Class: F.Y.MCA **Semester**: II

Course: Process Automation

Name: Vivek Tiwari

UID: 2023510059

Expt. Title: Web Scraping Problem

Statement: Web Scraping

Actions used:

Browser: Open

Opens the specified web page in the browser.

Recorder: Capture

Record interactions with UI elements such as click, read, and write.

Simulate keystrokes

Inserts keystrokes into a selected window.

Number: Assign

Assigns user specified number to number variable

Number: To string

Converts a user specified number to a string

Excel advanced: Open

Opens a Microsoft Excel spreadsheet or a CSV file. You can open the spreadsheet in read- only or read-write mode, with a password, and so on.

Excel advanced: Go to cell

Moves the cursor to a specific cell in a Microsoft Excel spreadsheet or a CSV file.

Excel advanced: Set cell

Sets a value in the Active cell or Specific cell in a Microsoft Excel spreadsheet or a CSV file. You can also use this action to set a formula

Loop

Runs a sequence of actions for a specific number of times or until a condition is met.

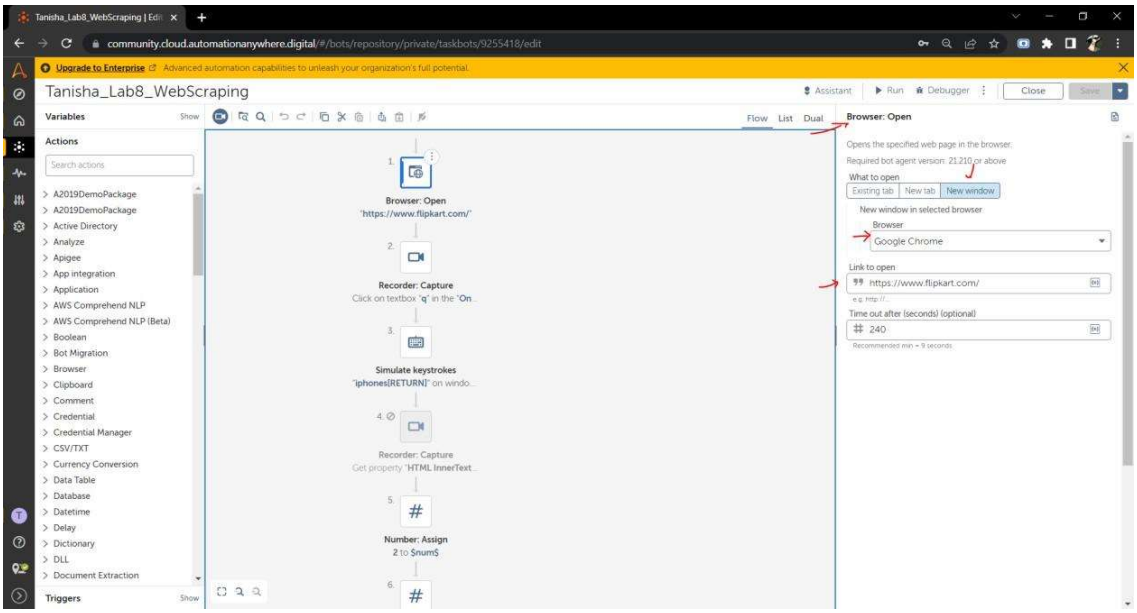
Number: Increment

Increments a number by specified value

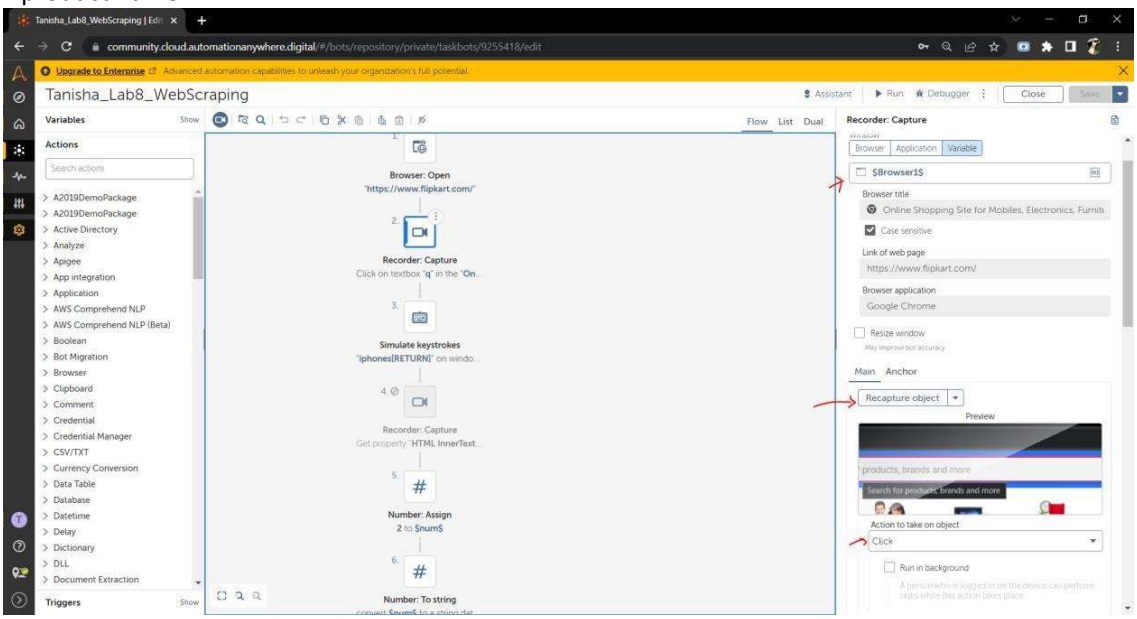
Number: To string

Converts a user specified number to a string

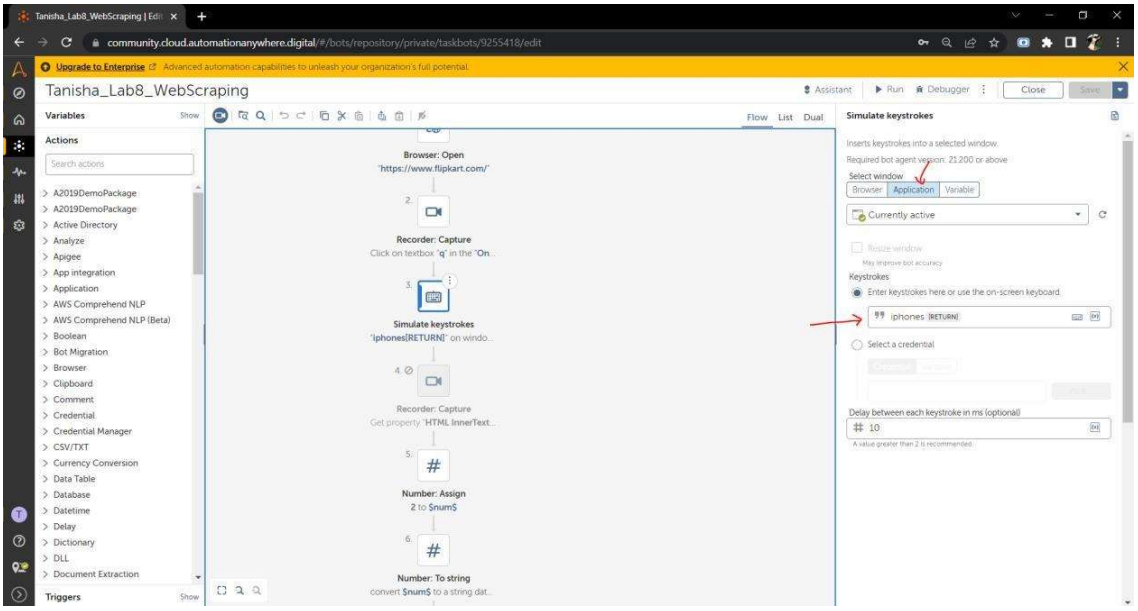
Step 1: use browser open to open the site from which you want to fetch the data



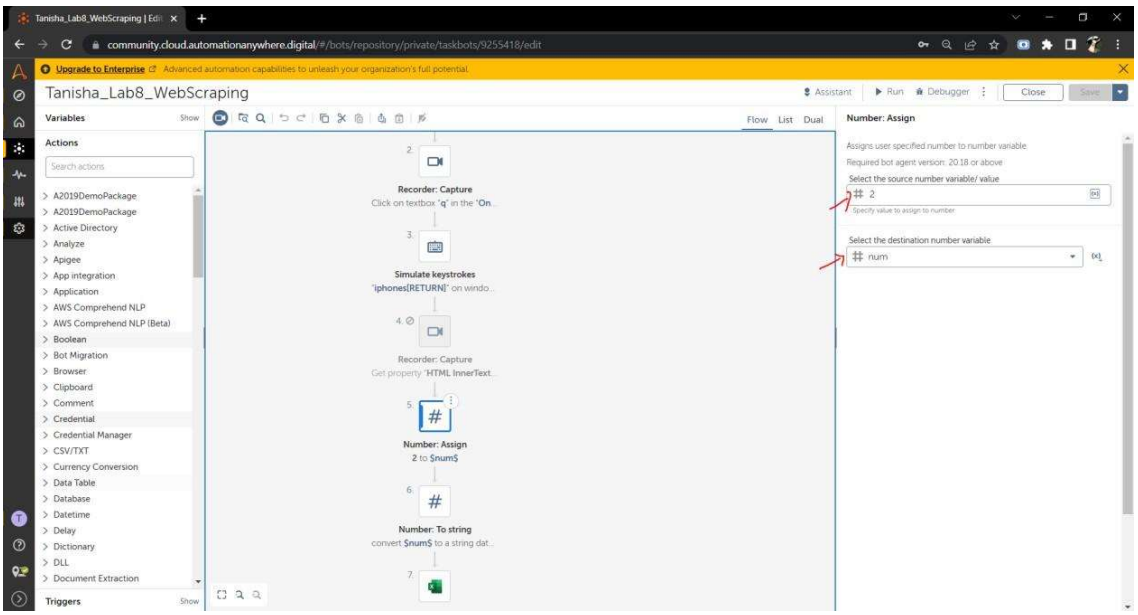
Step 2: use recorder capture to capture the data of the search bar where we will type the product name



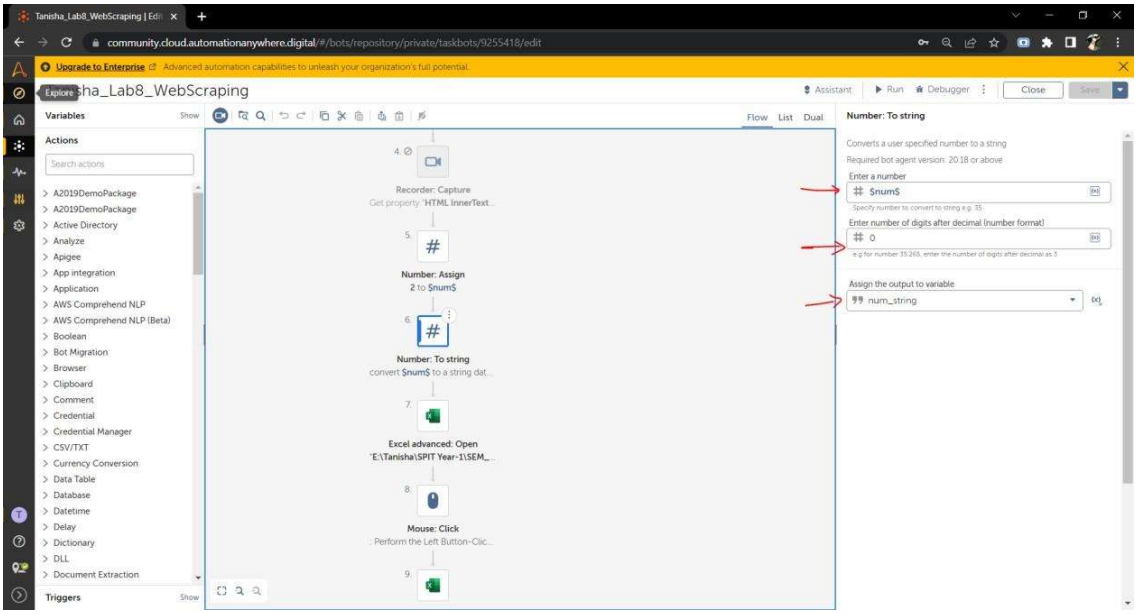
Step 3:use simulate key strokes to search for iphones and return



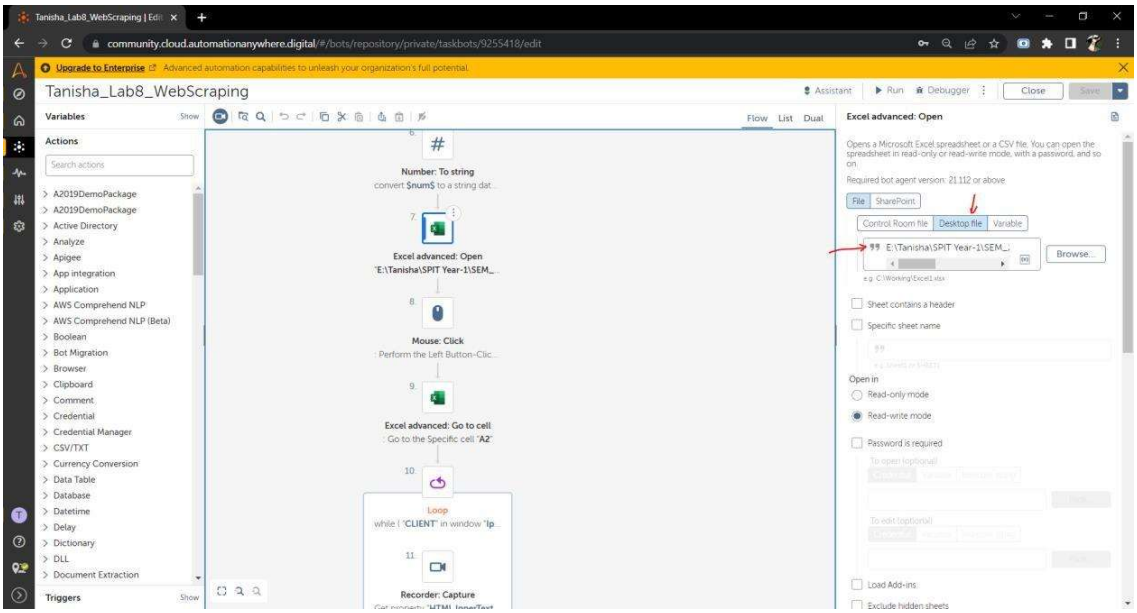
Step 4: Use number assign and set to 2 because the first product is sponsored > assign it to destination variable num



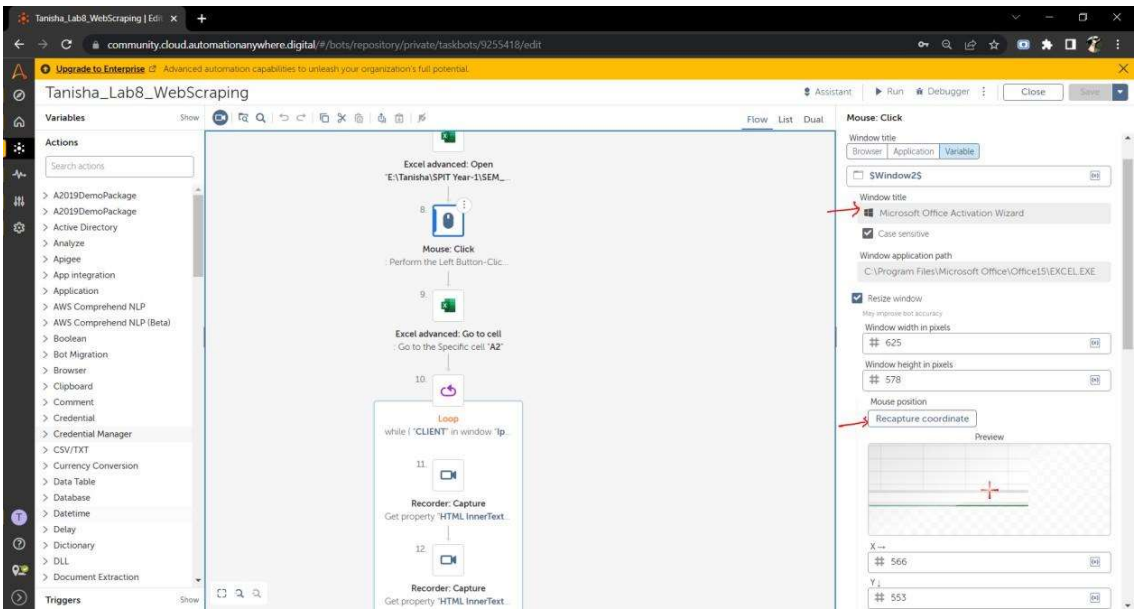
Step 5: use num string because automation anywhere needs string values to work on > convert the number from num to string



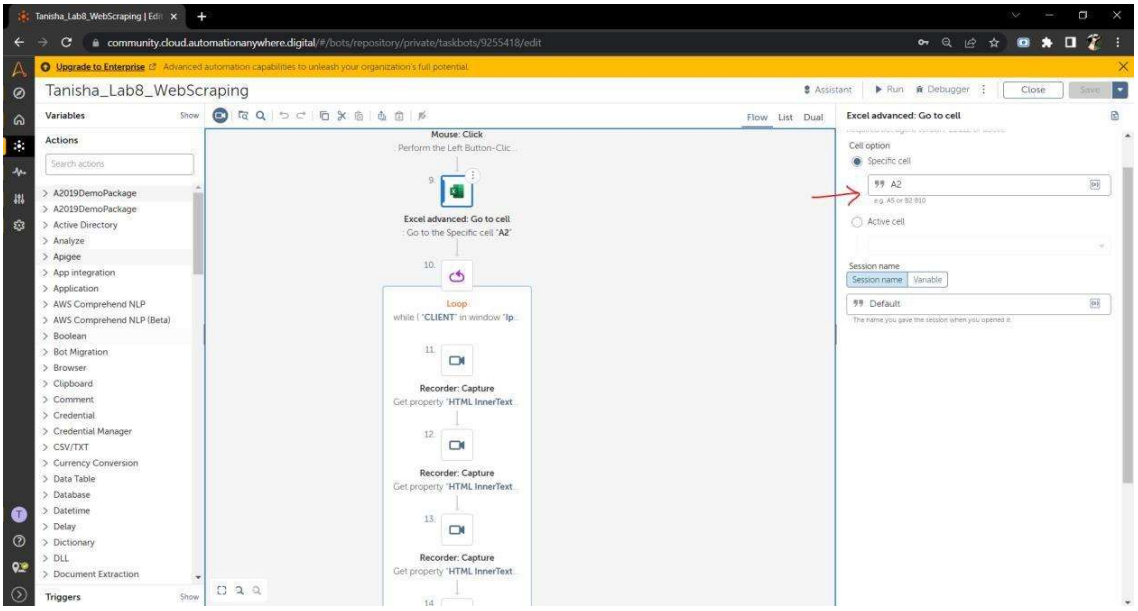
Step 6: Use excel open and specify the file path of the file



Step 7: use mouse click to close the Microsoft activation needed pop up

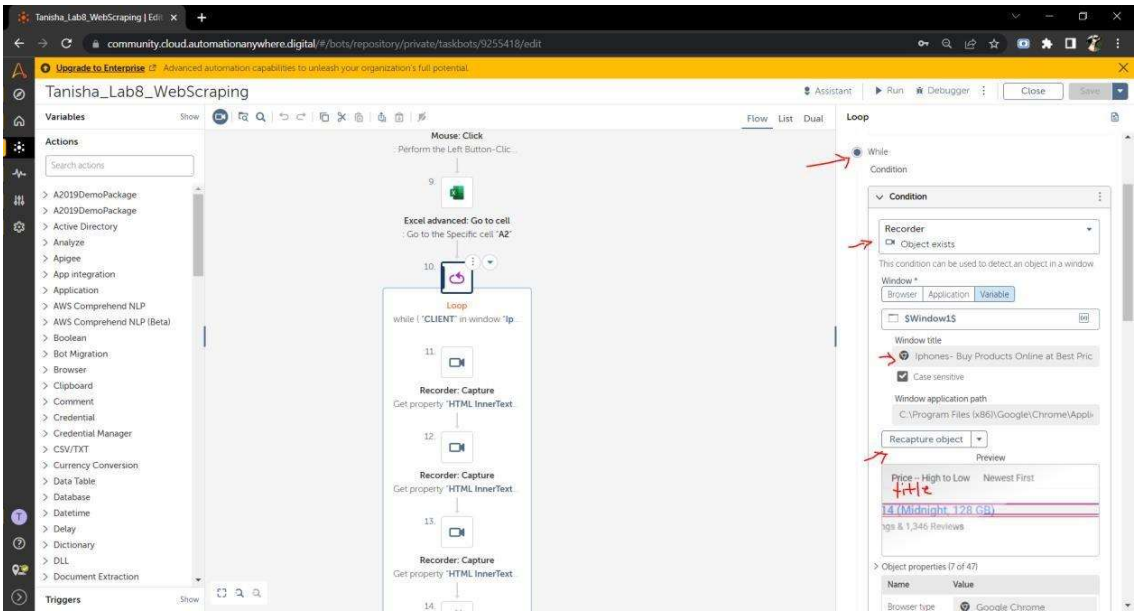


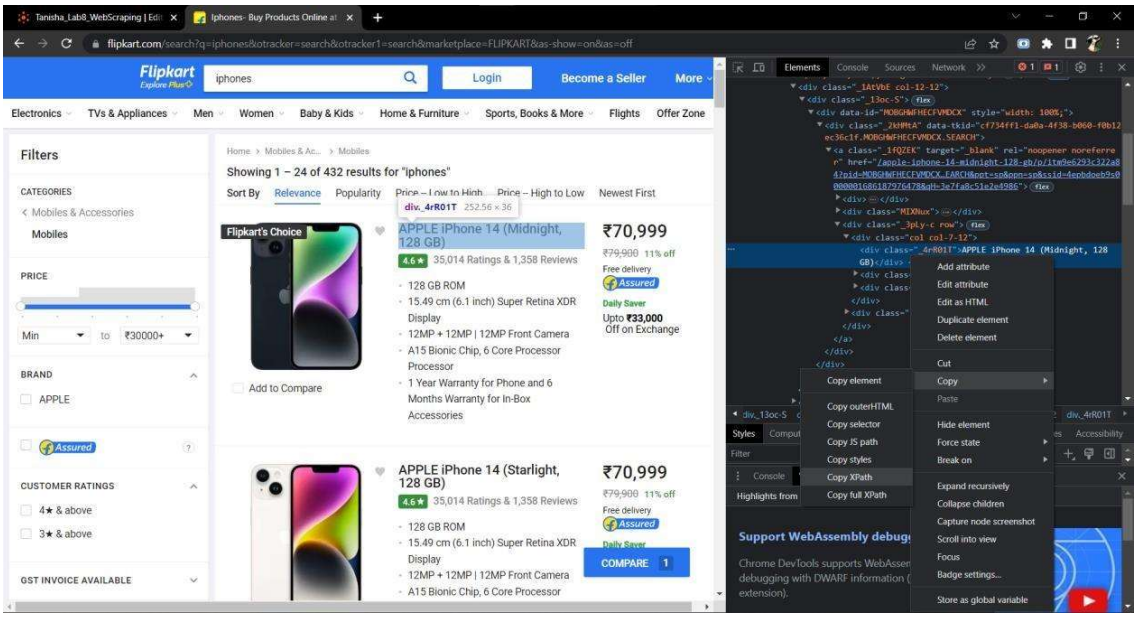
Step 8: in the excel sheet go to cell A2 where we will start writing the data

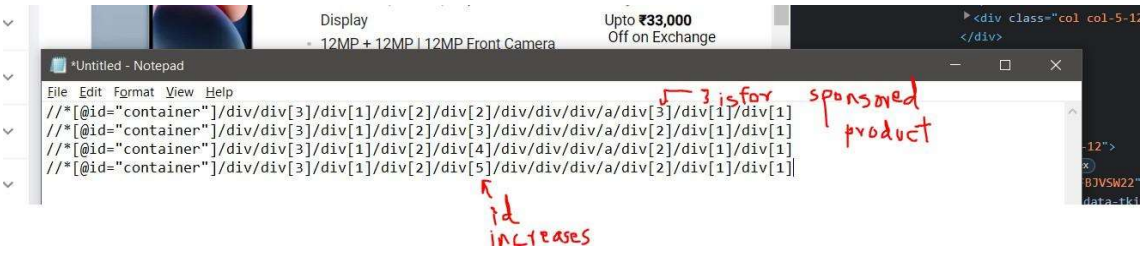


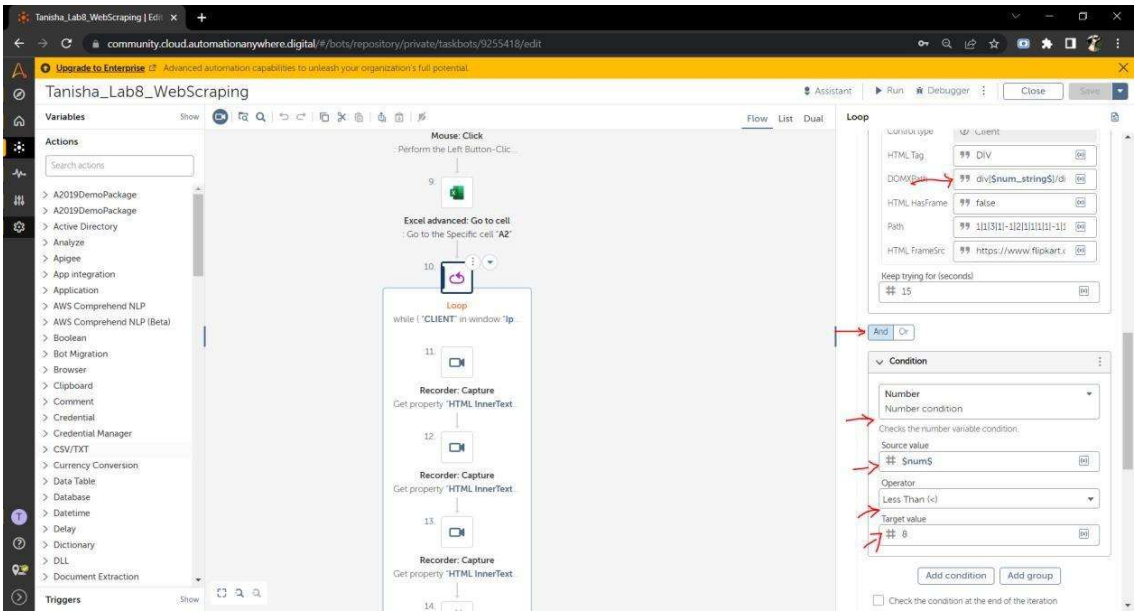
Step 9: use a loop > and select while condition > we will run this loop till we see if the recorder captured object i.w the title exists of each of the iphone > set the DOM Xpath of the product > right click on flipkart side > inspect > select desktop and arrow and hover on the title > right click and copy xpath > if we do that for 3-4 products we will see a pattern > increasing numbers

- select the xpath of unsponsored product and set it as num_string to iterate through the ids > add an AND and another condition and set number condition > set the num value to less than 8 so we can only copy items from 2 to 8 that is 5 items


Tanisha_Lab8_WebScraping
Variables
Actions
Mouse: Click
Excel advanced: Go to cell
Loop
Recorder: Capture
Condition
Recorder
Window title
Iphones- Buy Products Online at Best Pric
Recapture object
Price - High to Low
Newest First
title

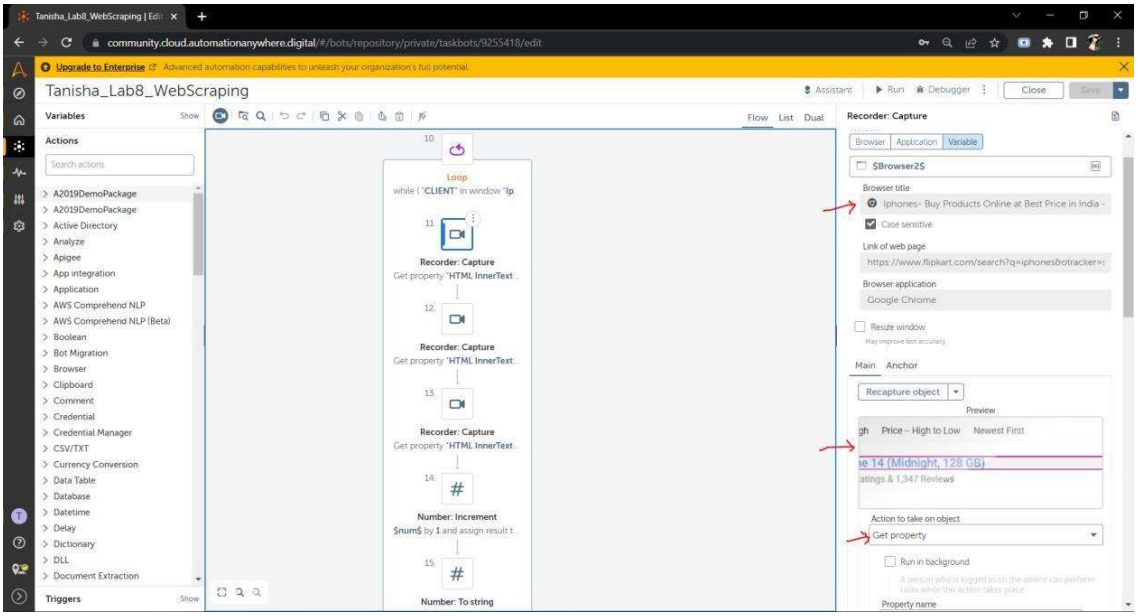

Flipkart
iphones
Login
Become a Seller
Filters
Showing 1 – 24 of 432 results for "iphones"
Sort By
Relevance
Popularity
Newest First
Flipkart's Choice
APPLE iPhone 14 (Midnight, 128 GB)
₹70,999
35,014 Ratings & 1,358 Reviews
128 GB ROM
15.49 cm (6.1 inch) Super Retina XDR Display
12MP + 12MP | 12MP Front Camera
A15 Bionic Chip, 6 Core Processor
Add to Compare
APPLE iPhone 14 (Starlight, 128 GB)
₹70,999
COMPARE 1
Elements
Console
Sources
Network
Add attribute
Edit attribute
Edit as HTML
Duplicate element
Delete element
Copy element
Copy
Paste
Copy outerHTML
Copy selector
Copy JS path
Copy styles
Copy XPath
Copy full XPath
Hide element
Force state
Break on
Expand recursively
Collapse children
Capture node screenshot
Scroll into view
Focus
Badge settings...
Store as global variable

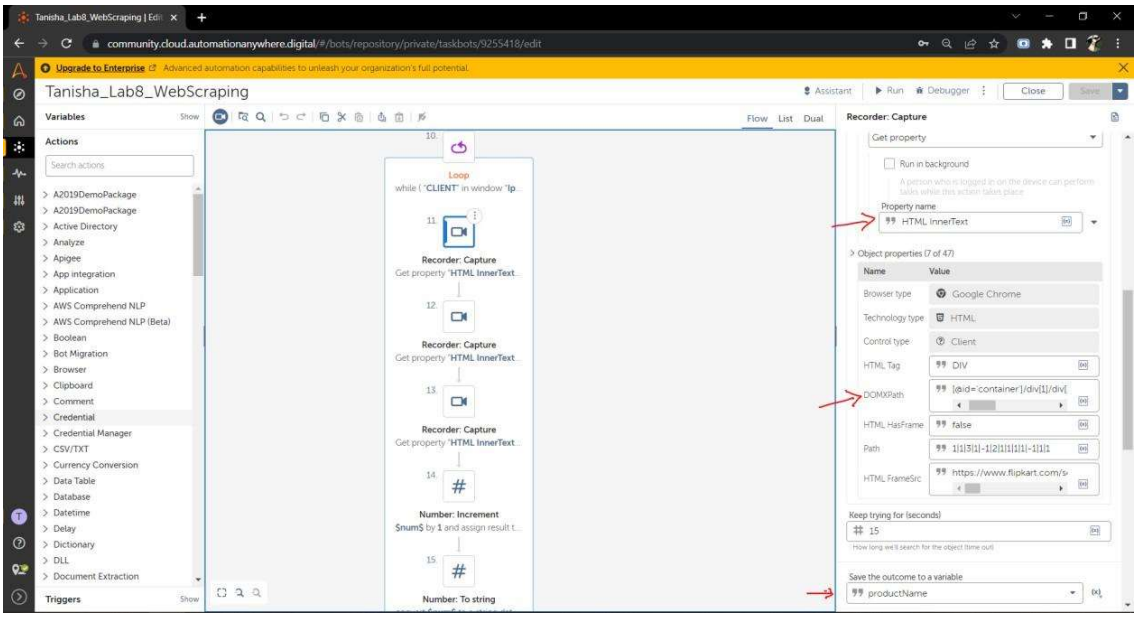

Display
12MP + 12MP | 12MP Front Camera
Upto ₹33,000
Off on Exchange
*Untitled - Notepad
File Edit Format View Help
//*[@id="container"]/div/div[3]/div[1]/div[2]/div[2]/div/div/div/a/div[3]/div[1]/div[1]
//*[@id="container"]/div/div[3]/div[1]/div[2]/div[3]/div/div/div/a/div[2]/div[1]/div[1]
//*[@id="container"]/div/div[3]/div[1]/div[2]/div[4]/div/div/div/a/div[2]/div[1]/div[1]
//*[@id="container"]/div/div[3]/div[1]/div[2]/div[5]/div/div/div/a/div[2]/div[1]/div[1]
3 is for
sponsored product
id increases



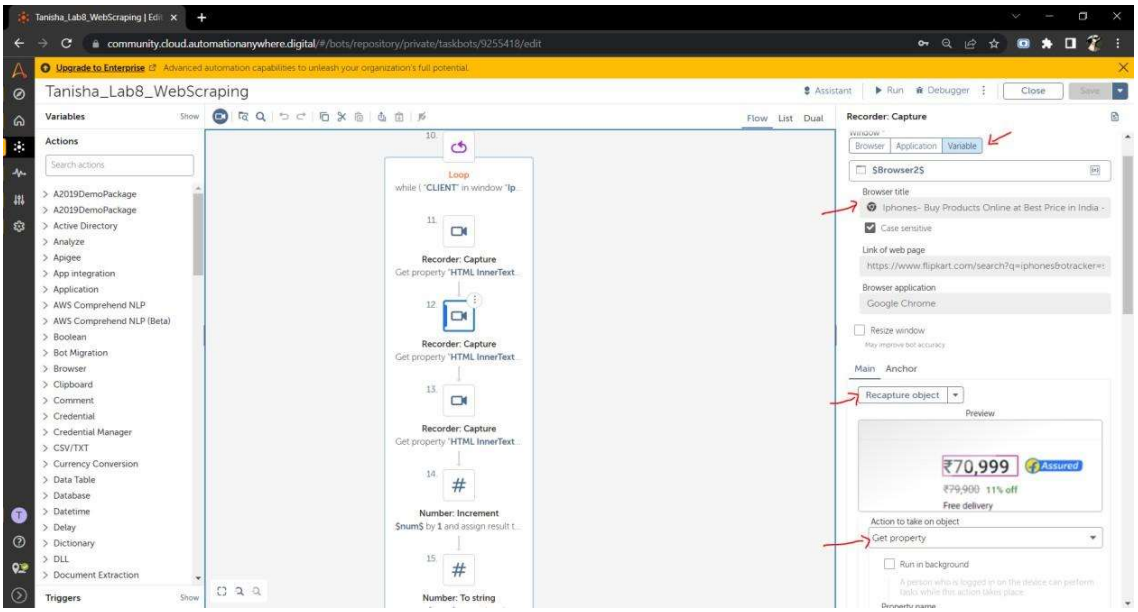
Step 10: take recorder capture > set the browser > capture the title object because we want to fetch that first > select action to take as get property > set property name as HTML InnerText

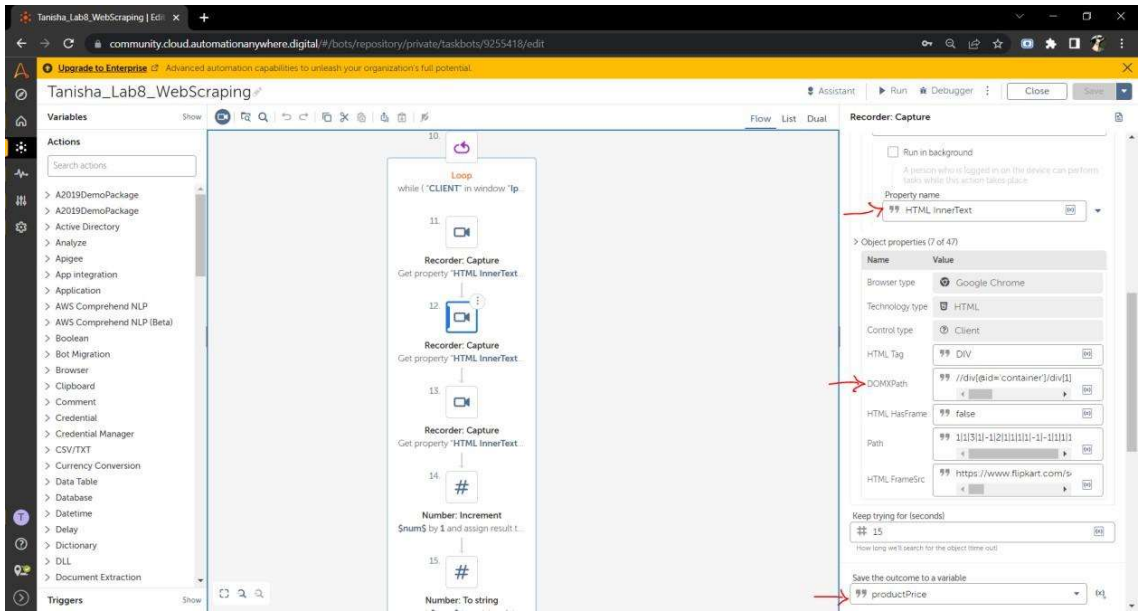
- set the DOMXpath by inspecting and capturing of the sponsored item and paste it > set the output to a string variable (create it) > this will fetch the name using x path and store it in the string variable



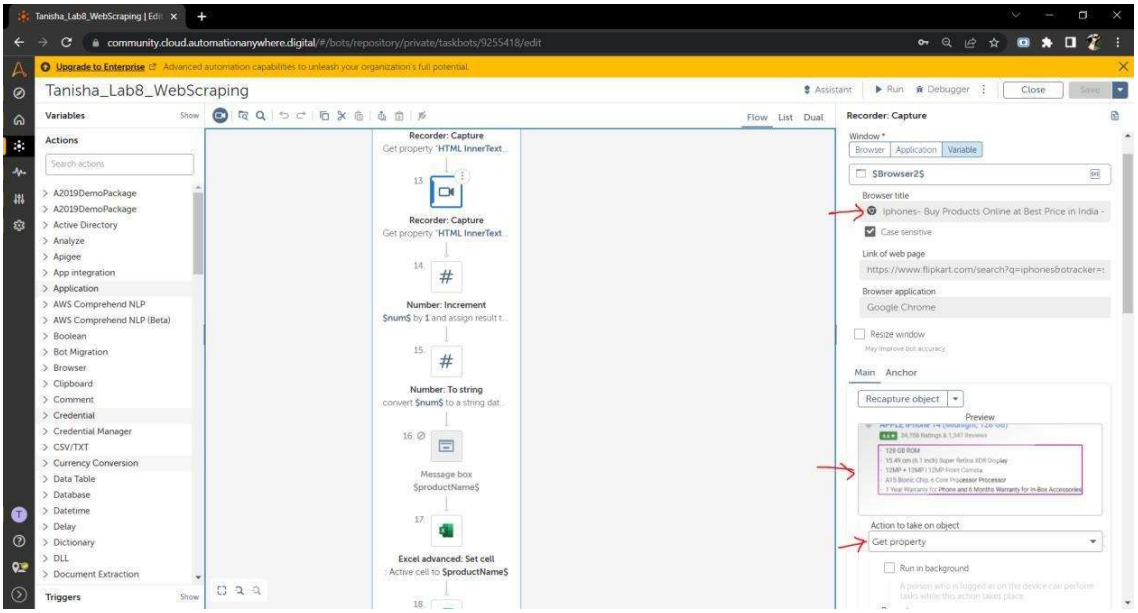


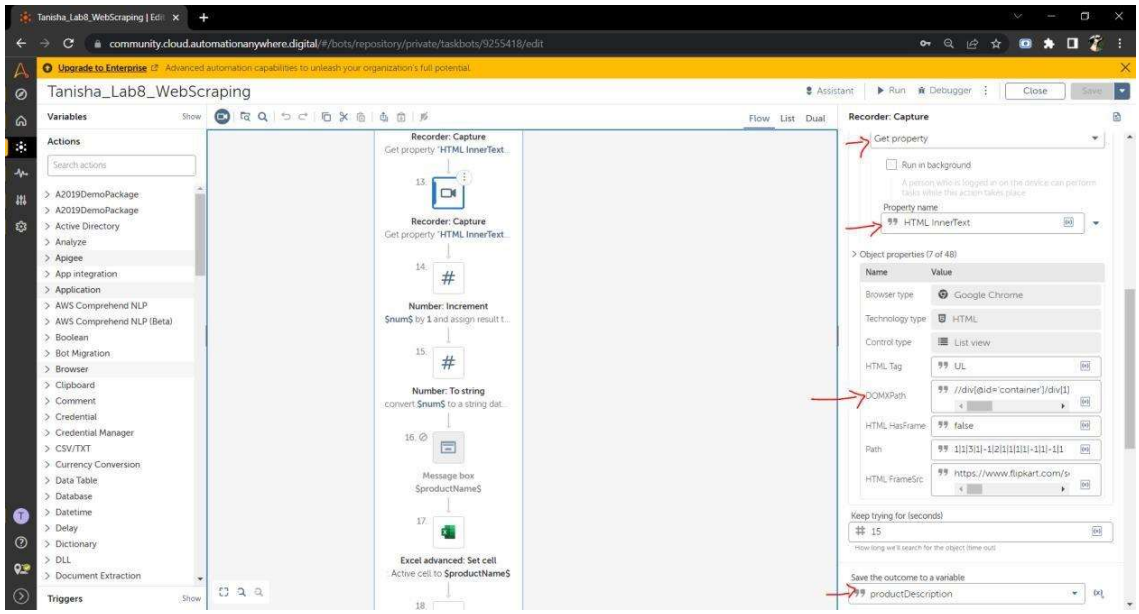
Step 11: capture price and again set its xpath using inspect and copying sponsored item's xpath > store the output in a string variable (create it)



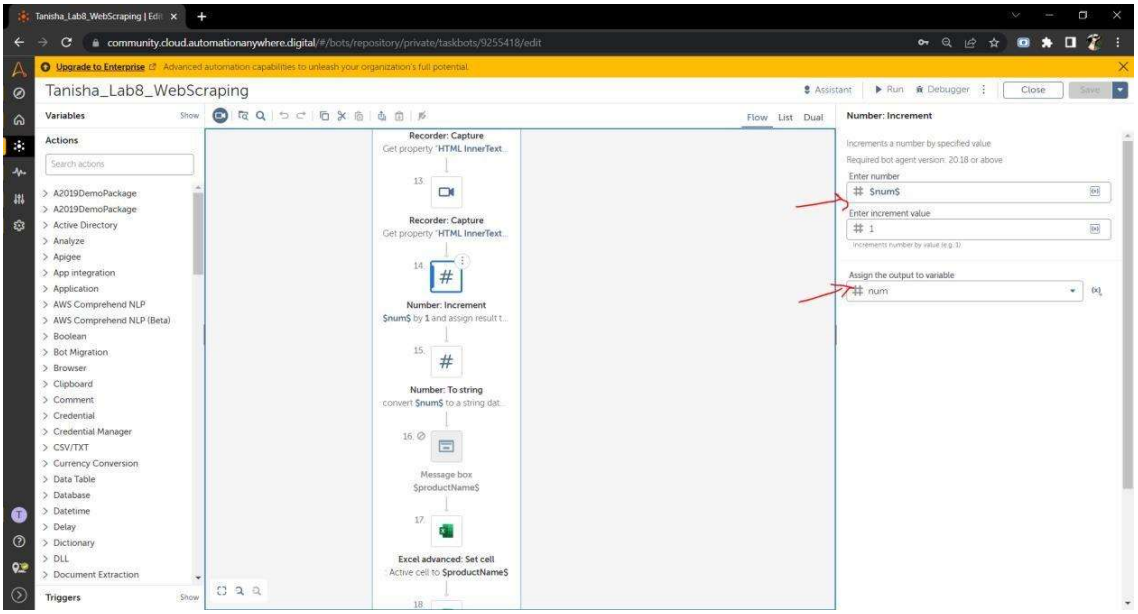


Step 12: repeat the same step as the previous one but for product description

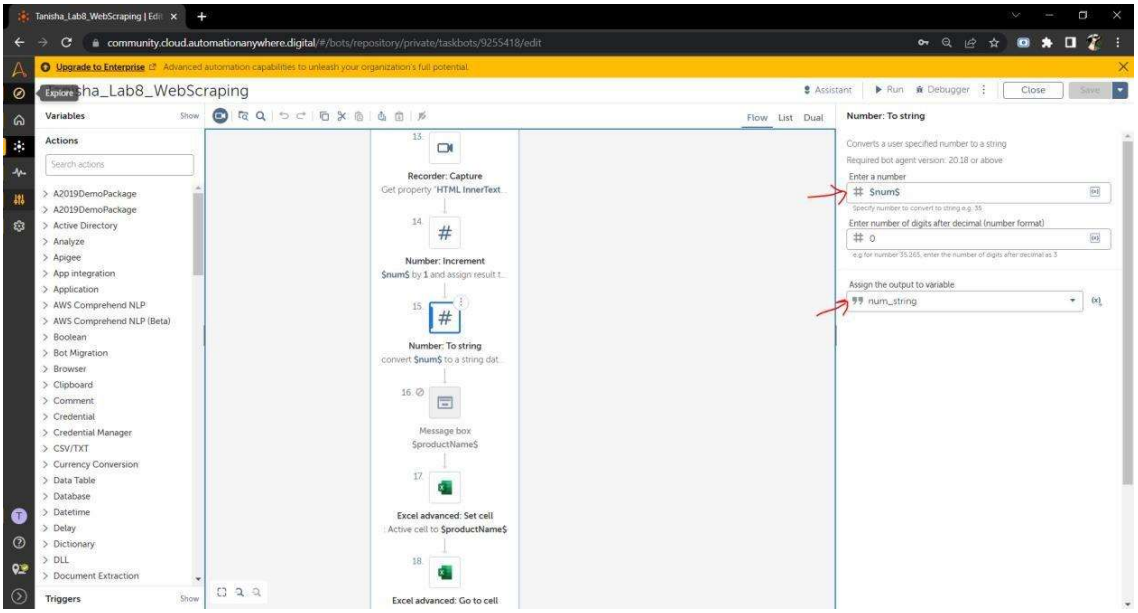




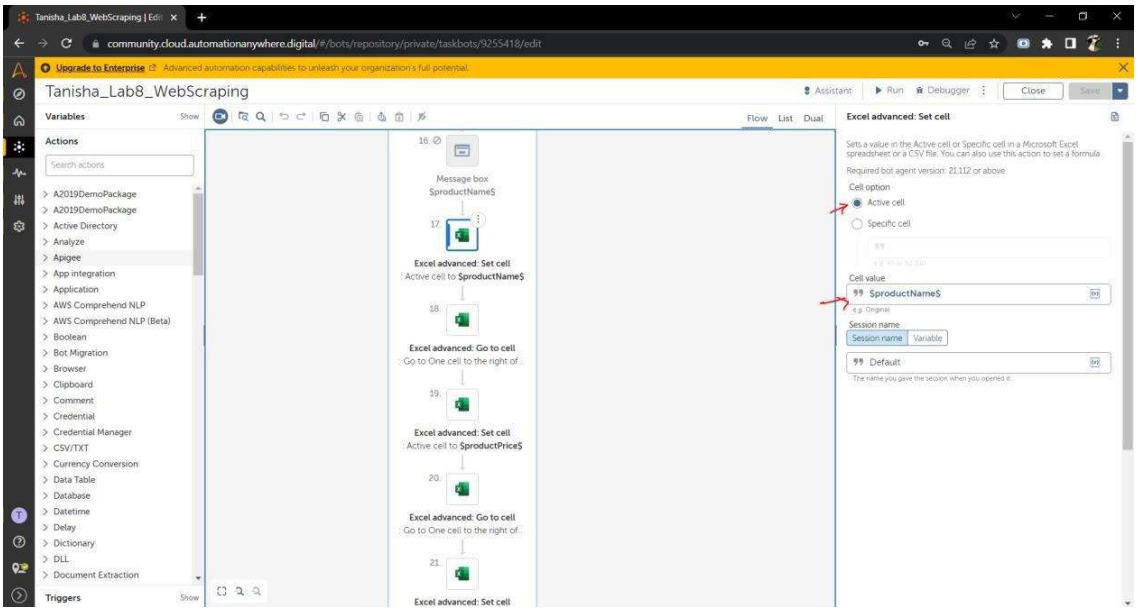
Step 13: use number increment to increment through the loop



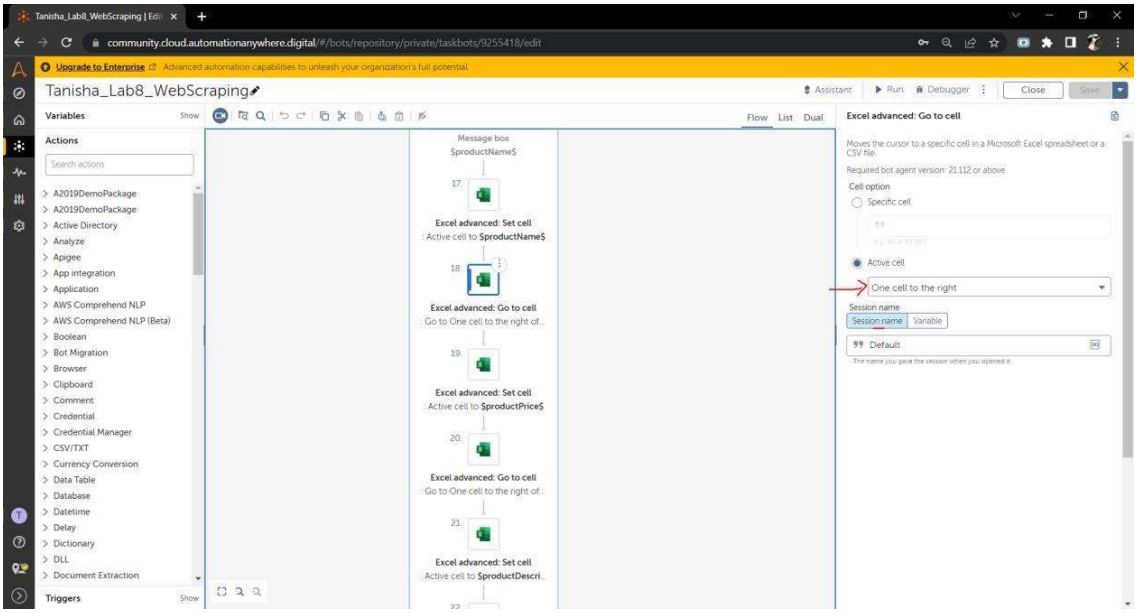
Step 14: use num to string to convert number to string because automation anywhere cannot read number values



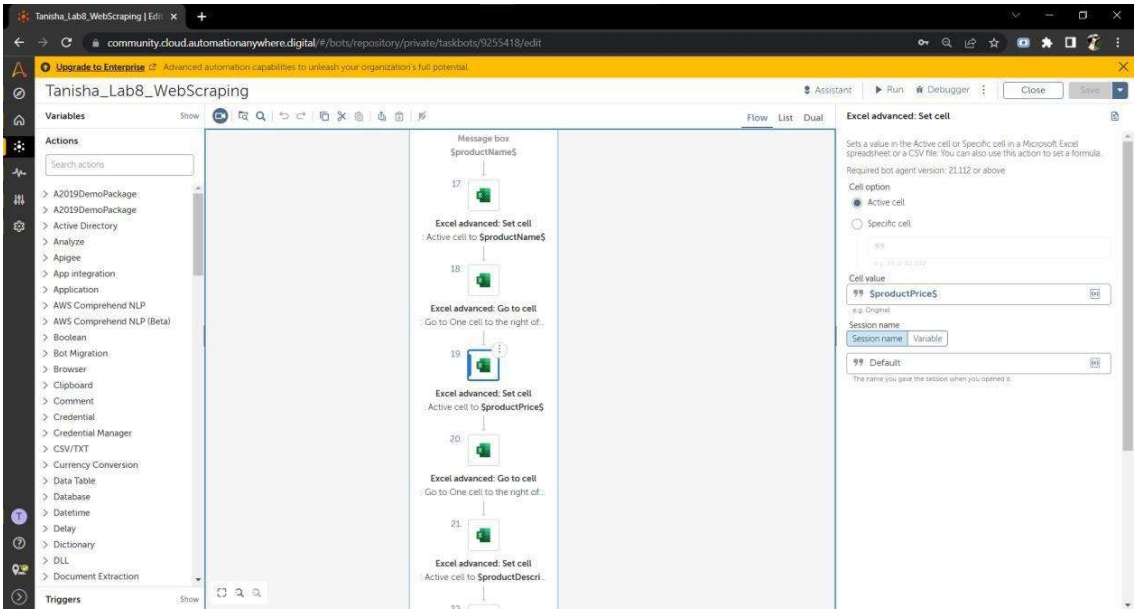
Step 15: Since we are on cell A2 as specified in step 8 (action 9) > on the active cell print productName



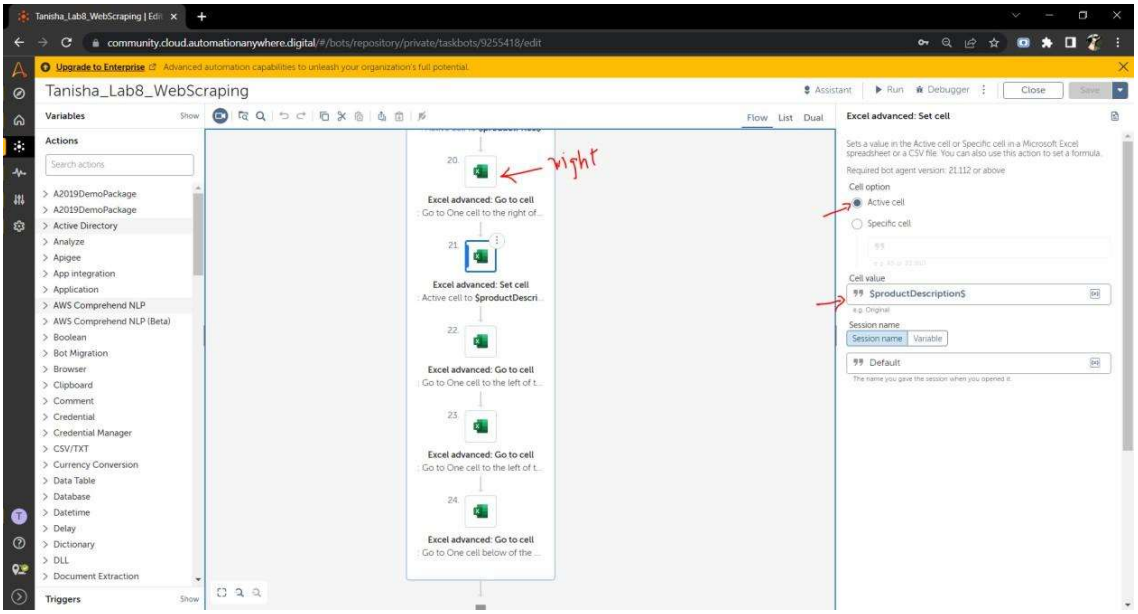
Step 16: use go to cell > set active cell > on cell to the right to move to next cell so that we can print the product



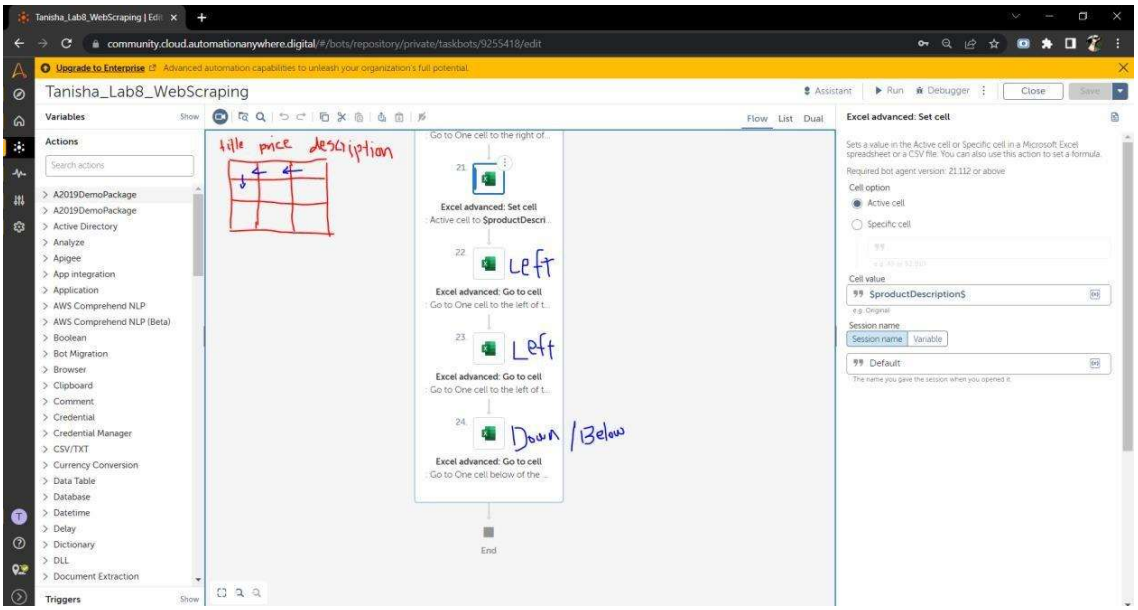
Step 17: set cell product price and use another go to cell > one cell to the right



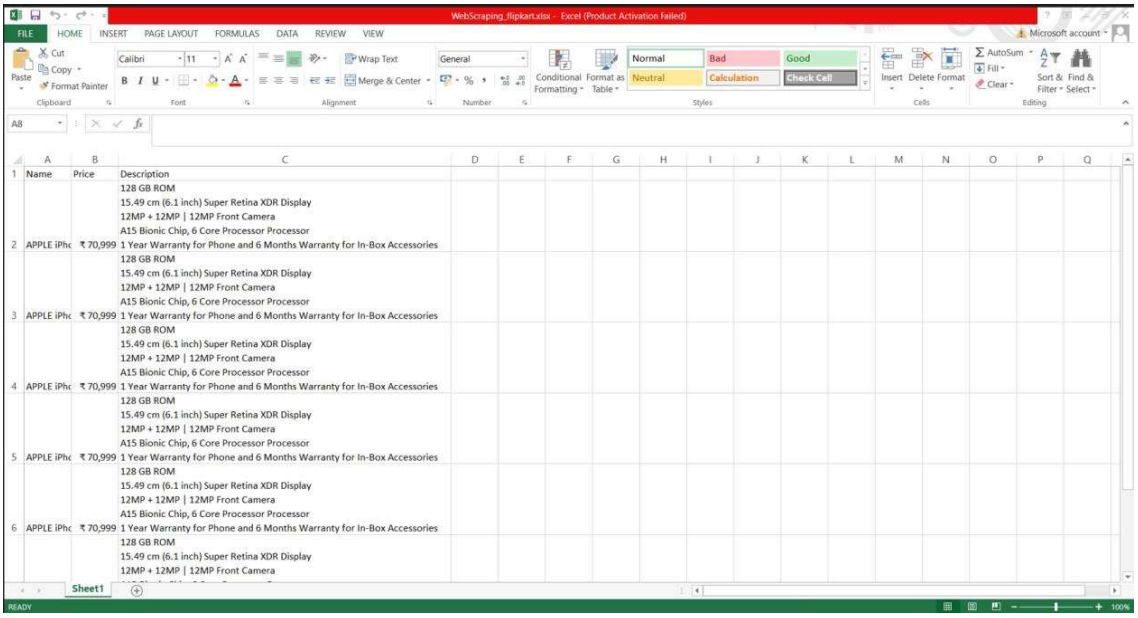
Step 18: set cell > print product description



Step 19: use 3 go to cell and go to left - left – below to print the details of the next product



OUTPUT:



	Name	Price	Description
1			128 GB ROM 15.49 cm (6.1 inch) Super Retina XDR Display 12MP + 12MP | 12MP Front Camera A15 Bionic Chip, 6 Core Processor Processor
2	APPLE iPhc	₹ 70,999	1 Year Warranty for Phone and 6 Months Warranty for In-Box Accessories 128 GB ROM 15.49 cm (6.1 inch) Super Retina XDR Display 12MP + 12MP | 12MP Front Camera A15 Bionic Chip, 6 Core Processor Processor
3	APPLE iPhc	₹ 70,999	1 Year Warranty for Phone and 6 Months Warranty for In-Box Accessories 128 GB ROM 15.49 cm (6.1 inch) Super Retina XDR Display 12MP + 12MP | 12MP Front Camera A15 Bionic Chip, 6 Core Processor Processor
4	APPLE iPhc	₹ 70,999	1 Year Warranty for Phone and 6 Months Warranty for In-Box Accessories 128 GB ROM 15.49 cm (6.1 inch) Super Retina XDR Display 12MP + 12MP | 12MP Front Camera A15 Bionic Chip, 6 Core Processor Processor
5	APPLE iPhc	₹ 70,999	1 Year Warranty for Phone and 6 Months Warranty for In-Box Accessories 128 GB ROM 15.49 cm (6.1 inch) Super Retina XDR Display 12MP + 12MP | 12MP Front Camera A15 Bionic Chip, 6 Core Processor Processor
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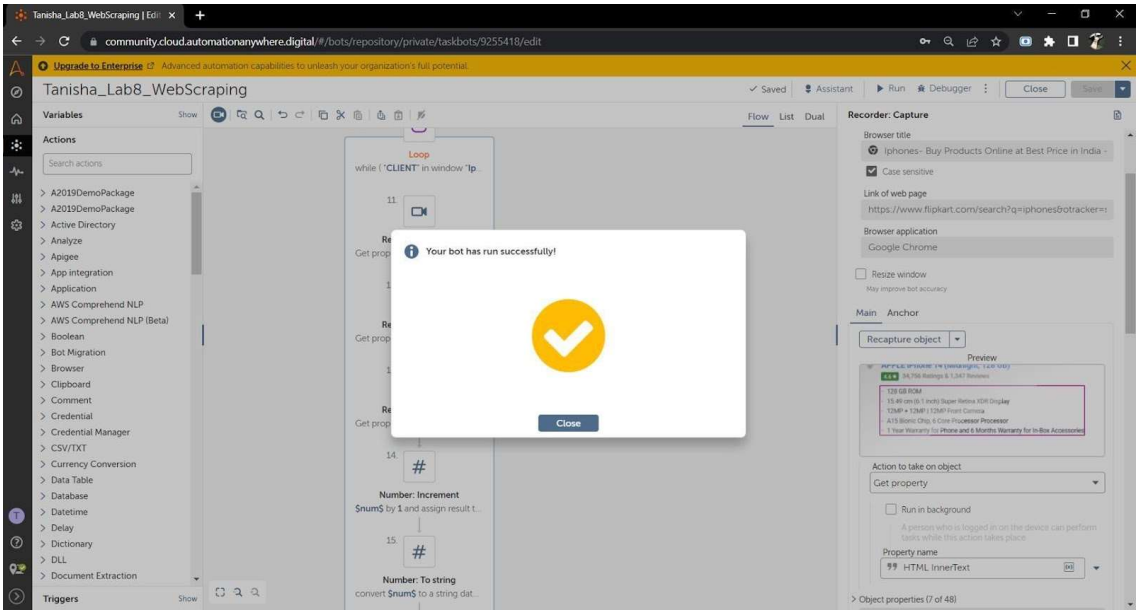

CONCLUSION:

We have learnt how to perform web scraping and extract data from the website and store it in a excel file. We have used the Xpath of the document object model of HTML to fetch and iterate through the data. We have used actions like go to cell, excel open, set cell, num increment, num to string, num assign, recorder capture, loop, browser open, simulate keystrokes and mouse click. Successful extraction of the data is done.