the scraping options.
- **Excel Application Scope:** Extract the relevant information and store it in variables or data tables.

#### For Termwork 8b:

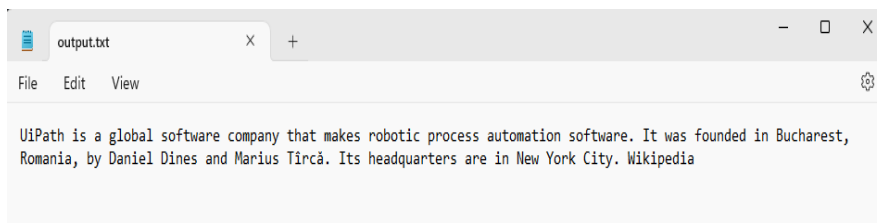
Data scraping is a technique used to extract information from websites and automate the process of gathering data. UiPath Studio provides a powerful tool called the Data Scraping Wizard, which allows users to easily extract structured data from websites. In this case, we will develop a workflow using the Data Scraping Wizard to scrape blog post titles from the UiPath Blog across multiple pages.

Activities:

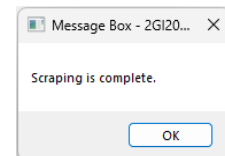
- **Open Browser** To open the default browser application.
- **Data Scraping Wizard:** extract structured data from your browser, application or document to a database, .csv file or even Excel spreadsheet.
- **Write Text File:** To save the extracted text into a Notepad file.
- **Message Box Activity:** Displays the output data table in a message box.

#### Outputs:

##### For Termwork 8a:



##### For Termwork 8b:



## Termwork 9

### Introduction:

UiPath Studio is a powerful Robotic Process Automation (RPA) tool that allows users to automate various tasks in a workflow. One common task is extracting specific information from PDF files, such as email addresses and phone numbers. In this scenario, we will develop a workflow using UiPath Studio to extract email IDs and phone numbers from a PDF file and store them in an MS Word file.

To accomplish this task in UiPath Studio, we will utilize the following activities:

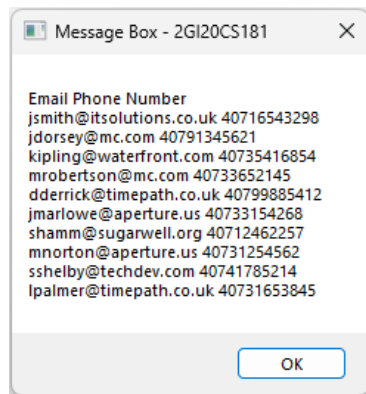
1. **Read PDF Text:** This activity reads the text content of the PDF file and stores it as a string variable.
2. **Append Text:** Within the Word Application Scope, we will use this activity to append the extracted email IDs and phone numbers to the MS Word file.

### Additional Packages:

UiPath.PDF.Activities

UiPath.Word.Activities

## Output:



## Termwork 10:

### Theory:

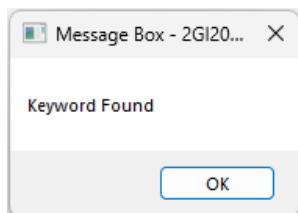
In today's digital world, automation has become essential to streamline and optimize various business processes. Extracting attachments from emails can be a time-consuming and tedious task, especially when dealing with a large volume of emails. However, by leveraging robotic process automation (RPA) tools like UiPath Studio, we can develop a workflow to automate this process and improve efficiency.

UiPath Studio is a powerful RPA tool that provides a visual interface for designing automation workflows. It offers a wide range of activities that can interact with different applications, including email clients like Microsoft Outlook or Gmail.

Activities:

- 1) **Input Dialog:** Prompt the user to enter a number and store the value in the input variable.
- 2) **Get Password:** Encrypts a password by associating it with the current user. Only workflows running under the current user context can decrypt the password.
- 3) **Get IMAP messages:** Retrieves an IMAP email message from a specified server.
- 4) **For Each Activity:** Performs an activity or a series of activities, specified in the Body section, on each element of a collection.
- 5) **Save Attachments:** Saves the mail message attachments to the specified folder. If the folder doesn't exist, it is created. If no folder is specified, the downloads are saved in the project folder. Files in the specified folder with the same name as the attachments are overwritten.

## Output:



For written VIVA preparation:

## PE-2 : RPA IA (18CS645)

Total points 24/30 ?

The IA contains 30 questions of type MCQ, and Multi choose options . Read the questions and their options carefully and answer.

Email \*



0 of 0 points

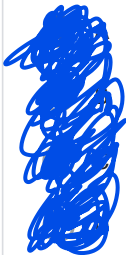
USN \*



Name \*



Division \*



IA questions

24 of 30 points

Answer the questions by choosing the appropriate option

The difference between basic recording and desktop recording in UiPath is/are \*0/1

- ☐ Because the earlier one is slower than the later one
- ☒ Because the basic recorder isn't helpful when automating multiple applications
- ☒ Because they will be using full and partial selectors respectively
- ☐ Because dynamic selectors are used in both cases





Which one is NOT a type of OCR engine \*

1/1

- ☒ Yahoo
- ☐ Microsoft
- ☐ Google
- ☐ Abbyy

Data Scraping requires a pattern to be indicated on the application for scraping \*1/1  
the information

- ☒ Yes
- ☐ No

RPA stands for.? \*

1/1

- ☐ Robot Processing Automate
- ☐ Robotic Profile Automation
- ☐ Robot Procuring Automation
- ☒ Robotic Process Automation

Does email automation requires a permission from google account if using the \*1/1  
google's email service

- ☐ NO
- ☒ Yes



☐ Properties Panel

☒ Variable Panel

☐ Activity Panel

☐ Output Panel

0/1

- ☐ all
- ☒ in the output panel.
- ☒ in the orchestrator logs.
- ☐ In the local logs folder.
- ☐ In the outline panel

- ☐ Very easily solvable problems
- ☐ Complex Problems
- ☒ Repetitive and time consuming
- ☒ High Risk tasks
- ☒ Logical aspects

	Windows Service for executing Processes	Orchestration of Robots	Development Environment	Score
UiPath Robot	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	0/0
UiPath Orchestrator	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	1/1
UiPath Studio	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	0/0

Data Scraping does not allow the extraction of URL associated with the text \* 1/1

- ☒ No
- ☐ Yes

The Characteristics of Screen scraping using OCR method is/are \* 1/1

- ☐ The speed being 10/10
- ☒ Its accuracy of scraping is 98%
- ☒ It is used when the other two methods fail to scrape the information
- ☐ It extracts the hidden text as well
- ☒ It cannot work in the background
- ☐ It Doesn't Support working with citrix environment

The default action performed when we execute the Automation workflow. \* 1/1

- ☒ Debug
- ☐ Execute
- ☐ Stop
- ☐ Run

Pick the odd one out \* 1/1

- ☐ Notepad, Microsoft Word, Microsoft Excel, Microsoft Powerpoint
- ☒ Microsoft Office One Note, Firefox, Calculator, Adobe Acrobat
- ☐ Chrome, Safari, Internet Explorer, Opera
- ☐ iTunes, Windows media player, MXplayer, VLC Media Player



Consider following steps for designing the workflow in UiPath 1) go to browser (already opened) 2)access [www.google.com](http://www.google.com) 3) type "time in belagavi" in search bar 4) click on search button 5) copy the the first result fetched by google 6) Store it in some variable and print it using message box activity ----- after designing the workflow, you should be closing the browser used for designing and start the execution of the workflow. Choose one of the options that suits the scenario

\*0/1

- ☐ Unable to print the message using message box activity
- ☐ The error says Unavailability of UI element
- ☒ The Workflow will execute successfully and prints the message
- ☐ We get an error at copying the text

The package required for working with Excel Applications \*

1/1

- ☐ UiPath.Word.Activities
- ☒ UiPath.Excel.Activities
- ☐ UiPath.MicrosoftExcel.Activities
- ☐ UiPath.PDF.Activities

Match the appropriate options 1) Protocols 2) Clients 3) Servers ----- i) SMTP , Apache ii) telnet, FTP iii) Chrome , IE

\*1/1

- ☒ 1->ii, 2->iii, 3->i
- ☐ 1->i, 2->ii, 3->iii
- ☐ 1->ii, 2->i, 3->iii
- ☐ 1->iii, 2->ii, 3->i



Choose a correct option \*

1/1

- ☐ The properties of an UI element may not differ with different instance of an application
- ☒ sometimes, Scope of a variable might cause errors while executing the workflow
- ☐ .toString() method for an integer variable will often not be used with message box activity
- ☐ Delay activity cannot be used in foreach activity

### The Activity used for creating a DataTable \*

1/1

- ☐ DesignDataTable
- ☒ BuildDataTable
- ☐ ShowDataTable
- ☐ CreateDataTable

which is the best way to delete the un-referenced variables.? \*

1/1

- ☐ Delete them one by one from variables panel. UiPath studio performs the workflow validation.
- ☐ The unreferenced elements do not occupy memory. so not required to delete them
- ☐ Assign a default value to un-referenced variables, so that they cannot be un-referenced variables.
- ☒ We can manage the variables from Desing Panel > manage variables > Remove unreferenced.

The Type of the variable created when Read Range activity is used\_\_\_\_\_ \* 1/1

\* 1/1

- ☐ Array[strings]
- ☐ Strings
- ☒ DataTable
- ☐ Int64



The activity used for downloading the attached files from Emails \*

1/1

☐ Email Attachments

☐ Clone Attachments

☐ Download Attachment

☒ Save Attachments

Choose the appropriate option \*

	Software specifications	Software development	Software evolution	Software validation	Score
The functionality of the software and constraints on its operation must be defined.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1/1
The software must evolve to meet changing client needs.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	0/0
The software to meet the requirement must be produced.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	0/0
The software must be validated to ensure that it does what the customer wants.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	0/0

Match the appropriate ones wrt the various options available while recording in UiPath A) ESc B) F2 C) F3 D) F4 ----- i) Select after delay ii) Cancel selection iii) Ui Framework iv) Select a region \*1/1

- ☐ A-iv, B->iii, C->ii, D->i
- ☐ A->i, B->ii, C->iii, D->iv
- ☒ A->ii, B->i, C->iv, D->iii
- ☐ A->iii, B->iv, C->i, D->ii

Automating an application which is connected through remote desktop connection is possible with \*0/1

- ☐ Citrix Recording
- ☒ Desktop Recording
- ☐ Basic Recording
- ☐ Web Recording

UiPath is \* 1/1

- ☐ Automation Process
- ☐ RPA
- ☒ RPA Technology vendor
- ☐ Robot Agent

The activity used for pausing the execution of the workflow for a specific period of time \*0/1

- ☐ Wait Element Vanish
- ☒ Wait for time
- ☐ Wait Attribute
- ☐ Wait Image Vanish



Choose the wrong option wrt email automation \*

1/1

- ☒ EXCHANGE is used for sending emails only
- ☐ POP3 is used for receiving emails
- ☐ SMTP is used for automation of sending emails.
- ☐ IMAP is better option than POP3 for sending emails

Anchor Base Activity is used when\_\_\_\_\_ \*

1/1

- ☐ Finding Ui element which is not locatable
- ☐ Ancestor element is present
- ☒ No control over the selector
- ☐ Complete control over the selector of the element

The Activity used for sending keystrokes as input to the screen \*

1/1

- ☐ Type Securetext
- ☐ Click Trigger
- ☐ TypeInto
- ☒ Send Hotkey

How does anchor base work.? \*

1/1

- ☐ it searches for an UiElement using relative coordinate position.
- ☒ it searches for an UiElementby using another UiElement as anchor.
- ☐ it searches for UiElement at fixed anchor position
- ☐ It searches the part of Ui and sets it as anchor.

This form was created inside of Gogte Institute of Technology.

Google Forms

