Date		EXP.N0.		Page No.	

Problem Statement: Download and install selenium and setup the environment using the pycharm.
Aim: To Download and install selenium and setup the environment using the pycharm.
Description:
Selenium is an open-source tool that automates web browsers. It provides a single interface that lets you write test scripts in programming languages like Ruby, Java, NodeJS, PHP, Perl, Python, and C#, among others.
Selenium WebDriver is a web framework that permits you to execute cross-browser tests. This tool is used for automating web-based application testing to verify that it performs expectedly. Selenium WebDriver allows you to choose a programming language to create test scripts.
Procedure:
1.Install Python in your system.
2.Install selenium.
3.Install web drivers.
4.Install pycharm.
Install selenium:
1.Open terminal (cmd)
2.type the following command
3.pip install selenium

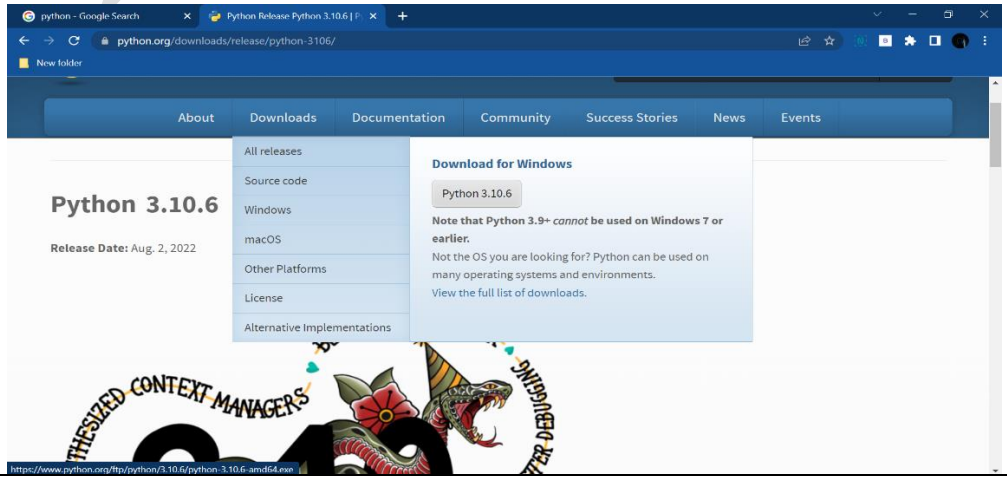
Install web drivers:
Selenium requires a driver to interface with the chosen browser.

supported browsers will have their own drivers available. Links to some of the more popular browser drivers follow.

Chrome:	https://sites.google.com/chromium.org/driver/
Edge:	https://developer.microsoft.com/en-us/microsoft-edge/tools/webdriver/
Firefox:	https://github.com/mozilla/geckodriver/releases
Safari:	https://webkit.org/blog/6900/webdriver-support-in-safari-10/

Install pycharm:
1.Download pycharm community application from jetbrains.com/pycharm/download/windows
2.Install the pycharm.exe and complete the installation process.
3.open the pycharm application setup the project.
4.In pycharm open terminal and run the command: pip install selenium
5.Now create project and perform the selenium tests.

Output:
Python install



Install Selenium

```
Command Prompt
Microsoft Windows [Version 10.0.22610.1]
(c) Microsoft Corporation. All rights reserved.

C:\Users\sandu>pip install selenium
Requirement already satisfied: selenium in c:\programdata\anaconda3\lib\site-packages (4.3.0)
Requirement already satisfied: trio~=0.17 in c:\programdata\anaconda3\lib\site-packages (from selenium) (0.21.0)
Requirement already satisfied: urllib3[secure,socks]~=1.26 in c:\programdata\anaconda3\lib\site-packages (from seleniur
Requirement already satisfied: trio-websocket~=0.9 in c:\programdata\anaconda3\lib\site-packages (from selenium) (0.9.
Requirement already satisfied: sortedcontainers in c:\programdata\anaconda3\lib\site-packages (from trio~=0.17->seleni
Requirement already satisfied: attrs>=19.2.0 in c:\programdata\anaconda3\lib\site-packages (from trio~=0.17->selenium)
Requirement already satisfied: async-generator>=1.9 in c:\programdata\anaconda3\lib\site-packages (from trio~=0.17->se
Requirement already satisfied: idna in c:\programdata\anaconda3\lib\site-packages (from trio~=0.17->selenium) (3.2)
Requirement already satisfied: outcome in c:\programdata\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.2.
Requirement already satisfied: sniffio in c:\programdata\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.2.
Requirement already satisfied: cffi>=1.14 in c:\programdata\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1
Requirement already satisfied: pycparser in c:\programdata\anaconda3\lib\site-packages (from cffi>=1.14->trio~=0.17->s
Requirement already satisfied: wsproto>=0.14 in c:\programdata\anaconda3\lib\site-packages (from trio-websocket~=0.9->
Requirement already satisfied: PySocks!=1.5.7,<2.0,>=1.5.6 in c:\programdata\anaconda3\lib\site-packages (from urllib3
Requirement already satisfied: pyOpenSSL>=0.14 in c:\programdata\anaconda3\lib\site-packages (from urllib3[secure,socks
Requirement already satisfied: cryptography>=1.3.4 in c:\programdata\anaconda3\lib\site-packages (from urllib3[secure,
Requirement already satisfied: certifi in c:\programdata\anaconda3\lib\site-packages (from urllib3[secure,socks]~=1.26
Requirement already satisfied: six>=1.5.2 in c:\users\sandu\appdata\roaming\python\python39\site-packages (from pyOpens
Requirement already satisfied: h11<1,>=0.9.0 in c:\programdata\anaconda3\lib\site-packages (from wsproto>=0.14->trio-we

C:\Users\sandu>
```

Install Webdrivers

chromedriver.storage.googleapis.com/index.html?path=105.0.5195.19/

New folder

Index of /105.0.5195.19/

Name	Last modified	Size	ETag
Parent Directory		-	
chromedriver_linux64.zip	2022-08-08 09:16:09	6.15MB	b3944a67d3dd6f9369cec74c1cc69c41
chromedriver_mac64.zip	2022-08-08 09:16:11	8.07MB	43d4460f63ef5bc8a5e711aff5ca00e3
chromedriver_mac64_m1.zip	2022-08-08 09:16:14	7.46MB	70f5243170812fe88f53e4502e03fb10
chromedriver_win32.zip	2022-08-08 09:16:16	6.24MB	eff85de8df53272a1e18ab65fdcbebf5
notes.txt	2022-08-08 09:16:22	0.00MB	5c39d0751819d261ae8b2072976494dd

Install Pycharm

pycharm - Google Search | Download PyCharm: Python IDE

jetbrains.com/pycharm/download/#section=windows

New folder

PyCharm

What's New Features Learn Pricing Download

Download PyCharm

Windows macOS Linux

Version: 2022.2
Build: 222.3345.131
28 July 2022

System requirements
Installation instructions
Other versions

Professional

For both Scientific and Web Python development. With HTML, JS, and SQL support.

Download

Free 30-day trial available

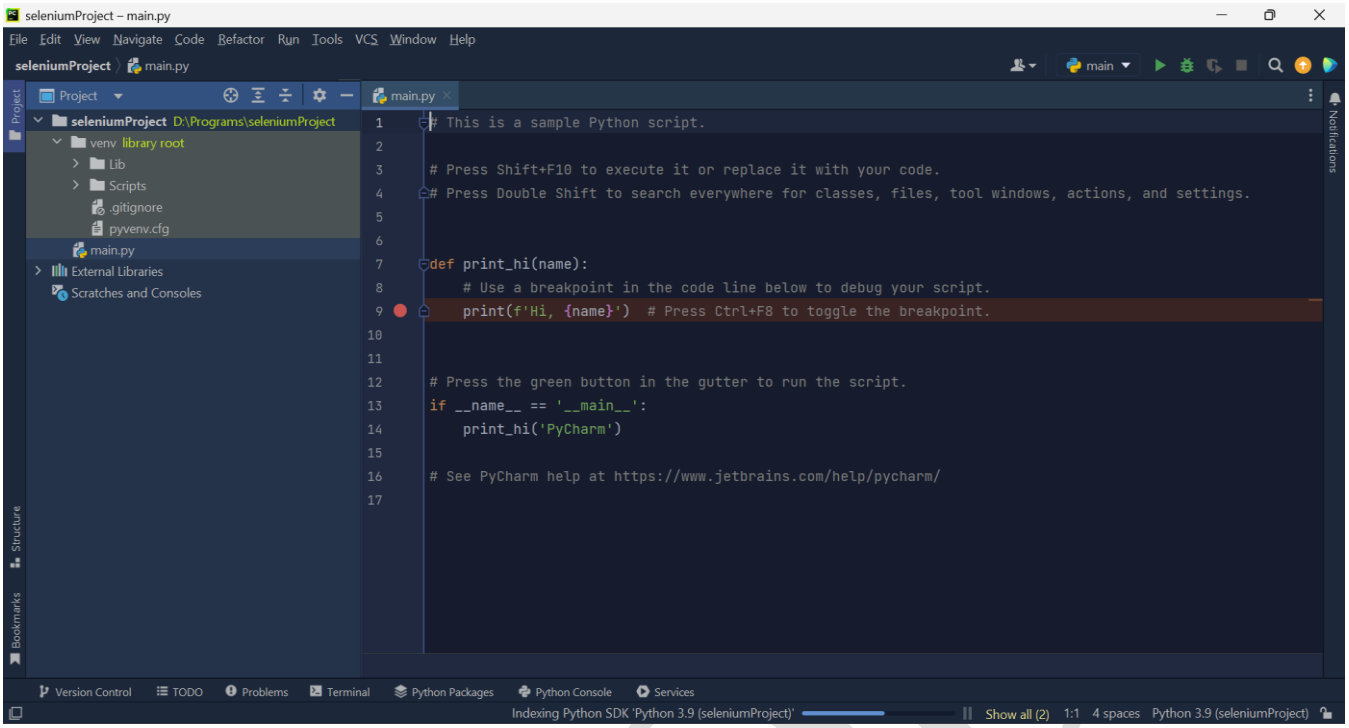
Community

For pure Python development

Download

Free, built on open-source

Date		EXP.N0.		Page No.	



Results:

Download and install selenium and setup the environment using the pycharm was completed successfully.

Date		EXP.N0.		Page No.	

Problem Statement: Automate a web browser to capture title of the page, URL of the page using selenium.

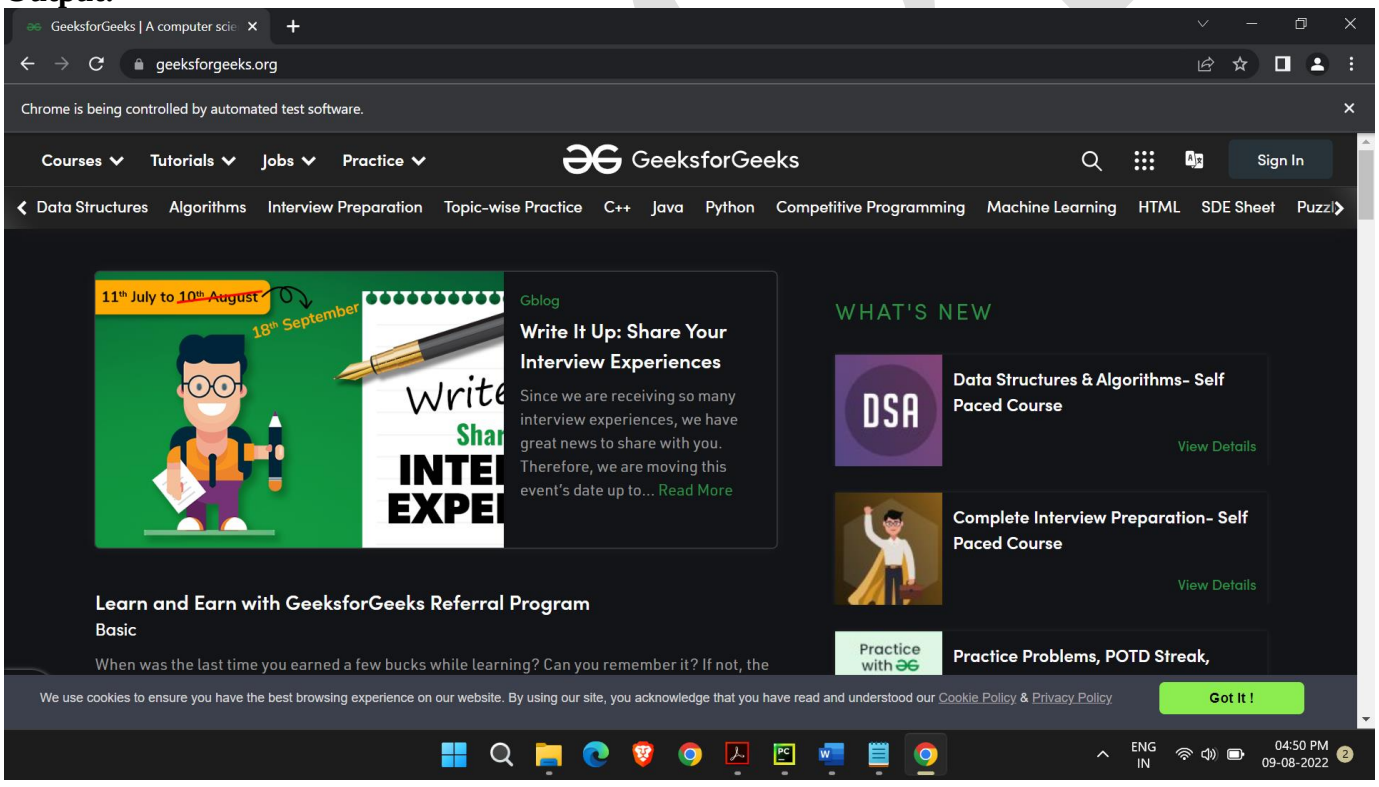
Aim: To Automate a web browser
1.to capture title of the page
2.to get URL of the page using selenium.

Procedure:
1.open pycharm application
2.Import the required libraries.
3.write the code for the problem statement.
4.test the code.

Program code:

```
from selenium import webdriver
from selenium.webdriver.common import keys
import time

driver=webdriver.Chrome(executable_path="C:\Drivers\chromedriver_win32\chromedriver.exe")
driver.get("https://www.geeksforgeeks.org/")
driver.maximize_window()
print(driver.title)
print(driver.current_url)
time.sleep(3)
driver.close()
```

Output:



GeeksforGeeks | A computer science portal for geeks
https://www.geeksforgeeks.org/

Results:

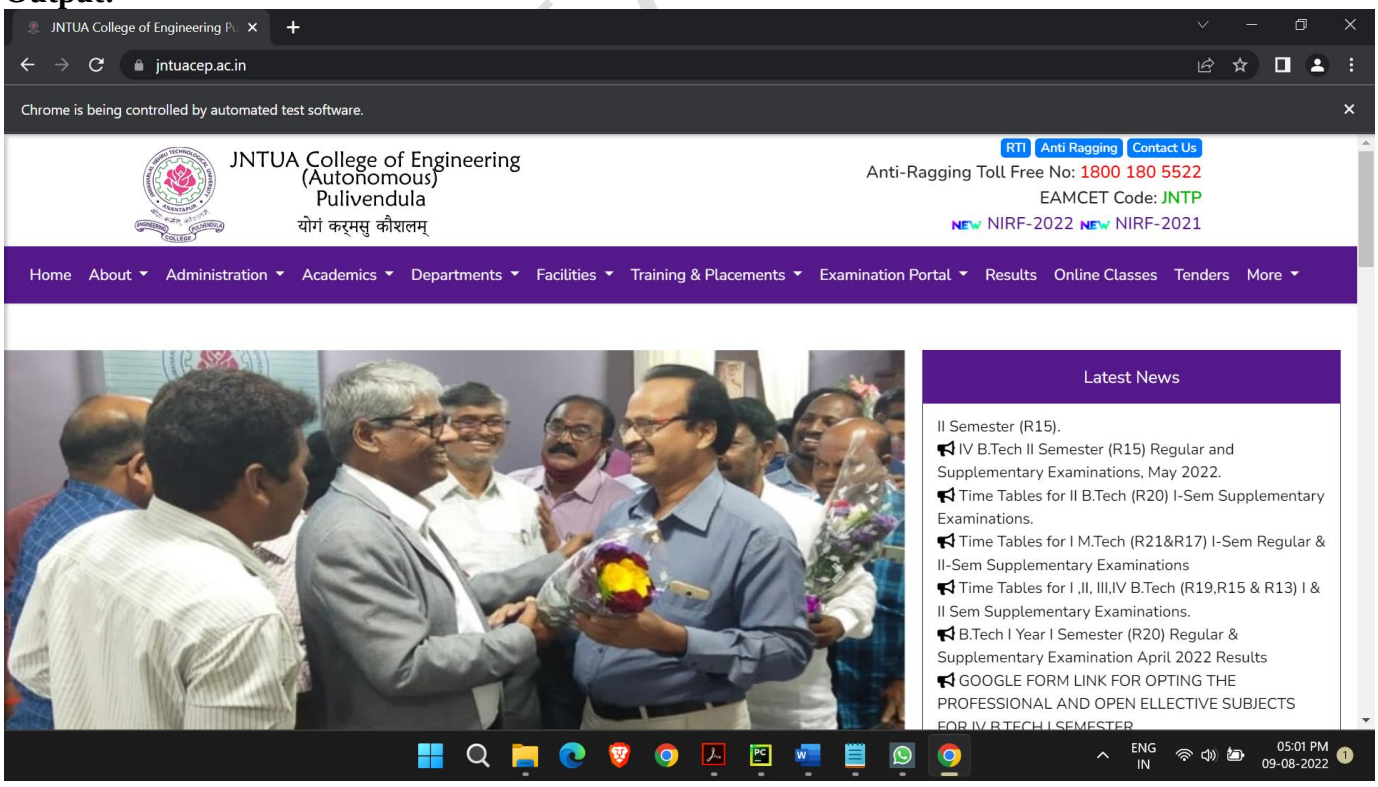
Automation of a web browser to capture title of the page, URL of the page using selenium was completed successfully.

Date		EXP.N0.		Page No.	

Problem Statement: Automate a web browser to test for Title matching with selenium tool.
Aim: To Automate a web browser to test for Title matching with selenium tool.
Procedure:
1.open pycharm application
2.Import the required libraries.
3.write the code for the problem statement.
4.test the code.
Program code:

```
from selenium import webdriver
from selenium.webdriver.chrome.service import Service
from selenium.webdriver.common.by import By
import time

serv_obj = Service("C:\Drivers\chromedriver_win32\chromedriver.exe")
driver = webdriver.Chrome(service=serv_obj)
driver.get("https://jntuacep.ac.in/")
driver.maximize_window()
actualTitle = driver.title
expectedTitle="JNTUA College of Engineering Pulivendula"
time.sleep(3)

if (actualTitle == expectedTitle):
   print("title matched")
else:
   print("title not matched")

driver.quit()
```

Output:



title matched

Results:

Automation of a web browser to test for Title matching with selenium tool was completed successfully.

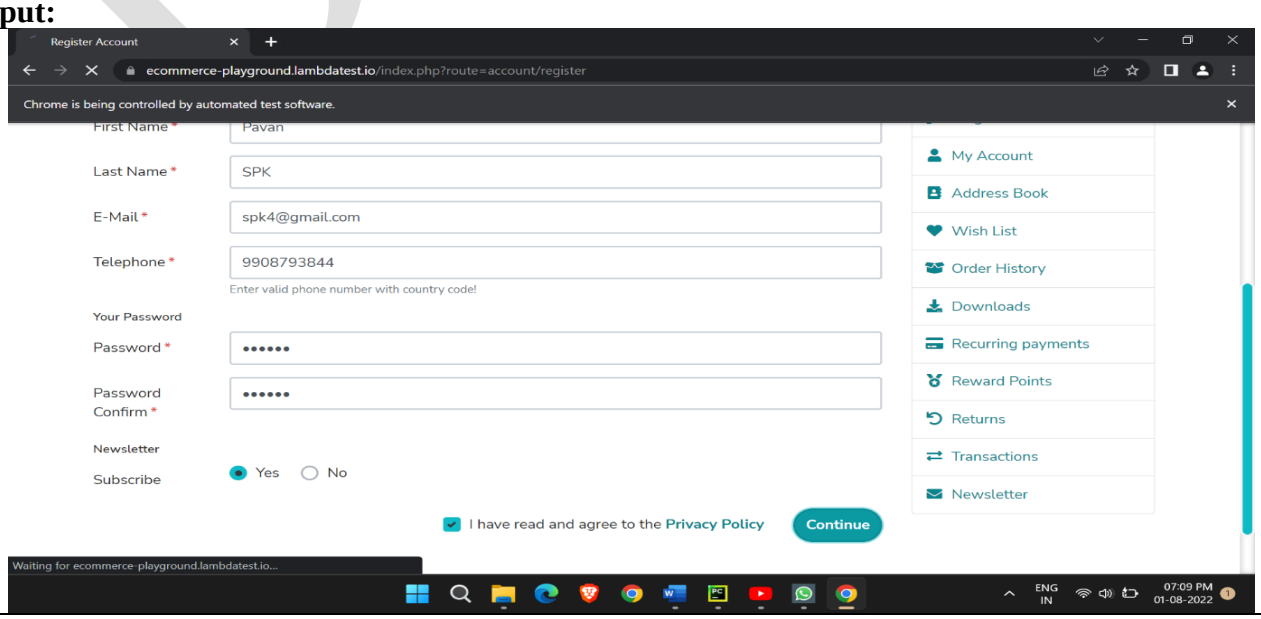
Date		EXP.N0.		Page No.	

Problem Statement: Automate a web browser for filling the web forms with selenium tool.
Aim: To Automate a web browser for filling the web forms with selenium tool.
Procedure:
1.open pycharm application
2.Import the required libraries.
3.write the code for the problem statement.
4.test the code.

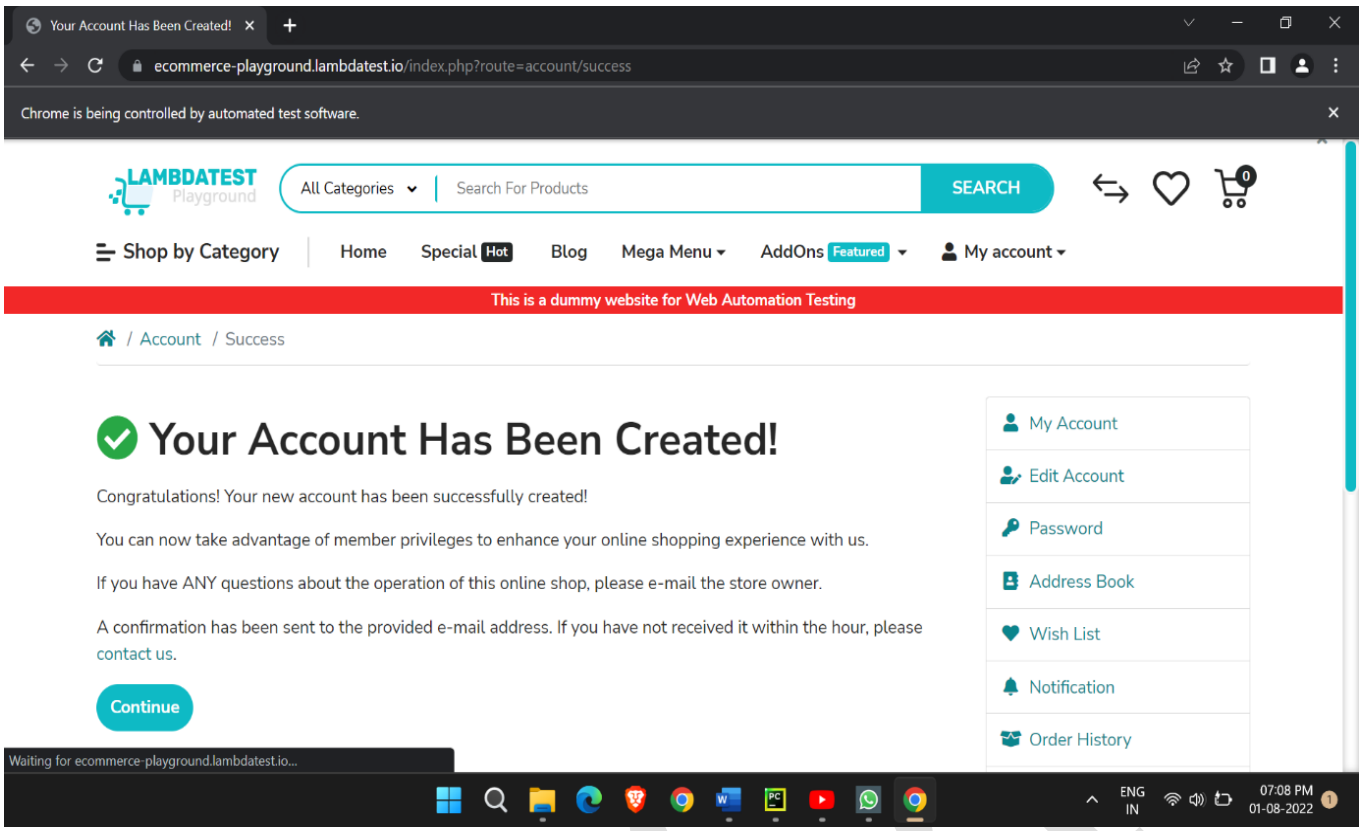
Program code:

```
from selenium import webdriver
from selenium.webdriver.common.by import By
import time

driver=webdriver.Chrome(executable_path="C:\Drivers\chromedriver_win32\chromedriver.exe")

driver.get("https://ecommerce-playground.lambdatest.io/index.php?route=account/register")

inputboxes=driver.find_element(By.CLASS_NAME,'form-control')
driver.find_element(By.ID,'input-firstname').send_keys("Pavan")
driver.find_element(By.ID,'input-lastname').send_keys("SPK")
driver.find_element(By.ID,'input-email').send_keys("spk4@gmail.com")
driver.find_element(By.ID,'input-telephone').send_keys("9908793844")
driver.find_element(By.ID,'input-password').send_keys("123321")
driver.find_element(By.ID,'input-confirm').send_keys("123321")
newsletter = driver.find_element(By.XPATH, value="//label[@for='input-newsletter-yes']")
newsletter.click()
terms = driver.find_element(By.XPATH, value="//label[@for='input-agree']")
terms.click()

continue_button = driver.find_element(By.XPATH, value="//input[@value='Continue']")
continue_button.click()
continue_button = driver.find_element(By.XPATH, value="//input[@value='Continue']")
continue_button.click()

assert browser.title == "Your Account Has Been Created!"
time.sleep(10)
driver.close()
```

Output:



Date		EXP.N0.		Page No.	



Your Account Has Been Created!

Results:

Automation of a web browser for filling the web forms with selenium tool was completed successfully.

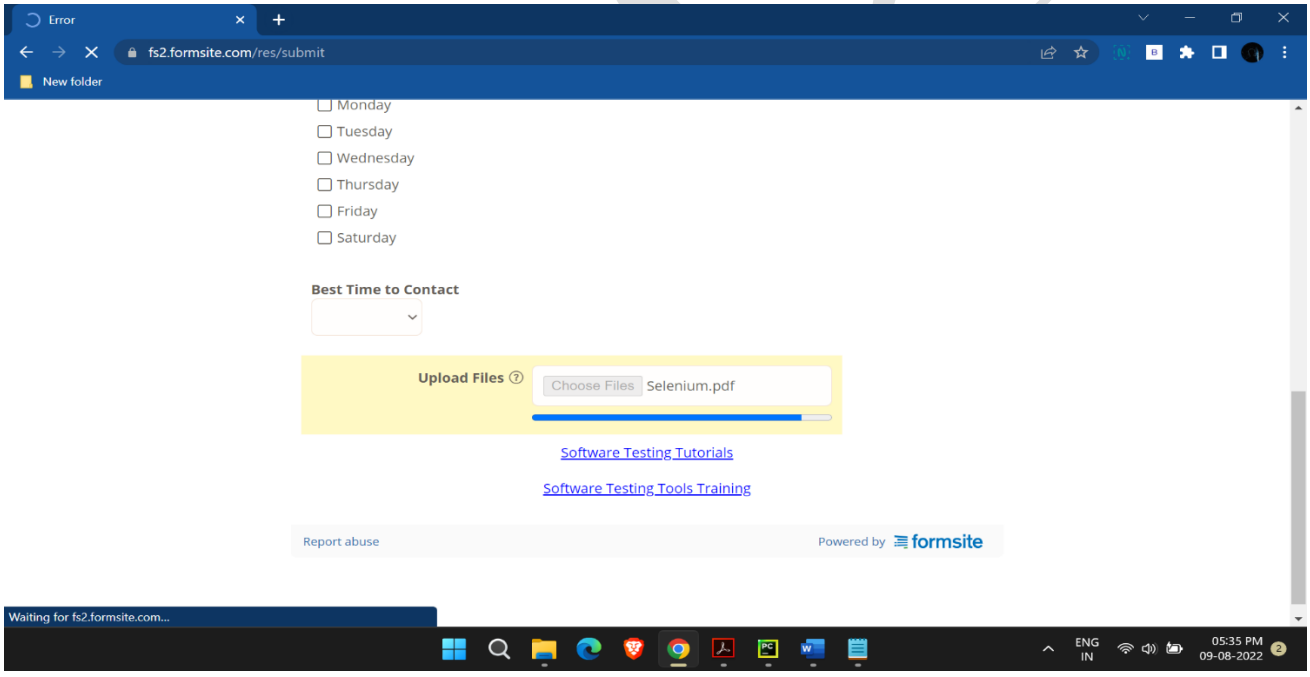
Date		EXP.N0.		Page No.	

Problem Statement: Automate a web browser to upload a file in web forms using selenium tool.
Aim: To Automate a web browser to upload a file in web forms using selenium tool.
Procedure:
1.open pycharm application
2.Import the required libraries.
3.write the code for the problem statement.
4.test the code.

Program code:

```
from selenium import webdriver
from selenium.webdriver.common.by import By
import time

driver=webdriver.Chrome(executable_path="C:\Drivers\chromedriver_win32\chromedriver.exe")
driver.get("https://fs2.formsite.com/meherpavan/form2/index.html?1537702596407")
driver.maximize_window()
driver.find_element(By.ID,"RESULT_FileUpload-
10").send_keys("C://Users/sandu/Pictures/Selenium.pdf")
time.sleep(5)
driver.close()
```

Output:



Results:
Automation of web browser to upload a file in web forms using selenium tool was completed successfully.

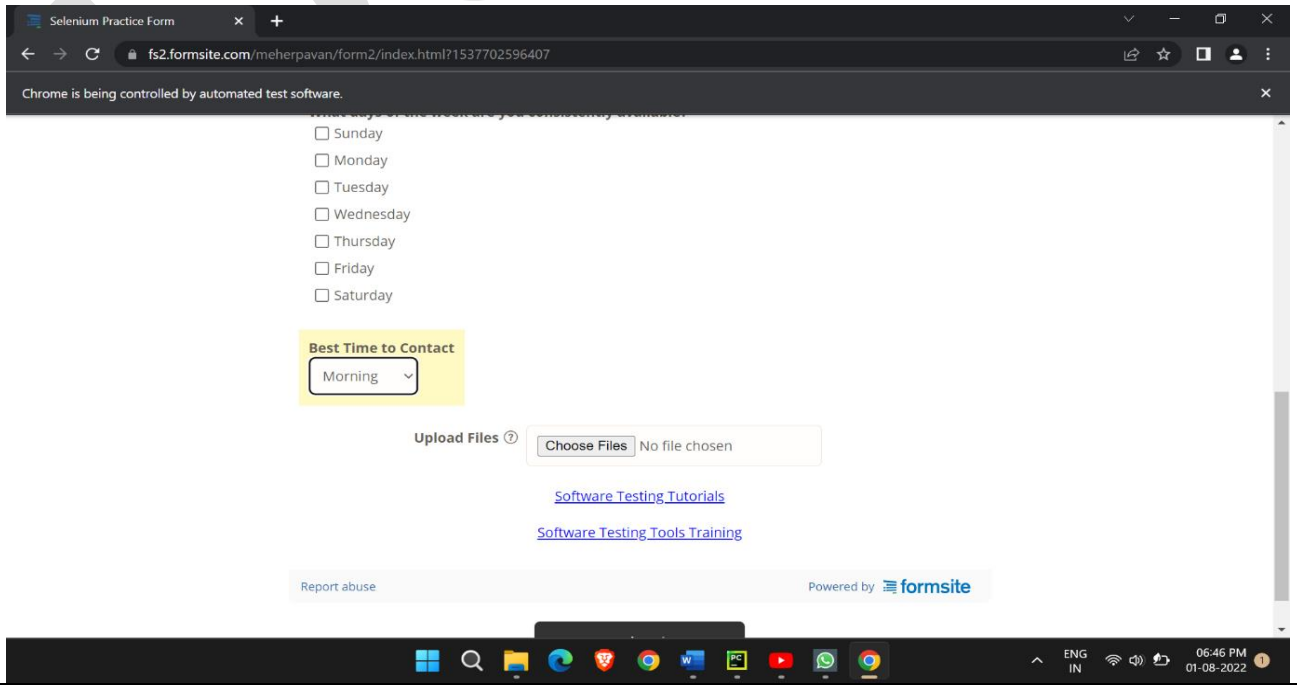
Date		EXP.N0.		Page No.	

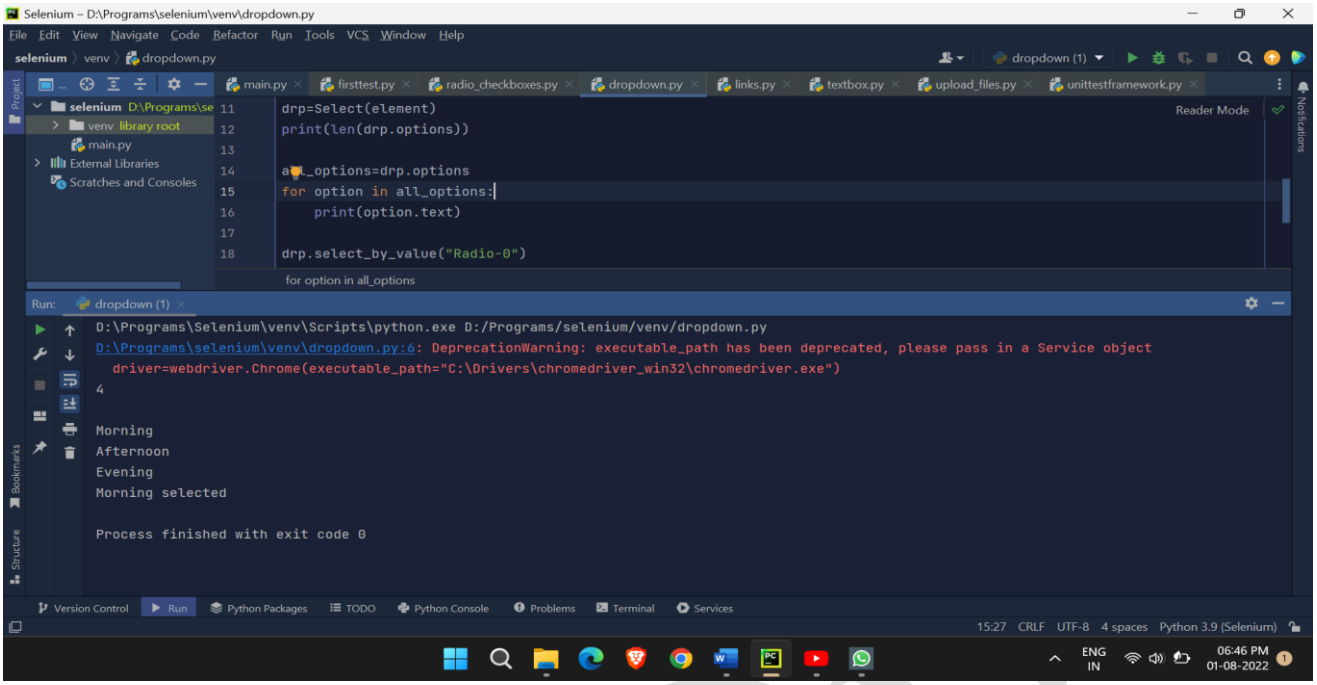
Problem Statement: Automate a web browser for working on a drop-down list in web forms using selenium tool.
Aim: To Automate a web browser for working on a drop-down list in web forms using selenium tool.
Procedure:
1.open pycharm application
2.Import the required libraries.
3.write the code for the problem statement.
4.test the code.

Program code:

```
from selenium import webdriver
from selenium.webdriver.common.by import By
from selenium.webdriver.support.ui import Select
import time

driver=webdriver.Chrome(executable_path="C:\Drivers\chromedriver_win32\chromedriver.exe")
driver.get("https://fs2.formsite.com/meherpavan/form2/index.html?1537702596407")
driver.maximize_window()

element=driver.find_element(By.NAME,"RESULT_RadioButton-9")
drp=Select(element)
print(len(drp.options))

all_options=drp.options
for option in all_options:
    print(option.text)

drp.select_by_value("Radio-0")
time.sleep(5)
print("Morning selected")
driver.close()
```

Output:





Results:

Automation of a web browser for working on a drop-down list in web forms using selenium tool was completed successfully.

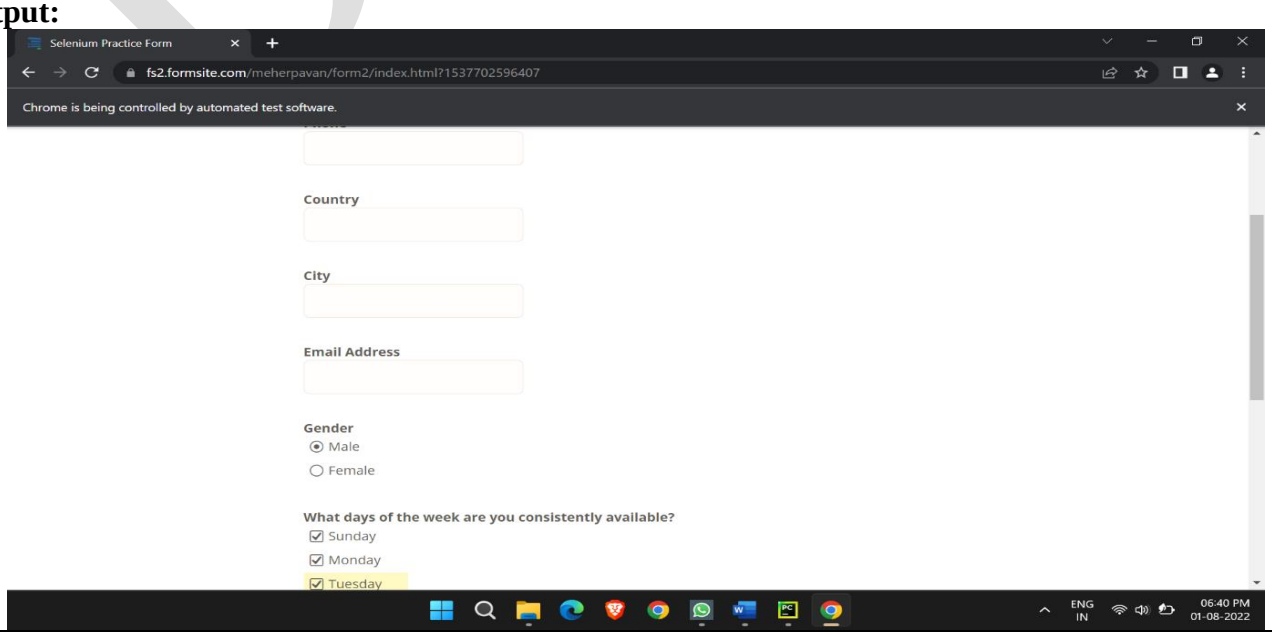
Date		EXP.N0.		Page No.	

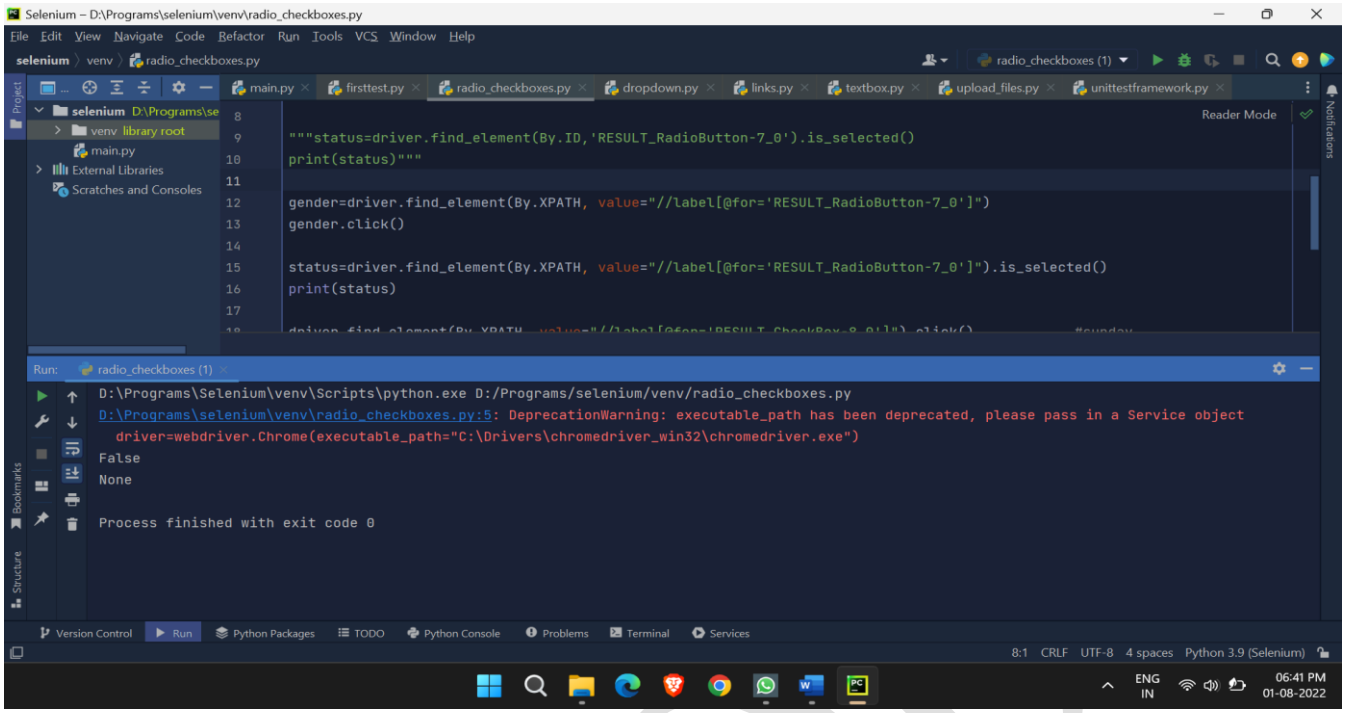
Problem Statement: Automate a web browser for working on a Radio and check boxes in formfilling using selenium tool.
Aim: To Automate a web browser for working on a Radio and check boxes in formfilling using selenium tool.
Procedure:
1.open pycharm application
2.Import the required libraries.
3.write the code for the problem statement.
4.test the code.

Program code:

```
from selenium import webdriver
from selenium.webdriver.common.by import By
import time

driver=webdriver.Chrome(executable_path="C:\Drivers\chromedriver_win32\chromedriver.exe")
driver.get("https://fs2.formsite.com/meherpavan/form2/index.html?1537702596407")
driver.maximize_window()

gender=driver.find_element(By.XPATH, value="//label[@for='RESULT_RadioButton-7_0']")
gender.click()

status=driver.find_element(By.XPATH, value="//label[@for='RESULT_RadioButton-
7_0']").is_selected()
print(status)

driver.find_element(By.XPATH, value="//label[@for='RESULT_CheckBox-8_0']").click()
#sunday
status=driver.find_element(By.XPATH, value="//label[@for='RESULT_CheckBox-8_1']").click()
#monday
driver.find_element(By.XPATH, value="//label[@for='RESULT_CheckBox-8_2']").click()
#tuesday
print(status)
time.sleep(5)
driver.quit()
```

Output:





Results:

Automation of a web browser for working on a Radio and check boxes in formfilling using selenium tool.

Date		EXP.N0.		Page No.	

Problem Statement: Automate a web browser for unit-test framework on a simple project using selenium tool.

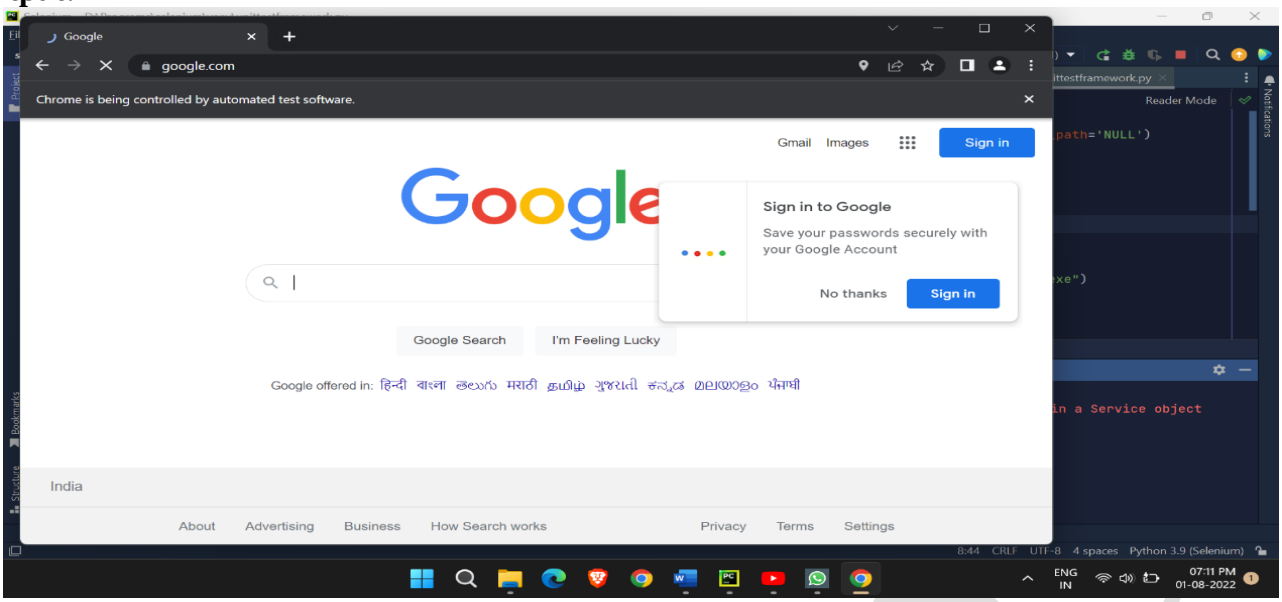
Aim: To Automate a web browser for unit-test framework on a simple project using selenium tool.

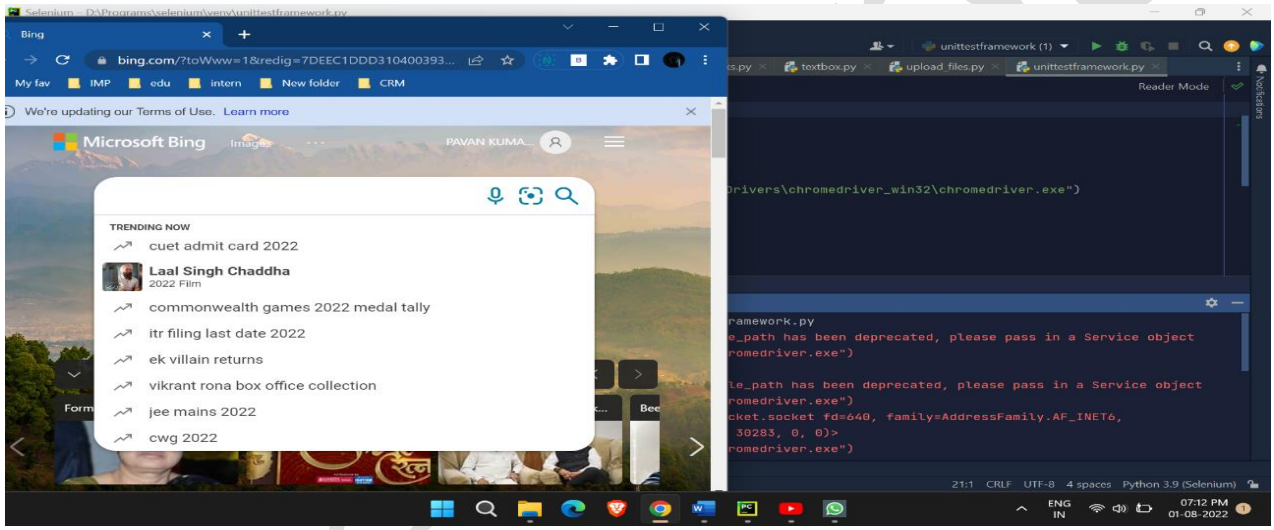
Procedure:
1.open pycharm application
2.Import the required libraries.
3.write the code for the problem statement.
4.test the code.

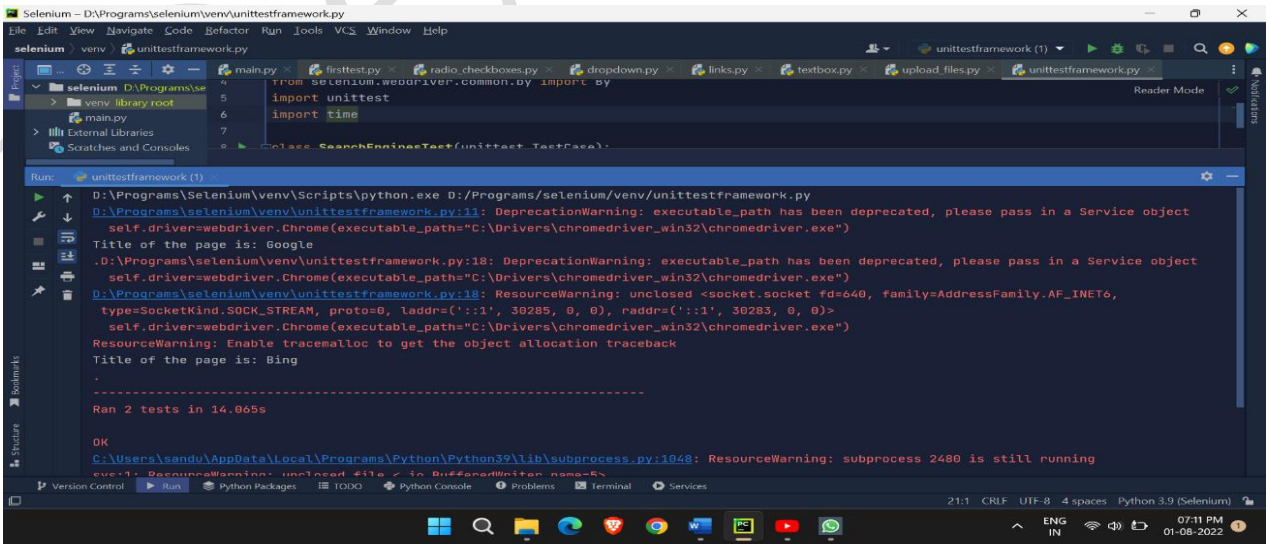
Program code:

```
from selenium import webdriver
from selenium.webdriver.chrome.service import Service
chrome_executable = Service(executable_path='C:\Drivers\chromedriver_win32\chromedriver.exe',
log_path='NULL')
from selenium.webdriver.common.by import By
import unittest
import time

class SearchEnginesTest(unittest.TestCase):
   @classmethod
   def testGoogle(self):

self.driver=webdriver.Chrome(executable_path="C:\Drivers\chromedriver_win32\chromedriver.exe")
       self.driver.get("https://www.google.com/")
       print("Title of the page is:",self.driver.title)
       self.driver.close()

   @classmethod
   def test_Bing(self):

self.driver=webdriver.Chrome(executable_path="C:\Drivers\chromedriver_win32\chromedriver.exe")
       self.driver.get("https://bing.com")
       print("Title of the page is:", self.driver.title)
       self.driver.close()

if __name__ == "__main__":
   unittest.main()
driver.quit()
```

Output:







Title of page is: Google
Title of page is: Bing
Closes the browser
Ran 2 tests in 14.065s
Status: OK
All Test classes finished

Date		EXP.N0.		Page No.	

Results:

Automate a web browser for unit-test framework on a simple project using selenium tool.