# CYBER SECURITY EXPERTS



### **COMMON TERMINOLOGY**

- What is cyber security
- Hacking
- White hat hackers
- Black hat hackers
- Grey hat hackers
- > Vulnerability assessment
- Exploit
- payloads

### PHASES OF PENETRATION TESTING

- Footprinting
- Scanning
- Gaining access
- Maintain access
- Clearing tracks

## **BASIC CONCEPTS OF NETWORKING**

- Networking devices
- > TCP IP
- Subnetting
- > Understanding service
- DNS server
- DHCP server
- Nat server
- Web server

### **CRYPTOGRAPHY**

- Key terminologies
- > Technologies used in cryptography
- > Symmetric encryption scheme
- Asymmetric encryption scheme
- Public key cryptography
- Hashing technologies
- Brute force attacks
- > Brate force attack
- dictionary attacks
- Rule based Attacks
- Rainbow table attacks
- Steganography

### **FOOTPRINTING**

- Targets of footprinting
- > IT infrastructure
- Organizational infrastructure
- Foot printing using Google



- Foot printing using Whois
- Foot printing using DNS queries
- Foot printing using command line utilities
- > Ping
- Tracert
- $\triangleright$

#### **NETWORK SCANNING**

- Scanning open ports
- Defense against port scanner
- Scanning tools

#### **SPOOFING**

- > IP address spoofing
- MAC address spoofing
- SMS spoofing
- URL spoofing
- Email spoofing
- Arp spoofing
- DNS spoofing

#### WINDOWS FIREWALL

- > Firewall In Windows
- Configuring Windows Firewall
- Windows Firewall Advanced Security
- ➤ Inbound & Outbound Rules?

## WEB APPLICATION VULNERABILITY

- Cross site scripting (XSS)
- Cross site request forgery (CSRF)
- Brute force attack
- No rate limit
- Session and cookies
- > File inclusion
- Directory traversal attack
- > Host header attack

# **SQL INJECTION**

- Error based
- Union based
- Blind based

### **SYSTEM SECURITY**

- > Introduction to OS
- Windows
- Linux
- User centered attacks



## **MALWARES**

- Virus
- > Worm
- > Trojan
- Rootkit
- Bots
- Adware
- Key loggers

# **SOCIAL ENGINEERING**

- Phishing
- > Shareware
- TailgatingPop ups
- > Shoulder surfing
- Dumpster diving

# **DENIAL OF SERVICE ATTACK**

- DOS Attack
- > DDOS

# INTRODUCTION TO CLOUD SECURITY

- What is cloud
- Categories of Cloud ComputingCloud Security