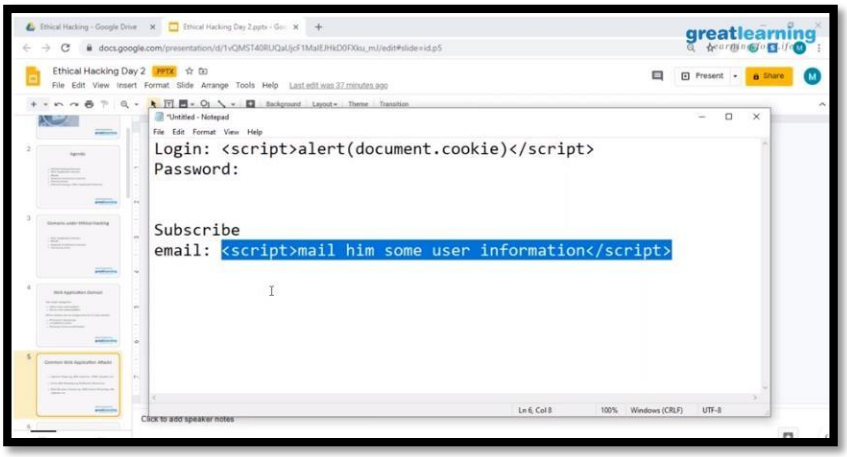
DAILY ASSESSMENT

Date:	**20/06/2020**	**Name:**	**Shilpa S**
Course:	**Ethical Hacking**	**USN:**	**4AL14EC078**
Topic:	**Domains and process implementation under ethical hacking Career and growth ladder in ethical hacking**	**Semester & Section:**	**8th - A**
GitHub Repository:	**Shilpa_online**		

FORENOON SESSION DETAILS

Image of session



REPORT –

Ethical Hacking is an authorized practice of bypassing system security to identify potential data breaches and threats in a network. The company that owns the system or network allows Cyber Security experts to perform such activities in order to test the system's defenses. Thus, unlike malicious hacking, this process is planned, approved, and more importantly, legal.

Ethical hackers aim to investigate the system or network for weak points that malicious hackers can exploit or destroy. They collect and analyze the information to figure out ways to strengthen the security of the system/network/applications. By doing so, they can improve the security footprint so that it can better withstand attacks or divert them.

The practice of ethical hacking is called “White Hat” hacking, and those who perform it are called White Hat hackers. In contrast to Ethical Hacking, “Black Hat” hacking describes practices involving security violations. The Black Hat hackers use illegal techniques to compromise the system or destroy information.

Unlike White Hat hackers, “Grey Hat” hackers don’t ask for permission before getting into your system. But Grey Hats are also different from Black Hats because they don’t perform hacking for any personal or third-party benefit. These hackers do not have any malicious intention and hack systems for fun or various other reasons, usually informing the owner about any threats they find. Grey Hat and Black Hat hacking are both illegal as they both constitute an unauthorized system breach, even though the intentions of both types of hackers differ.

Ethical Hackers must follow certain guidelines in order to perform hacking legally. A good hacker knows his or her responsibility and adheres to all of the ethical guidelines. Here are the most important rules of Ethical Hacking:

- An ethical hacker must seek authorization from the organization that owns the system. Hackers should obtain complete approval before performing any security assessment on the system or network.
- Determine the scope of their assessment and make known their plan to the organization.

- Report any security breaches and vulnerabilities found in the system or network.
- Keep their discoveries confidential. As their purpose is to secure the system or network, ethical hackers should agree to and respect their nondisclosure agreement.
- Erase all traces of the hack after checking the system for any vulnerability. It prevents malicious hackers from entering the system through the identified loopholes.

Learning ethical hacking involves studying the mindset and techniques of black hat hackers and testers to learn how to identify and correct vulnerabilities within networks. Studying ethical hacking can be applied by security pros across industries and in a multitude of sectors. This sphere includes network defender, risk management, and quality assurance tester.

However, the most obvious benefit of learning ethical hacking is its potential to inform and improve and defend corporate networks. The primary threat to any organization's security is a hacker: learning, understanding, and implementing how hackers operate can help network defenders prioritize potential risks and learn how to remediate them best. Additionally, getting an ethical hacking training or certifications can benefit those who are seeking a new role in the security realm or those wanting to demonstrate skills and quality to their organization.

An ethical hacker should have in-depth knowledge about all the systems, networks, program codes, security measures, etc. to perform hacking efficiently. Some of these skills include:

- Knowledge of programming - It is required for security professionals working in the field of application security and Software Development Life Cycle (SDLC).

- Scripting knowledge - This is required for professionals dealing with network-based attacks and host-based attacks.
- Networking skills - This skill is important because threats mostly originate from networks. You should know about all of the devices present in the network, how they are connected, and how to identify if they are compromised.
- Understanding of databases - Attacks are mostly targeted at databases. Knowledge of database management systems such as SQL will help you to effectively inspect operations carried out in databases.
- Knowledge of multiple platforms like Windows, Linux, Unix, etc.
- The ability to work with different hacking tools available in the market.
- Knowledge of search engines and servers.