

Assignment-4

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21BEC7224

ECE

- **what is burp suite?**

Burp Suite is a popular cybersecurity tool used for web application security testing and penetration testing. It is developed by PortSwigger, a cybersecurity company, and is widely used by security professionals and ethical hackers to identify vulnerabilities and weaknesses in web applications.

Burp Suite offers a range of features and tools to assist with various aspects of web application security testing, including:

1. **Proxy:** Burp Suite acts as an intercepting proxy server, allowing users to intercept and modify HTTP/S requests and responses between a client (usually a web browser) and a web server. This is useful for inspecting and manipulating web traffic for testing purposes.

2. **Scanner:** It includes an automated vulnerability scanner that can identify common web application vulnerabilities such as SQL injection, cross-site scripting (XSS), cross-site request forgery (CSRF), and more. The scanner helps security professionals quickly identify potential security issues.
3. **Spider:** Burp Suite can crawl a website to map its structure and identify hidden or less accessible pages. This is useful for thorough testing of web applications.
4. **Intruder:** The Intruder tool allows users to automate and customize attacks against web applications, helping to identify vulnerabilities related to input validation, session management, and more.
5. **Repeater:** This tool lets users manually modify and resend individual HTTP requests, making it easy to test how a web application responds to different inputs.

It's important to note that Burp Suite is a tool for ethical hacking and security testing, and it should only be used on systems and applications where you have proper authorization. Unauthorized or malicious use of Burp Suite is illegal and unethical. Security professionals and ethical hackers use it to help organizations identify and fix security vulnerabilities in their web applications, ultimately improving their overall security posture.

● Why we used as a is burp suite?

Burp Suite is used for a variety of purposes in the field of cybersecurity, primarily related to web application security testing and penetration testing. Here are some common reasons why security professionals and ethical hackers use Burp Suite:

1. **Identifying Vulnerabilities:** One of the primary uses of Burp Suite is to identify vulnerabilities and weaknesses in web applications. It can automatically scan web applications for common vulnerabilities such as SQL

injection, cross-site scripting (XSS), cross-site request forgery (CSRF), and more. This helps security teams pinpoint potential security issues that could be exploited by malicious hackers.

2. **Manual Testing:** Burp Suite provides a user-friendly interface for manually testing web applications. Security professionals can intercept and manipulate individual HTTP requests and responses, allowing them to explore how a web application behaves under different conditions and inputs. This manual testing is valuable for identifying unique or complex vulnerabilities that automated scanners might miss.
3. **Session Management Testing:** The tool's Sequencer feature helps assess the quality and predictability of session tokens and other security-related data used in web applications. This is crucial for ensuring that session management mechanisms are secure.
4. **Customized Attacks:** The Intruder tool allows users to automate and customize attacks against web applications. This can help identify vulnerabilities related to input validation, authentication, and authorization. Security professionals can craft specific attack payloads to test how an application responds to various inputs.
5. **Web Application Mapping:** Burp Suite's Spider tool can be used to crawl and map the structure of a web application. This is useful for creating an inventory of all accessible pages and functionalities, which can aid in comprehensive testing.

It's important to emphasize that Burp Suite should only be used in ethical and authorized security testing scenarios. Unauthorized or malicious use of such tools is illegal and unethical.

Organizations use Burp Suite to improve their web application security by proactively identifying and addressing vulnerabilities before they can be exploited by malicious actors.

• what are the features of burp suite

Burp Suite is a comprehensive cybersecurity tool designed for web application security testing and penetration testing. It offers a wide range of features to assist security professionals in assessing and securing web applications. Here are some of the key features of Burp Suite:

1. **Proxy:** Burp Suite acts as an intercepting proxy server, allowing users to intercept and modify HTTP/S requests and responses between a client (usually a web browser) and a web server. This is useful for inspecting and manipulating web traffic for testing purposes.
 2. **Scanner:** It includes an automated vulnerability scanner that can identify common web application vulnerabilities such as SQL injection, cross-site scripting (XSS), cross-site request forgery (CSRF), and more. The scanner helps security professionals quickly identify potential security issues.
 3. **Spider:** Burp Suite can crawl a website to map its structure and identify hidden or less accessible pages. This is useful for thorough testing of web applications.
 4. **Intruder:** The Intruder tool allows users to automate and customize attacks against web applications, helping to identify vulnerabilities related to input validation, session management, and more.
 5. **Repeater:** This tool lets users manually modify and resend individual HTTP requests, making it easy to test how a web application responds to different inputs.
 6. **Sequencer:** Burp's Sequencer analyzes the quality and predictability of session tokens, CSRF tokens, and other data used in web application security. It helps assess the strength of these security mechanisms.
- Decoder:** Burp Suite provides various encoding and decoding tools for manipulating data, including base64 encoding, URL

encoding, and more. These tools are handy when working with encoded or encrypted data.

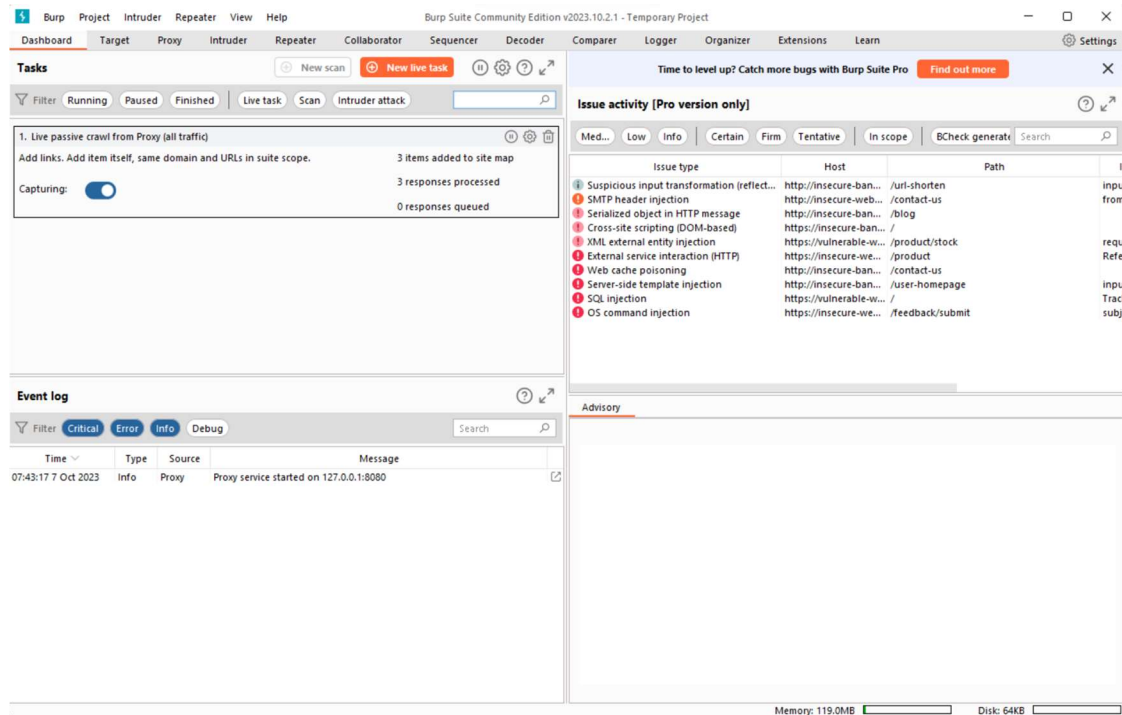
7. **Comparer:** The Comparer tool allows you to compare two HTTP requests or responses to identify differences and spot anomalies.
8. **Extensions:** Burp Suite is highly extensible and supports custom plugin development. You can create your own extensions to enhance its capabilities or automate specific testing tasks.
9. **Collaborator:** The Collaborator feature assists in identifying out-of-band vulnerabilities and interactions with external systems during testing.
10. **Targeted Scanning:** Burp allows you to define scope and target-specific areas of a web application for scanning. This is useful for focusing testing efforts on critical components.
11. **Reporting:** Burp Suite generates detailed reports summarizing identified vulnerabilities, testing activities, and findings. These reports are valuable for communication and remediation efforts.
12. **Configuration and Session Handling:** You can configure proxy settings and handle sessions to authenticate and maintain state during testing.
13. **Support for Various Protocols:** Burp Suite supports HTTP and HTTPS, making it suitable for testing web applications. It can also handle other protocols, like FTP and SMTP, for broader security assessments.
14. **Integration:** Burp Suite can be integrated with other security tools and services, enhancing its functionality within a larger security testing ecosystem.

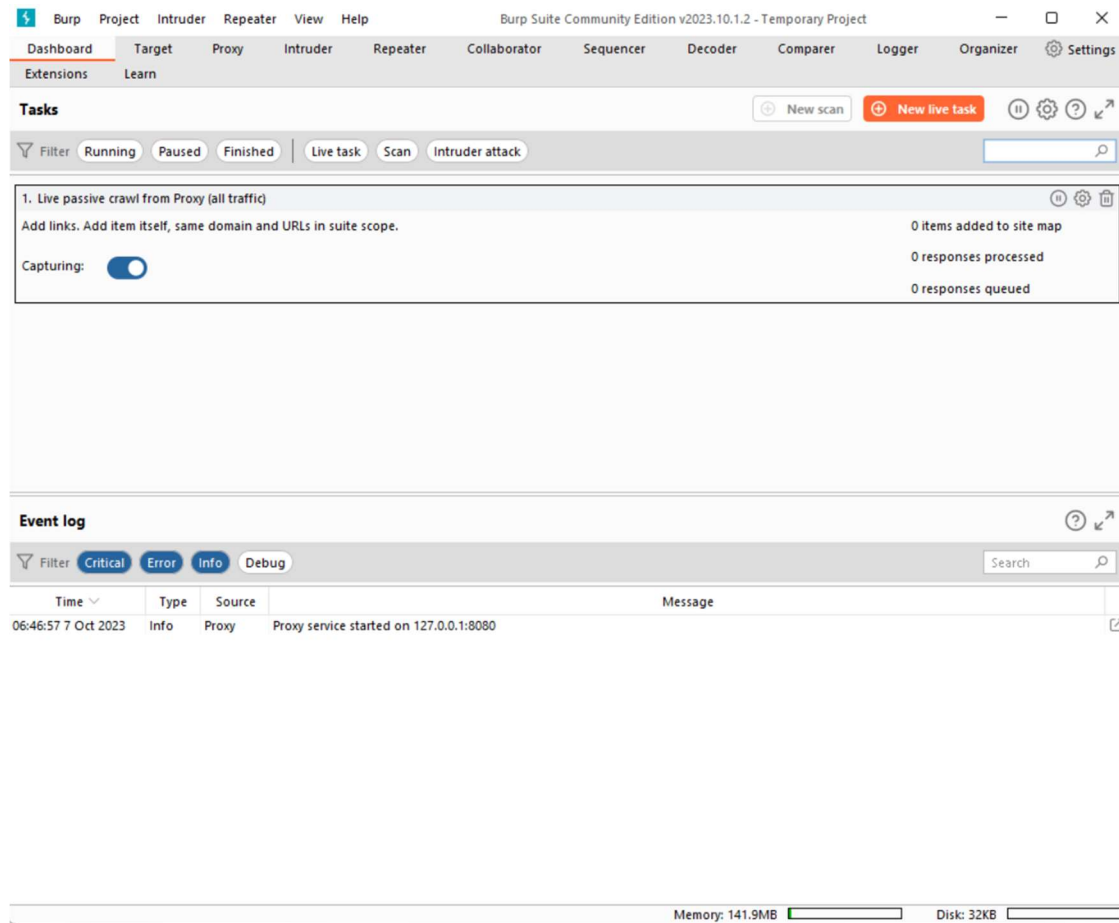
These features make Burp Suite a powerful tool for security professionals and ethical hackers who want to assess and improve the security of web applications. It's important to use Burp Suite responsibly and within the bounds of ethical hacking

and security testing practices. Unauthorized or malicious use is illegal and unethical.

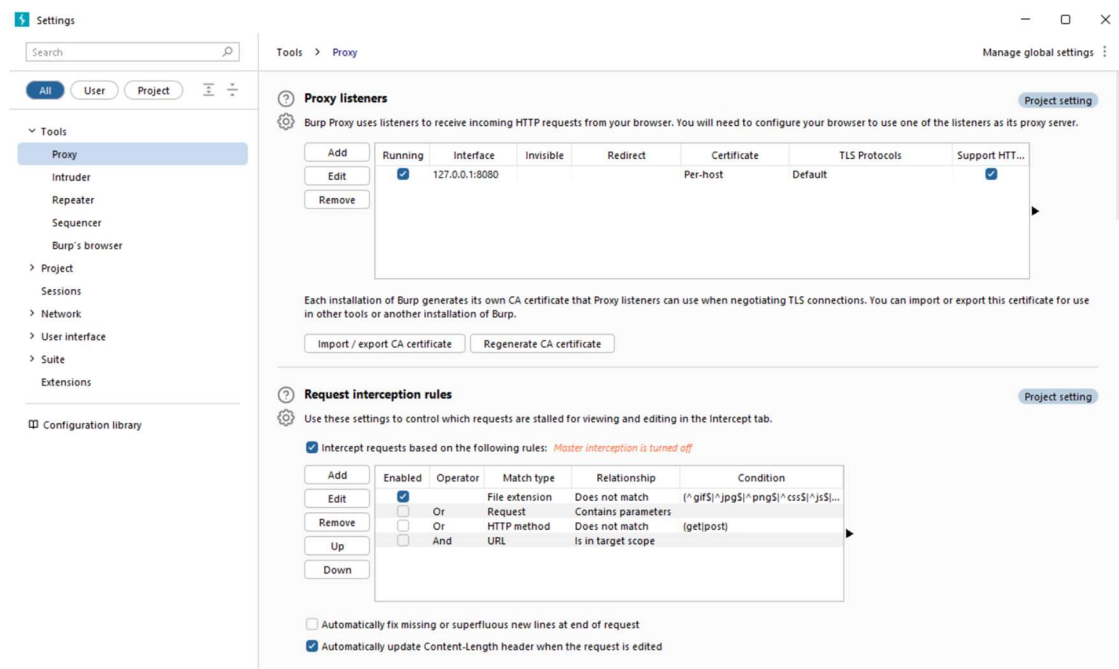
Test the vulnerabilities of testfire.net

Open the burp suite app

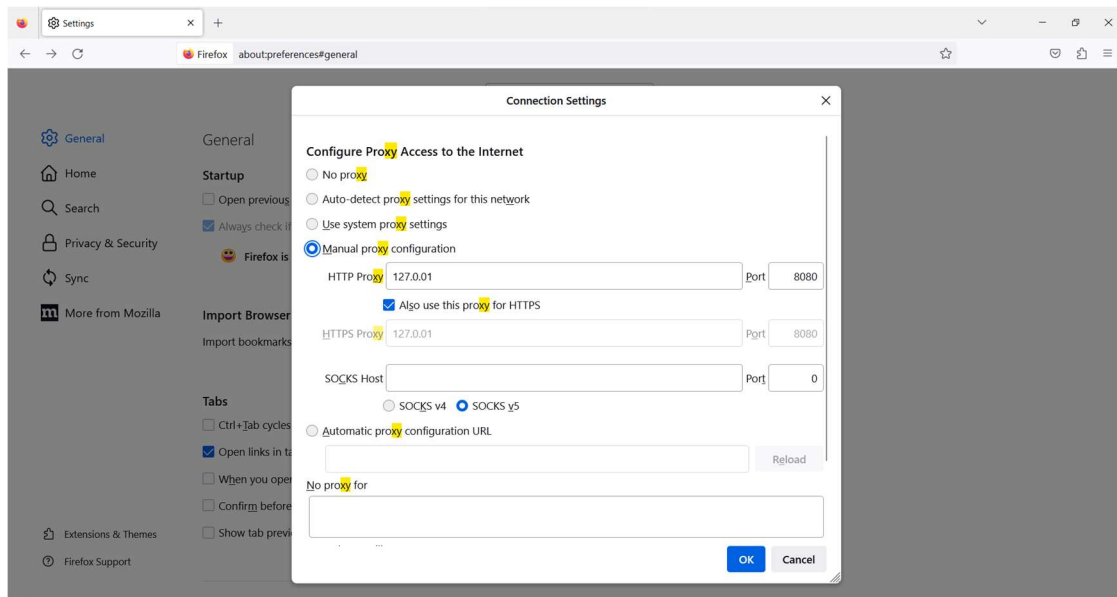




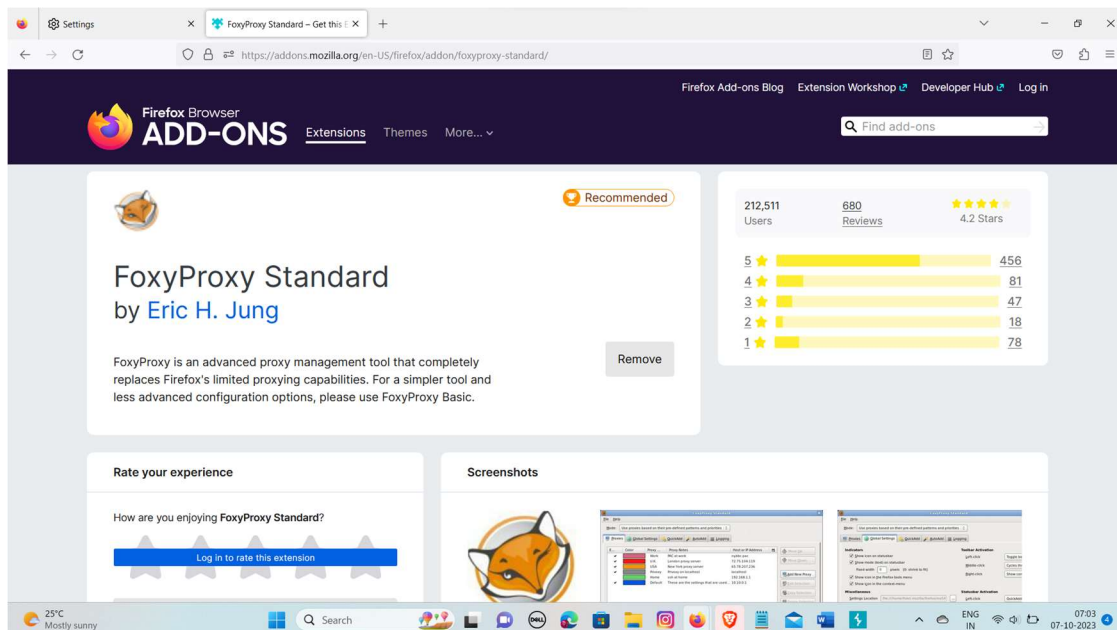
Then open the proxy setting



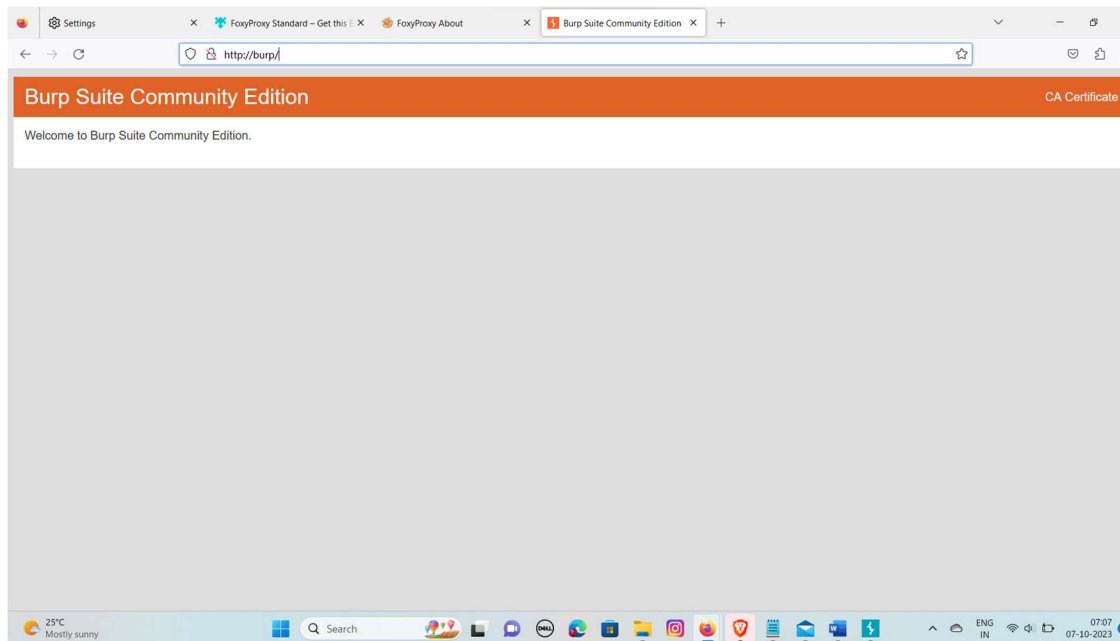
- Then go to your firefox browser then open the settings
- Type the xy in search bar
- Open the connection setting



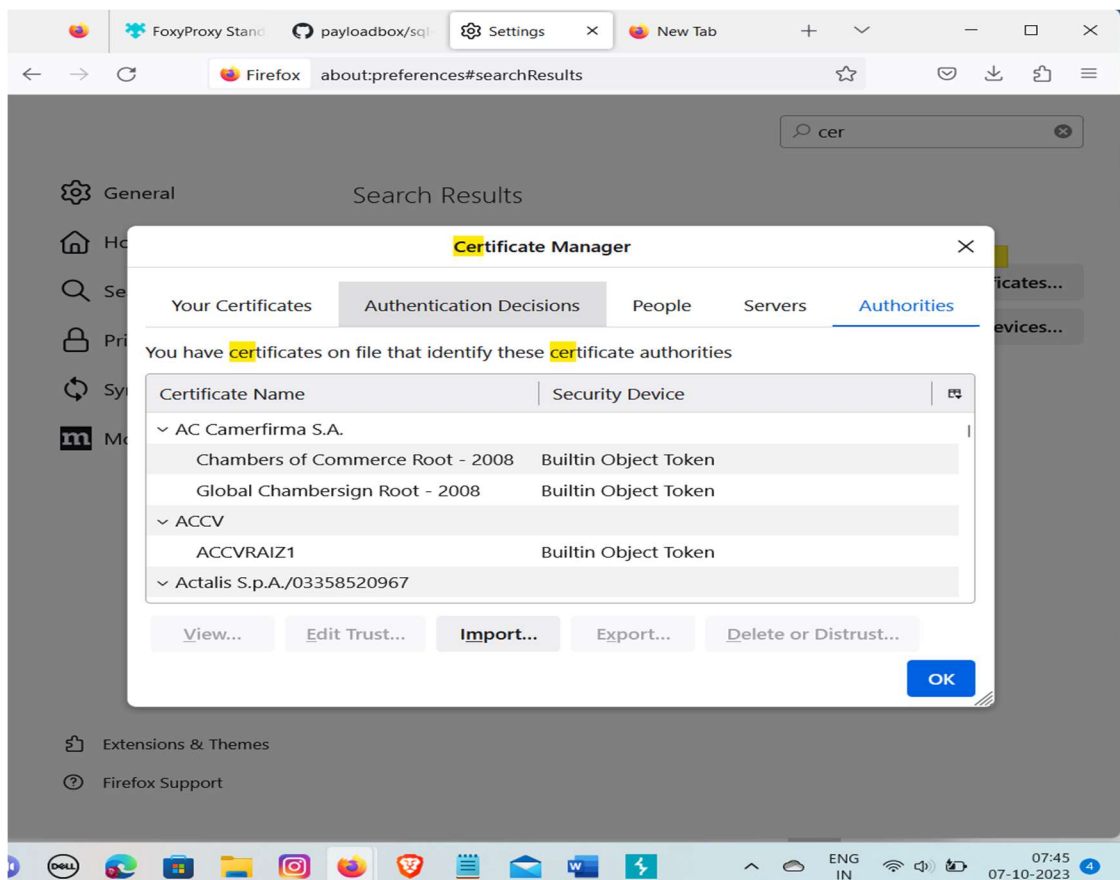
- Then click on ok
- The install the extension of froxy proxy



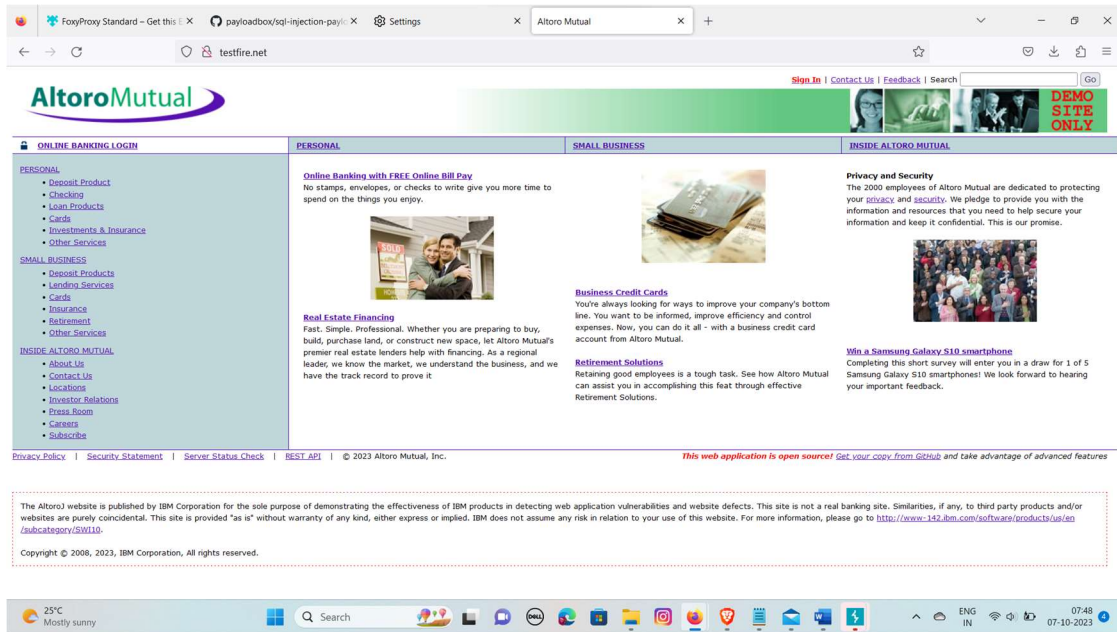
- Then type this link in search bar <http://burp/>



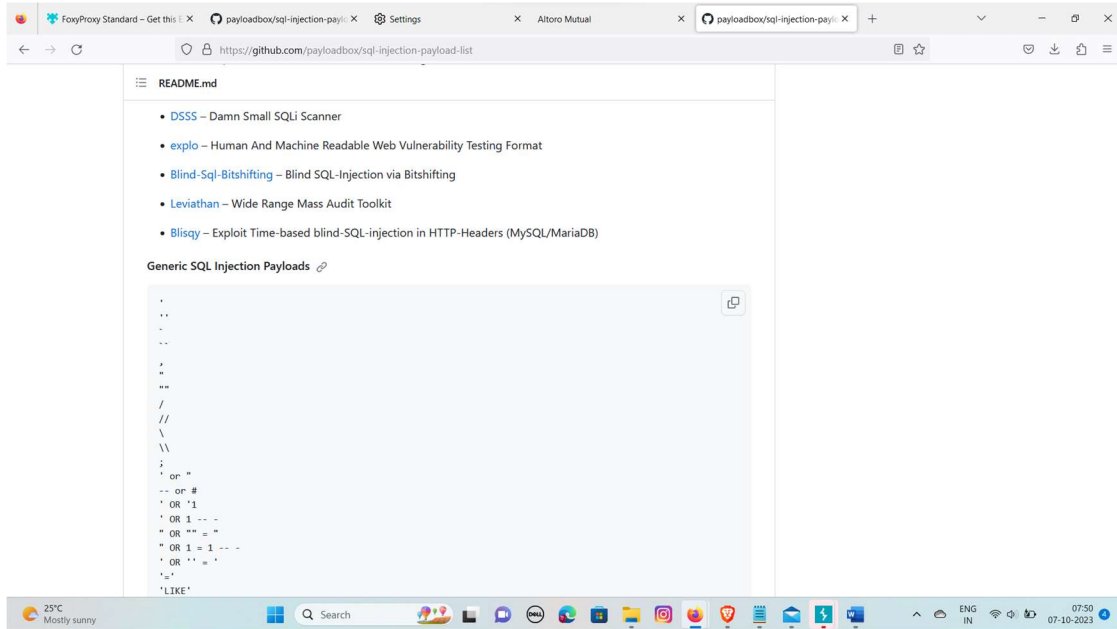
- klik on the CA certificate
- After that import the ca certificate



- Then type the <https://testfire.net> in search bar

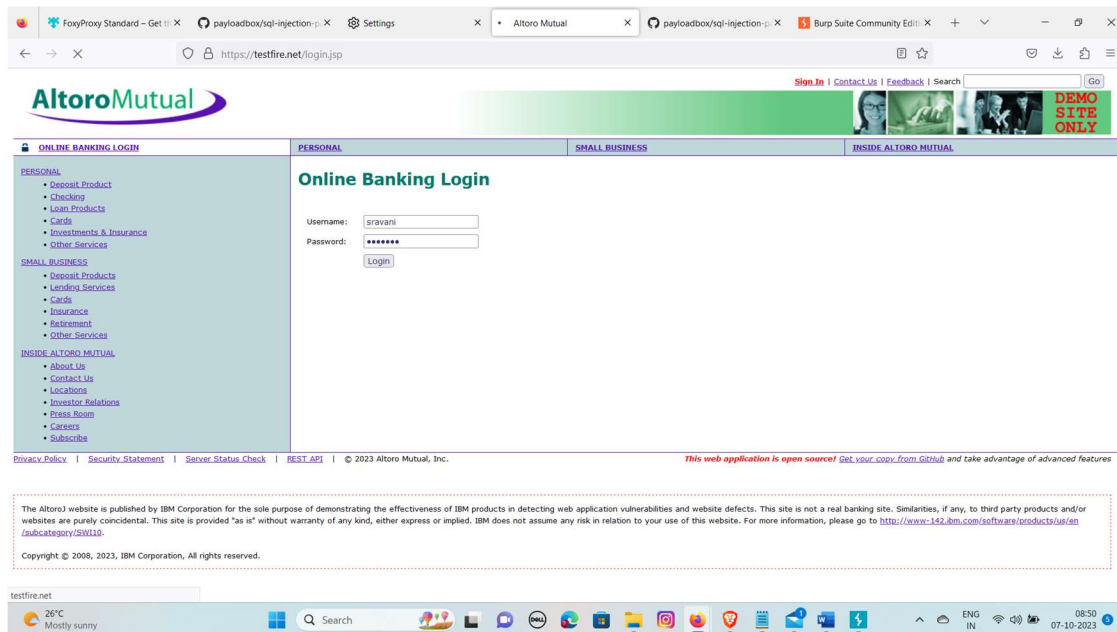


- Then type in sql injection github in search bar

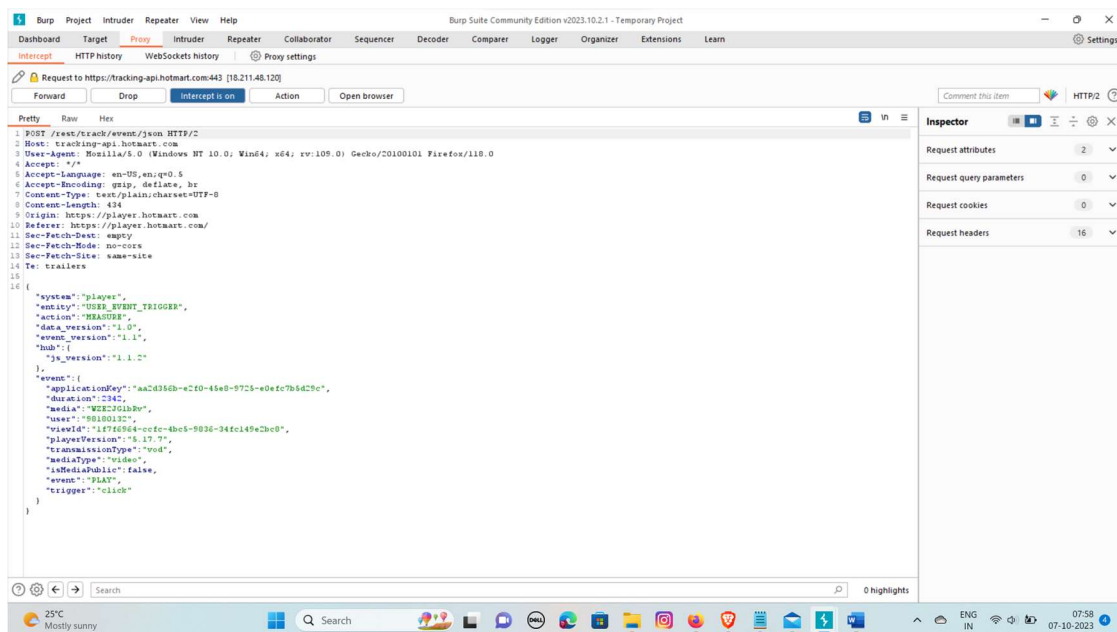


- After that coping the code
- Then open the burp suit
- Go to the proxy turn on the intercept

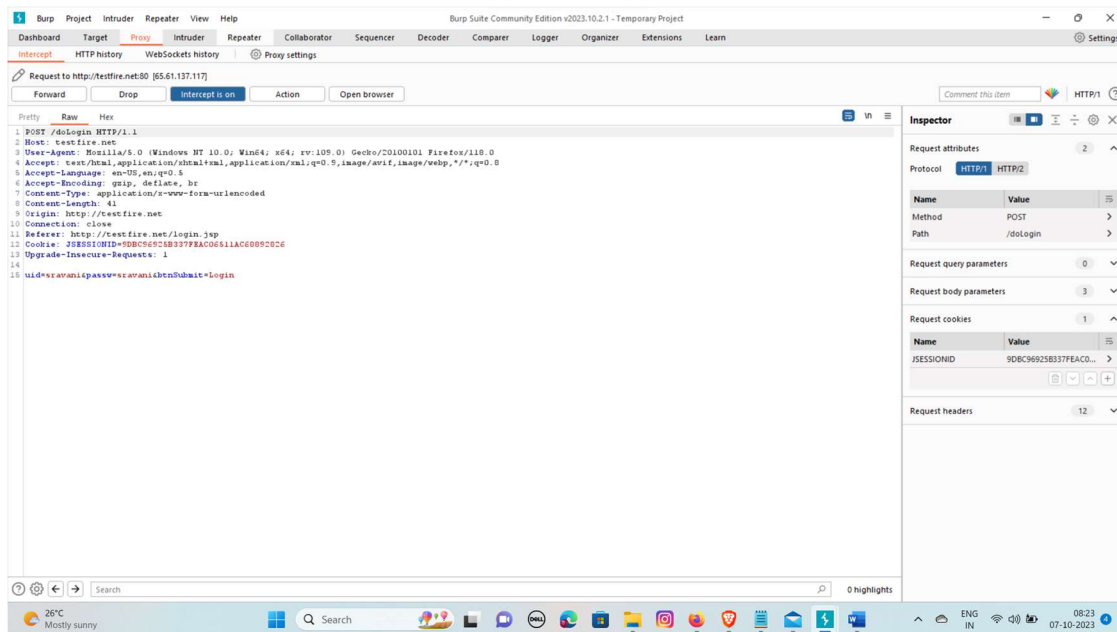
- Go the Altoro mutual website go to the sign option after just type your username and password
- Go to the proxy turn off the intercept
- The klik on the login



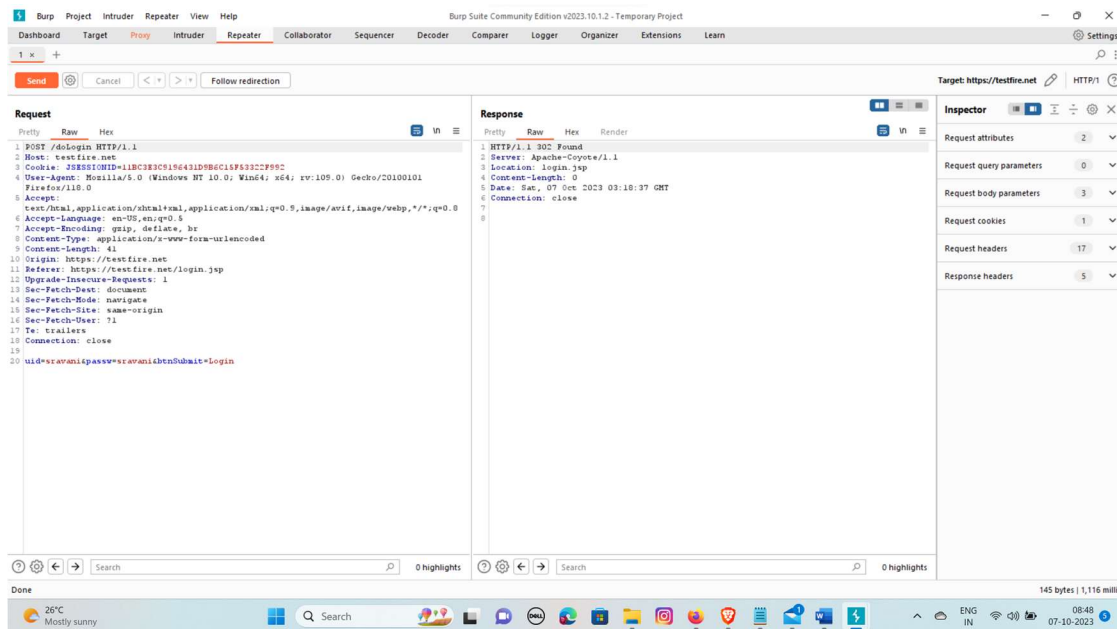
- Go to the proxy turn on the intercept



- Click on the repeater

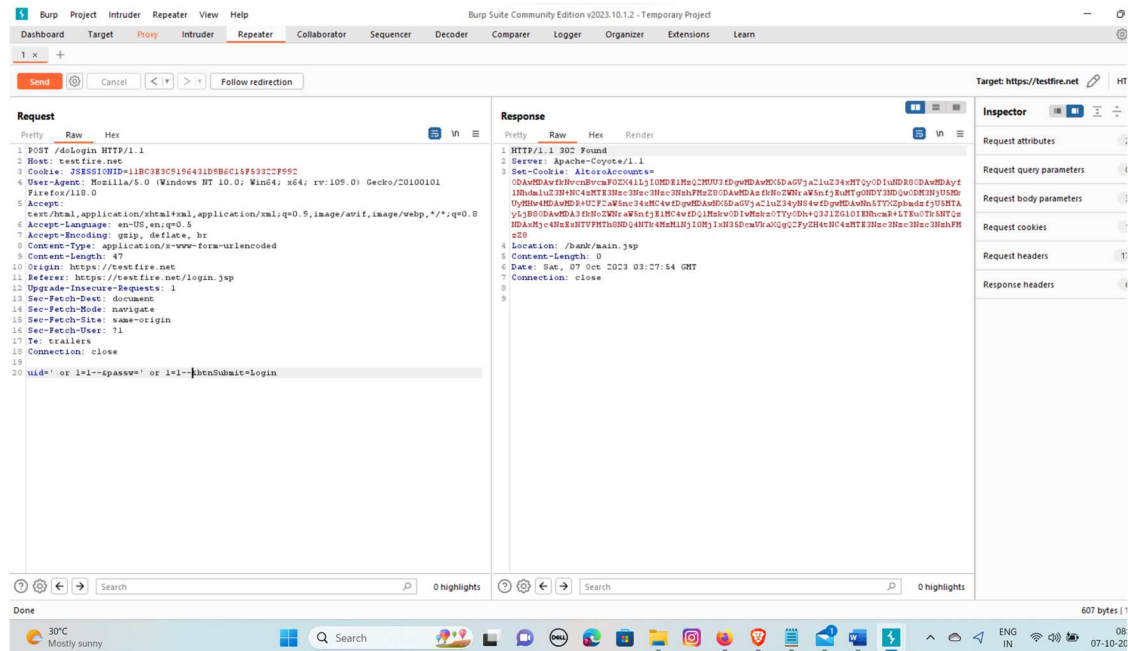


- The send option

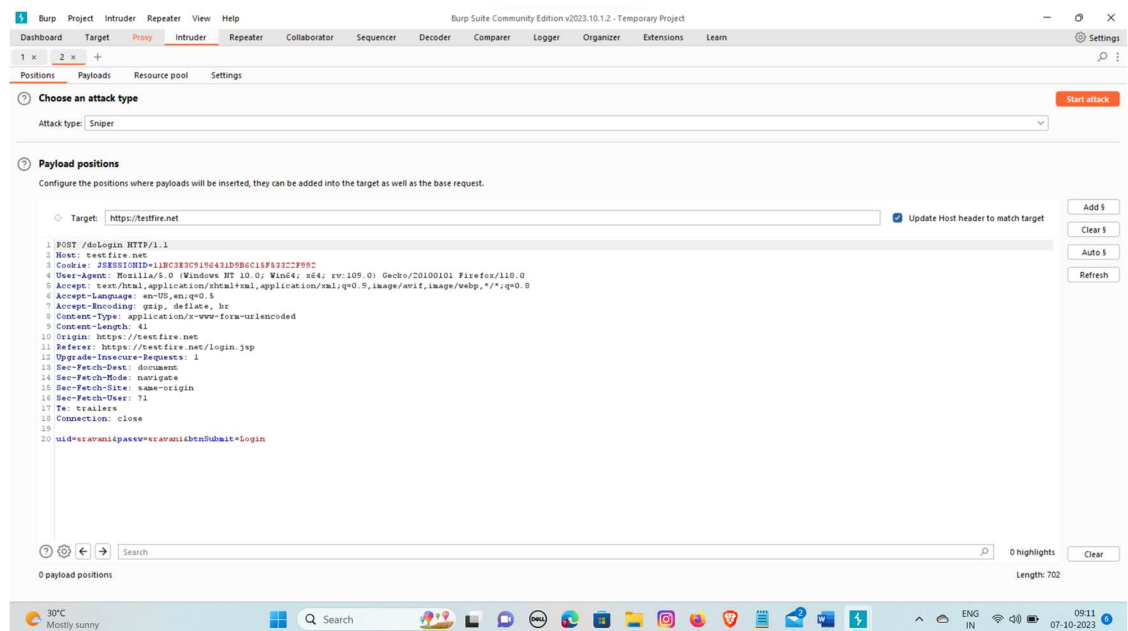


- Then got to the last line uid name change into the 12345 then click on the send

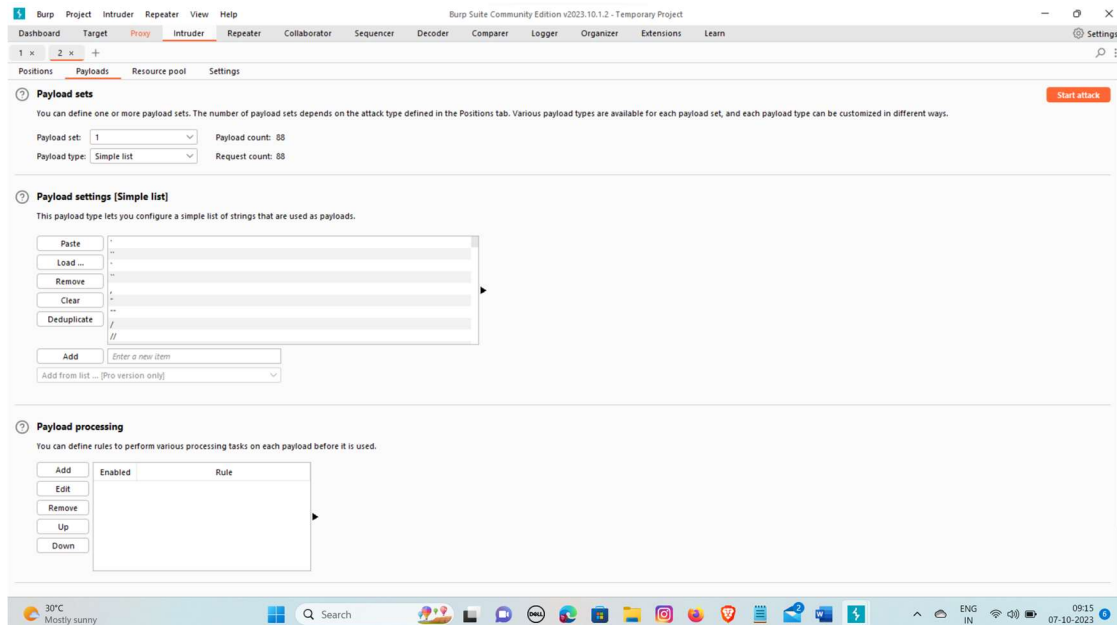
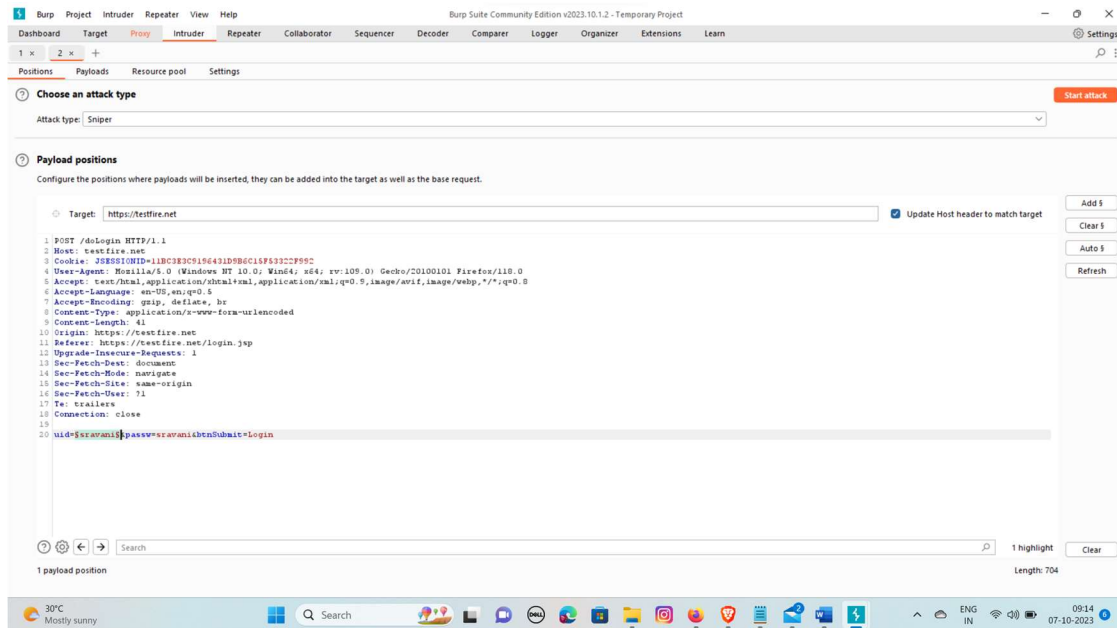
- Then again change the username and password into admin and admin



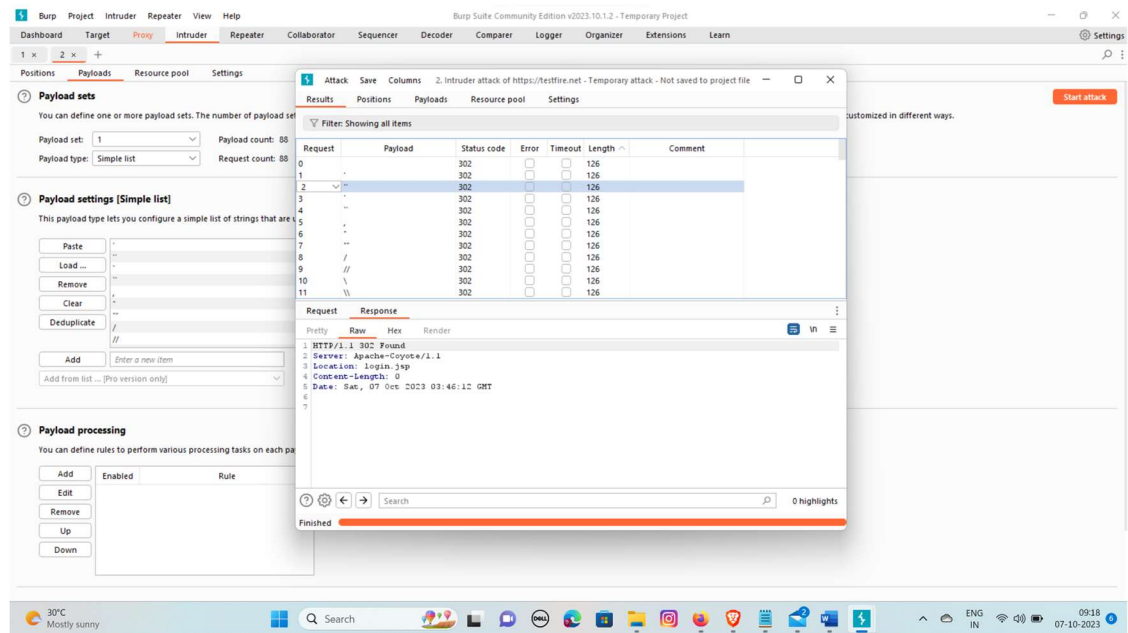
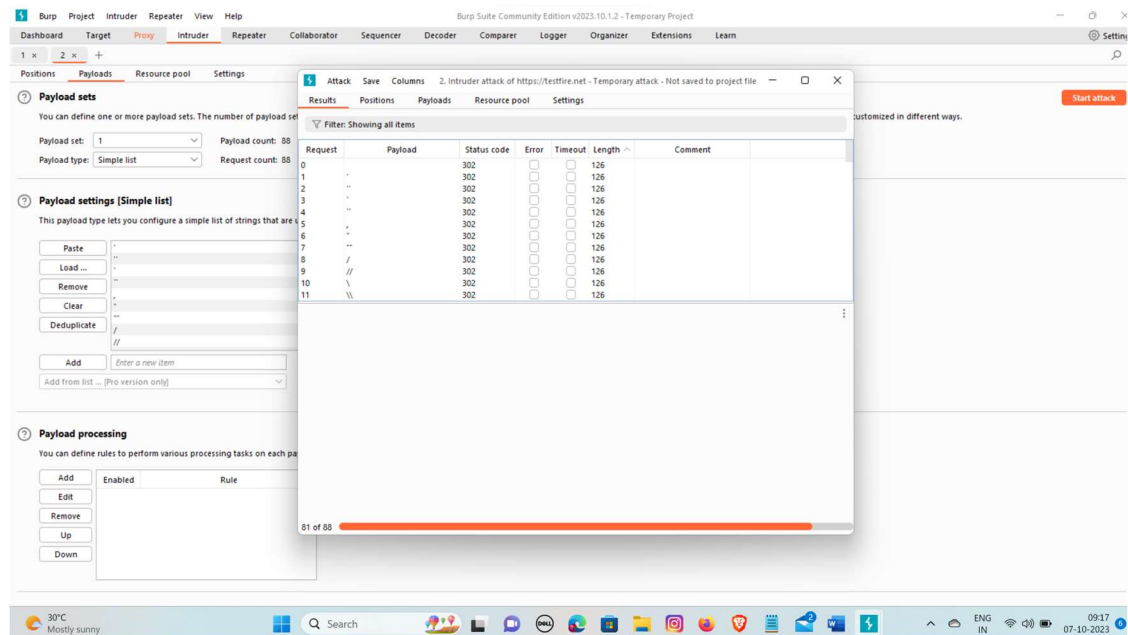
- Then click on the right click click the intruder
- Go to the github copy the code



- click on the payloads



- click on the start attack



- Like this we can testfire the username and password
- We get access of the username by using this method

Burp Suite Community Edition v2023.10.1.2 - Temporary Project

Dashboard Target **Proxy** Intruder Repeater Collaborator Sequencer Decoder Comparer Logger Organizer Extensions Learn

Intercept HTTP history WebSockets history Proxy settings

Filter: Hiding CSS, image and general binary content

#	Host	Method	URL	Params	Edited	Status code	Length	MIME type	Extension	Title	Comment	TLS	IP	Cookies	Time	Listener port
86	https://www.google.com	GET	/complete/search?client=firefox...	✓		200	1280	JSON				✓	142.250.195.36		08:45:49 7 ...	8080
87	https://www.google.com	GET	/complete/search?client=firefox...	✓		200	1295	JSON				✓	142.250.195.36		08:45:50 7 ...	8080
88	https://www.google.com	GET	/complete/search?client=firefox...	✓		200	1283	JSON				✓	142.250.195.36		08:45:51 7 ...	8080
89	https://www.google.com	GET	/complete/search?client=firefox...	✓		200	1284	JSON				✓	142.250.195.36		08:45:51 7 ...	8080
90	https://testfire.net	GET	/			200	9537	HTML		Altoro Mutual		✓	65.61.137.117		08:46:00 7 ...	8080
91	https://incoming.telemetr...	POST	/submit/activity-stream/impressi...			200	622	text				✓	34.120.208.123		08:46:03 7 ...	8080
92	https://incoming.telemetr...	POST	/submit/firefox-desktop/newtab...			200	622	text				✓	34.120.208.123		08:46:03 7 ...	8080
93	https://incoming.telemetr...	POST	/submit/activity-stream/sessions...			200	622	text				✓	34.120.208.123		08:46:03 7 ...	8080
94	https://incoming.telemetr...	POST	/submit/activity-stream/impressi...			200	622	text				✓	34.120.208.123		08:46:03 7 ...	8080
102	https://testfire.net	GET	/favicon.ico			404	7097	HTML	ico	Altoro Mutual		✓	65.61.137.117		08:46:03 7 ...	8080
104	https://testfire.net	GET	/login.jsp			200	8687	HTML	jsp	Altoro Mutual		✓	65.61.137.117		08:46:26 7 ...	8080
105	https://testfire.net	GET	/favicon.ico			404	7097	HTML	ico	Altoro Mutual		✓	65.61.137.117		08:46:42 7 ...	8080

- This the history like what are url we can perform

Burp Suite Community Edition v2023.10.1.2 - Temporary Project

Dashboard Target **Proxy** Intruder Repeater Collaborator Sequencer Decoder Comparer Logger Organizer Extensions Learn

1 x 2 x +

Positions Payloads Resource pool Settings

Payload set: 1 Payload count: 1
 Payload type: Numbers Request count: 1

① Payload settings [Numbers]

This payload type generates numeric payloads within a given range and in a specified format.

Number range

Type: ☒ Sequential ☐ Random

From: 0
 To:
 Step: 1
 How many:

Number format

Base: ☒ Decimal ☐ Hex

Min integer digits: 0
 Max integer digits: 0
 Min fraction digits: 0
 Max fraction digits: 0

Examples
 0
 0

② Payload processing

You can define rules to perform various processing tasks on each payload before it is used.

Add Enabled Rule
 Edit
 Remove

- Which number to which number we can try by using berp suit