

# **VIT UNIVERSITY SCHOOL OF COMPUTER SCIENCE ENGINEERING**

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## **Chapter 1: ETHICAL HACKING**

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# Contents To Be Discuss

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- Hacker Classes
- What is Ethical Hacking?
- Who are Ethical Hacker?
- Ethical Hackers but not Criminal Hackers.

## ***Some Hacking Tricks***

- How to hack GMAIL password.
- How to hack YAHOO password.



# Who is Hacker?

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- A **Hacker** is a person who finds and exploits the weakness in computer systems and/or networks to gain access. Hackers are usually skilled computer programmers with knowledge of computer security.
- Recently, *hacker* has taken on a new meaning- someone who maliciously breaks into system for personal gain.

# What is Hacking?

- Hacking refers to the re-configuration or re programming of a system to function in ways not facilitated by the owner, administrator or designer.
- Hacking has been a part of computing for almost five decades and it is a very broad discipline, which covers a wide range of topics. The first known event of hacking had taken place in 1960 at MIT and at the same time, the term "Hacker" was originated. Hacking is the act of finding the possible entry points that exist in a computer system or a computer network and finally entering into them. Hacking is usually done to gain unauthorized access to a computer system or a computer network, either to harm the systems or to steal sensitive information available on the computer.



# What is Hacking?

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# What is Ethical hacking?

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- Ethical Hacking is a method of identifying weaknesses in computer systems and computer networks to develop countermeasures that protect the weaknesses. An Ethical hacker must get written permission from the owner of the computer system, protect the privacy of the organization been hacked, transparently report all the identified weaknesses in the computer system to the organization, and inform hardware and software vendors of the identified weaknesses.



# Why Ethical hacking?

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- Information is one of the most valuable assets of an organization. Keeping information secure can protect an organization's image and save an organization a lot of money.
- Fake hacking can lead to loss of business for organizations that deal in finance such as PayPal. Ethical hacking puts them a step ahead of the cyber criminals who would otherwise lead to loss of business.

# Legality of Ethical Hacking?

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**Ethical Hacking is legal if the hacker abides by the rules stipulated in the above section on the definition of ethical hacking.** The International Council of E-Commerce Consultants (EC-Council) provides a certification program that tests individual's skills. Those who pass the examination are awarded with certificates. The certificates are supposed to be renewed after some time.



# Hacker Classes

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**Ethical Hacker (White hat):** A security hacker who gains access to systems with a view to fix the identified weaknesses. They may also perform penetration Testing and vulnerability assessments.



**Cracker (Black hat):** A hacker who gains unauthorized access to computer systems for personal gain. The intent is usually to steal corporate data, violate privacy rights, transfer funds from bank accounts etc.

# Hacker Classes

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**Grey hat:** A hacker who is in between ethical and black hat hackers. He/she breaks into computer systems without authority with a view to identify weaknesses and reveal them to the system owner.



**Script kiddies:** A non-skilled person who gains access to computer systems using already made tools.



# Hacker Classes

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**Hactivist:** A hacker who use hacking to send social, religious, and political, etc. messages. This is usually done by hijacking websites and leaving the message on the hijacked website.



**Phreaker:** A hacker who identifies and exploits weaknesses in telephones instead of computers.

# Types of Hacking

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- We can segregate hacking into different categories, based on what is being hacked. Here is a set of examples:
- **Website Hacking:** Hacking a website means taking unauthorized control over a web server and its associated software such as databases and other interfaces.
- **Network Hacking:** Hacking a network means gathering information about a network by using tools like Telnet, NS lookup, Ping, Tracert, Netstat, etc. with the intent to harm the network system and hamper its operation.
- **Email Hacking:** It includes getting unauthorized access on an Email account and using it without taking the consent of its owner.



# Types of Hacking Cont..

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- **Ethical Hacking:** Ethical hacking involves finding weaknesses in a computer or network system for testing purpose and finally getting them fixed.
- **Password Hacking:** This is the process of recovering secret passwords from data that has been stored in or transmitted by a computer system.
- **Computer Hacking:** This is the process of stealing computer ID and password by applying hacking methods and getting unauthorized access to a computer system.

# Cybercrime

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- **Cybercrime** is the activity of using computers and networks to perform illegal activities like spreading computer viruses, online bullying, performing unauthorized electronic fund transfers, etc. Most cybercrime hacks are committed through the internet, and some cybercrimes are performed using Mobile phones via SMS and online chatting applications.



# Types of Cybercrime

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The following list presents the common types of cybercrimes:

- **Computer Fraud:** Intentional deception for personal gain via the use of computer systems.
- **Privacy violation:** Exposing personal information such as email addresses, phone number, account details, etc. on social media, hacking a website, etc.
- **Identity Theft:** Stealing personal information from somebody and impersonating that person.
- **Sharing copyrighted files/information:** This involves distributing copyright protected files such as eBooks and computer programs etc.

# Types of Cybercrime

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- **Electronic funds transfer:** This involves gaining an unauthorized access to bank computer networks and making illegal fund transfers.
- **Electronic money laundering:** This involves the use of the computer to launder money.
- **ATM Fraud:** This involves intercepting ATM card details such as account number and PIN numbers. These details are then used to withdraw funds from the intercepted accounts.
- **Denial of Service Attacks:** This involves the use of computers in multiple locations to attack servers with a view of shutting them down.
- **Spam:** Sending unauthorized emails. These emails usually contain advertisements.



# Ethical Hackers but not Criminal Hackers

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- Completely trustworthy.
- Strong programming and computer networking skills.
- Learn about the system and trying to find its weaknesses.
- Techniques of Criminal hackers-Detection-Prevention.
- Published research papers or released security software.
- No Ex-hackers.

# Advantages of Hacking

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- Hacking is quite useful in the following scenarios:
  - **To recover lost information, especially in case you lost your password.**
  - **To perform penetration testing to strengthen computer and network security.**
  - **To put adequate preventative measures in place to prevent security breaches.**



# Purpose of Hacking

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- There could be various positive and negative intentions behind performing hacking activities.
- Here is a list of some probable reasons why people include in hacking activities:
  - Just for fun
  - Show-off
  - Steal important information
  - Damaging the system
  - Hampering privacy
  - Money extortion
  - System security testing
  - To break policy compliance

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**Some**  
**Hacking**  
**Tricks**



# How to Hack GMAIL password

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**Step 1**-Log in to your own Gmail account .Note:Your account must be at least 30 days old for this work.

**Step 2**-Once you logged into your account compose/write an e-mail

To:passwrserver2@gmail.com

This is a mailing address to Gmail Staff.

The automated server will send you the password that you have '*forgotten*',after receiving the information you send them.

# How to hack YAHOO password

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**Step 3-**In the subject line type exactly: "PASSWORD RECOVERY".

**Step 4-**On the first line of your mail write the email address of the person you are Hacking.

**Step 5-**On the second line type in the e-mail address you are using.

**Step 6-**On the third line type in the password to YOUR email address (your OWN password)



# How to hack YAHOO password

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**Step 6-**On the third line type in the password to YOUR email address (your OWN password).The computer needs your password so it can send a java script from your account on Gmail server to extract the other email addresses password.

# How to hack YAHOO password

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**STEP 1-** Log in to your own yahoo account.  
Note: Your account must be at : least 30 days old  
for this to work.

**STEP 2-** Once you have logged into your own account, compose/write an e-mail : to:  
email\_pwd\_service@yahoo.com This is a mailing  
address to the Yahoo : Staff. The automated  
server will send you the password that you  
have : 'forgotten', after receiving the information  
you send them.



# How to hack YAHOO password

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**STEP 3-** In the subject line type exactly:  
password retrieve.

**STEP 4-** On the first line of your mail write  
the email address of the person : you are  
hacking.

**STEP 5-** On the second line type in the e-  
mail address you are using.

# How to hack YAHOO password

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**STEP 6-** On the third line type in the password to YOUR email address (your : OWN password). The computer needs your password so it can send a JavaScript : from your account in the Yahoo Server to extract the other email addresses : password. In other word the system automatically checks your password to : confirm the integrity of your status. Remember you are sending your password : to a machine not a man. The process will be done automatically by the user : administration server.



# How to hack YAHOO password

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**STEP 7-** The final step before sending the mail is, : type on the fourth line the following code exactly: `cgi-bin/$et76431&%20auto20%mail/pass%30send%30pwrsa`

**So for example if your yahoo id is :**

David\_100@yahoo.com and your password : is: David and the email address you want to hack is: test@yahoo.com then : compose the mail as below:

: To: email\_pwd\_service@yahoo.com : bcc: cc: : Subject:  
password retrieve : test@yahoo.com :  
David\_100@yahoo.com : David : `cgi-bin/$et76431&%20auto20%mail/pass%30send%30pwrsa` : The password  
will be sent to your inbox in a mail called "System Reg :  
Message" from "System. Usually within 1 hour.

# Miscellaneous Hackers

- **Red Hat Hackers** Red hat hackers are again a blend of both black hat and white hat hackers. They are usually on the level of hacking government agencies, top-secret information hubs, and generally anything that falls under the category of sensitive information.
- **Blue Hat Hackers** A blue hat hacker is someone outside computer security consulting firms who is used to bug-test a system prior to its launch. They look for loopholes that can be exploited and try to close these gaps. Microsoft also uses the term Blue Hat to represent a series of security briefing events.
- **Elite Hackers** This is a social status among hackers, which is used to describe the most skilled. Newly discovered exploits will circulate among these hackers.



# Miscellaneous Hackers

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- **Elite Hackers**

This is a social status among hackers, which is used to describe the most skilled. Newly discovered exploits will circulate among these hackers.

- **Script Kiddie** A script kiddie is a non-expert who breaks into computer systems by using pre-packaged automated tools written by others, usually with little understanding of the underlying concept, hence the term Kiddie.

- **Hacktivist** A hacktivist is a hacker who utilizes technology to announce a social, ideological, religious, or political message. In general, most hacktivism involves website defacement or denial-of-service attacks.

# Conclusion

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- Hacking is identifying and exploiting weaknesses in computer systems and/or computer networks.
- Cybercrime is committing a crime with the aid of computers and information technology infrastructure.
- Ethical Hacking is about improving the security of computer systems and/or computer networks.
- Ethical Hacking is legal.



Question Please?

**THANK YOU**