

# task 5

## 1. Different Malware Types

### 1. Virus

A **virus** is a type of malware that attaches itself to a legitimate file or program. It spreads only when the infected file is executed by the user.

#### Key Characteristics:

- Requires user action to spread
- Attaches to executable files
- Can corrupt, delete, or modify files

#### Example Impact:

- File damage
  - System slowdown
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### 2. Worm

A **worm** is a self-replicating malware that spreads automatically across networks without user interaction.

#### Key Characteristics:

- Does not need a host file
- Spreads through network vulnerabilities
- Consumes network bandwidth

#### Example Impact:

- Network congestion
  - Rapid system infection
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### 3. Trojan

A **trojan** is malware disguised as a legitimate application to trick users into installing it.

#### Key Characteristics:

- Appears harmless
- Does not self-replicate
- Often creates backdoors

#### **Example Impact:**

- Credential theft
  - Remote access to system
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## **4. Ransomware**

**Ransomware** is malware that encrypts a victim's files and demands payment to restore access.

#### **Key Characteristics:**

- Encrypts important data
- Displays ransom message
- Targets individuals and organizations

#### **Example Impact:**

- Data loss
- Financial damage
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