Introduction

Cyber Security:

Preserving the integrity, availability and confidentiality of information system resources.

CIA Triad:

- Confidentiality
- Integrity - Messages are not changed during transmission
- Availability - DOS

Authenticity - Verifying that users are who they say they are

Threat - Potential violation of security

Attacks:

- Active - Happening in real time
- Passive - Doesn't affect system resources or affect their operation (traffic analysis, the release of message contents).

Nonrepudiation - Prevents either sender from denying a transmitted message (Proof of delivery and proof of the sender's identity)

Security Types:

- Authentication - (Passwords, Keys, Biometrics and behaviours)
- Accountability
- Authorization