

Chapter 1



INFORMATION SYSTEMS SECURITY

INTRODUCTION



- Classify each of the following as a violation of confidentiality, of integrity, of availability, of authenticity, or of some combination of those.
 - When someone copies another person's homework.
 - Eve peeks at Alice's password when she is logging in.
 - Eve logs into Alice's account using Alice's password without Alice knowing about it.
 - Eve changes the amount of Alice's check from \$1000 to \$10000.
 - Eve spoofs Alice's IP address to gain access to her computer.
 - John copies a file from Alice's account and then deletes the file from Alice's directory.
 - Eve crashes Alice's system.
 - Eve forges Alice's signature on a contract.



- When someone copies another person's homework.
 - Confidentiality (homework was exposed)
- Eve peeks at Alice's password when she is logging in.
 - Confidentiality (Password was exposed)
- Eve logs into Alice's account using Alice's password without Alice knowing about it.
 - Confidentiality (Eve obtained Alice's password)
 - Integrity (Eve acting as Alice)
- Eve changes the amount of Alice's check from \$1000 to \$10000.
 - Integrity (the amount of the check has changed)



- Eve spoofs Julie's IP address to gain access to her computer
 - Integrity (Eve acting as Alice)
 - Confidentiality (Eve access Alice's data)
- John copies a file from Alice's account and then deletes the file from Alice's directory.
 - Confidentiality and availability
- Eve crashes Alice's system.
 - Availability (the system is down)
- Eve forges Alice's signature on a contract.
 - Integrity (source origin compromised)