DOP: / /2023 **DOS: / /2023**

Experiment No:

Title: Android Dynamic Code Analysis

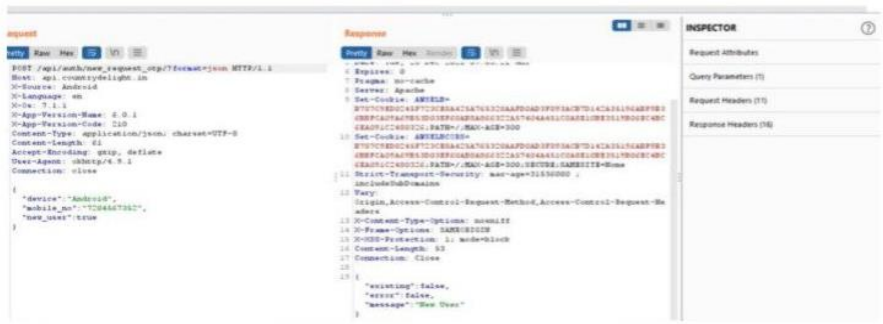
Theory:- Android dynamic code analysis refers to the process of analyzing an Android application while it is running in order to gain insights into its behavior and detect any security vulnerabilities or other issues. This type of analysis is often used by developers, security researchers, and other professionals who are interested in understanding how an application functions under different conditions, as well as identifying any potential weaknesses that could be exploited by attackers.

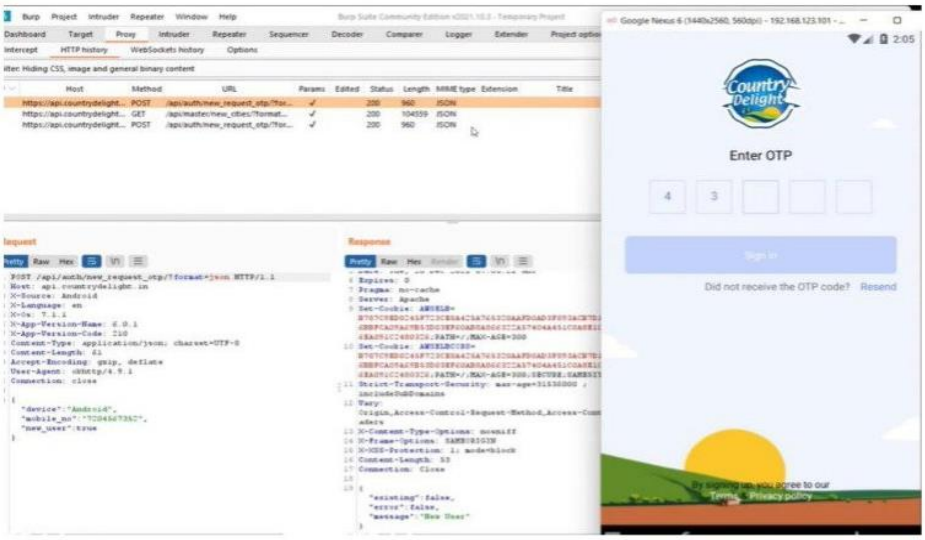
There are several different tools and techniques that can be used for Android dynamic code analysis, including:

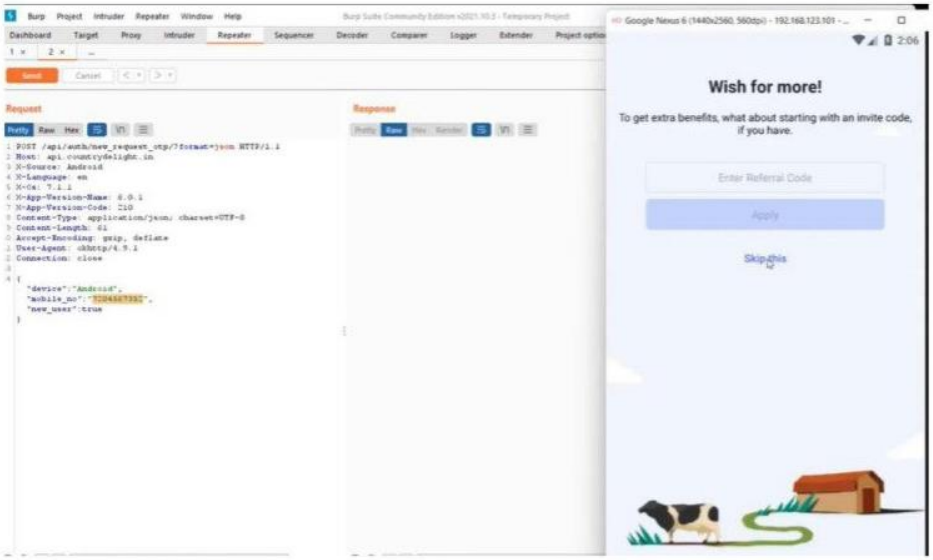
1. Debugging: This involves using a debugger to examine the application's code as it is running, in order to identify any bugs or other issues.
2. Profiling: This involves using a profiling tool to analyze the application's performance and resource usage, in order to identify any areas where improvements could be made.
3. Network traffic analysis: This involves monitoring the network traffic generated by the application, in order to identify any sensitive information that is being transmitted or any potential security vulnerabilities.
4. Malware analysis: This involves analyzing the application for any signs of malware or other malicious behavior, such as the use of root privileges or the ability to access sensitive data.
5. Dynamic analysis frameworks: These are tools specifically designed for dynamic analysis of Android applications, such as Frida, which allows for real-time manipulation and monitoring of an application's behavior.

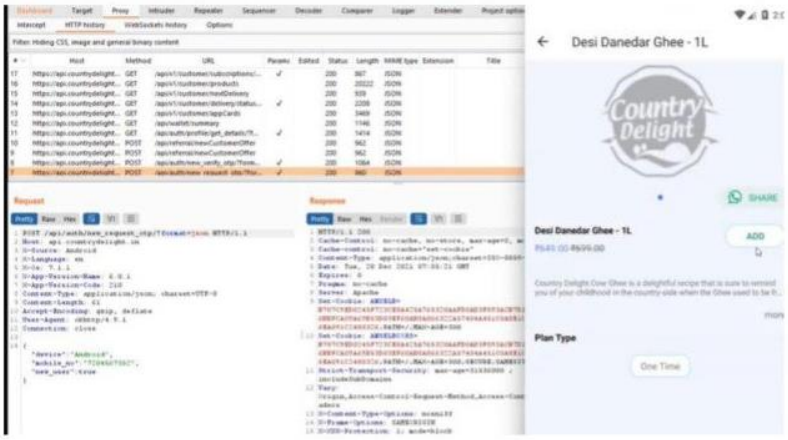
- Android dynamic code analysis is an important tool for developers and security researchers, as it allows them to gain a deeper understanding of how an application works and identify any potential issues that could impact its security and functionality.

CODE ANALYSIS WITH OUTPUT.









Conclusion:- Thus we have successfully studied Android dynamic code Analysis.