**ASSESSMENT 30**

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| **Course:** | Introduction to Ethical Hacking | **USN:** | 4AL16EC068 |
| **Topic:** | * Career and growth ladder in ethical hacking * Program relevance | **Semester & Section:** | VIII  ‘B’ |
| **Github Repository:** | Sheela-Course |  |  |

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So, you should be aware of your interest before you take your first step toward the industry. But if you have already made up your mind to become an ethical hacker, then stay with us.  Reasons to Choose Ethical Hacking as Career Ethical hackers always have a handful of roles and responsibilities to deal with. An ethical hacker not only safeguards the data and network of an organization but is also responsible for taking preventive measures to avoid a security breach via penetration testing or any other method. It does possess a great career scope. And, the salary package is another fascinating aspect of it. However, if you are still unsure of pursuing ethical hacking as a career, then the listed reasons will serve as food for thought. There are organizations looking for professionals with specialized knowledge making it convenient for certified ethical hackers to take up other cyber security jobs, too, such as: 1. Network administrator/manager2.Security investigator3.Penetration tester4.Web security administrator/manager5.Data security analyst/specialist6.Computer/digital forensics investigator7.IT security administrator/consultant/manager8.Network defense technicians. The list doesn’t end here. These are just a few of the professional profiles that an ethical hacker can easily fit into **Who is an Ethical Hacker?** “To beat a hacker, you have to think like one” – Ethical Hacking Council  Hacking is the process of finding vulnerabilities in a system and using these found vulnerabilities to gain unauthorized access into the system to perform malicious activities ranging from deleting system files to stealing sensitive information. Hacking is illegal and can lead to extreme consequences if you are caught in the act. People have been sentenced to years of imprisonment because of hacking.  Nonetheless, hacking can be legal if done with permission. Computer experts are often hired by companies to hack into their system to find vulnerabilities and weak endpoints so that they can be fixed. This is done as a precautionary measure against legitimate hackers who have malicious intent. Such people, who hack into a system with permission, without any malicious intent, are known as *e*thical hackers and the process is known as an ethical hacking.  Requirement to Become an Ethical Hacker  Requirements - Ethical Hacking Career - Edureka  How your ethical hacking career begins depends on your current field of work. If you’re not in an IT field you should definitely try shifting into one. Even though most jobs require you to have a Bachelor’s degree in computer science or cyber security-related field, exceptions are made for people with sound knowledge of operating systems, databases and networking! Also, it is nigh impossible to directly become an ethical hacker. Most ethical hackers begin their career as tech support engineers who climb their way up, by earning certifications like CCNA and CISSP before working towards the ultimate CEH certification. After earning your CEH certifications, is the time to market you as an ethical hacker!  Course Curriculum  Cyber security Certification Course  Instructor-led Sessions Real-life Case Studies Assignments Lifetime Access  Now let us go over the roles and responsibilities of an ethical hacker.  Roles & Responsibilities of an Ethical Hacker  Roles and Resp - Ethical Hacking Career - Edureka  There seems to be a general misconception that a person with an ethical hacking career is only responsible for penetration testing of systems and applications. This is not true, and an ethical hacker is responsible for much more.  Scanning open and closed ports using Reconnaissance tools like Nessus and NMAP  Engaging in social engineering methodologies  Examining patch releases by performing vigorous vulnerability analysis on them  An ethical hacker will see if he/she can evade IDS (Intrusion Detection systems), IPS (Intrusion Prevention systems), honeypots and firewalls  Ethical hackers can employ other strategies like sniffing networks, bypassing and cracking wireless encryption, and hijacking web servers and web applications  An ethical hacker strives to replicate the working of a black hat hacker by analyzing the defense protocols and social-engineering aspects of an organization. His job is to make sure the organization reacts to these situations well enough if they are already not doing so.  Ethical Hacker Skill Set  Skills - Ethical Hacking Career - Edureka  A person with an ethical hacking career is expected to be proficient in database handling, networking, and operating systems and also have excellent soft skills as they need to communicate problems regarding security to the rest of the organization. Other than these generalized skillsets, an ethical hacker also have a good grasp on the following skills:  Network traffic sniffing  Orchestrate various network attacks  Exploit buffer overflow vulnerabilities  SQL injection  Password guessing and cracking  Session hijacking and spoofing  DNS spoofing  Apart from this, an ethical hacker must be a creative thinker because black hat hackers are constantly coming up with ingenious ways to exploit a system and it is an ethical hacker’s job to predict and prevent such breaches. Alignment to Federal Government Priorities The Government of Canada’s Speech from the Throne identifies the federal government’s priorities for the upcoming year. While the federal government priorities are reviewed each year, several common themes such as improving the health of Canadians, keeping Canadians safe, supporting Canadian families, and making government more effective and efficient have been included in the speeches over the years. In 2010, the Speech included the area of ‘Standing up for those that helped build Canada’; this particular priority speaks specifically to supporting Veterans and recognizing their sacrifices[Footnote17](https://www.veterans.gc.ca/eng/about-vac/publications-reports/reports/departmental-audit-evaluation/2011-07-evaluation-veterans-independence-program/4-0#fna17).  The VIP is aligned with these federal government priorities by:   1. Contributing to improvement of the health of Canadians through providing Veterans access to home care services and support such as personal care, nursing services, access to nutrition, and ambulatory care that aim to help Veterans remain healthy and independent in their own homes and communities. 2. Helping to keep Canadians safe by providing Veterans access to services and supports such as home adaptations, housekeeping, grounds maintenance and social transportation to aid Veterans in everyday household tasks that they may no longer be able to complete safely on their own. 3. Supporting Canadian families of Veterans through its support of caregivers.    1. The suite of programs aid families and caregivers of Veterans by offering assistance determined by the Veterans eligibility and needs.    2. Housekeeping and/or grounds maintenance services aid eligible primary caregivers and spouses of Veterans who have entered a long-term care facility, or have passed away, to remain healthy and independent in their own homes.   The Prime Minister of Canada has identified five priorities for his government, one of which is "Delivering the health care Canadians need, when they need it, by addressing the fiscal imbalance and establishing a patient wait-times guarantee with the provinces. VIP helps address this priority by providing services to Veterans on provincial waitlists (e.g., personal care) and by offering services that help them remain in their homes until facility beds become available (e.g., Overseas Veterans [OSV] waitlist initiative). |

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