

## Lab 02 Assignment: Social Engineering and Data Protection Strategies

### Instructions:

Complete the tasks below and submit a well-organized report of 600–800 words. Include real-world examples, diagrams if applicable, and cite a minimum of three credible sources using APA format.

### Lab Tasks:

#### 1. Social Engineering Case Study

Research a documented case of a successful social engineering attack. Describe the type of attack, how the attacker exploited human vulnerabilities, and the outcome. Provide an analysis of how the attack could have been prevented through awareness training or technical controls.

#### 2. Physical Security Research

Choose a real or hypothetical organization and analyze their perimeter and physical security defenses. Explain how devices like IR sensors, Faraday cages, or mantraps could improve their security posture.

#### 3. Data Classification and Compliance

Create a sample data classification policy for a fictional company. Include five types of data and specify how each type should be handled and protected. Discuss the importance of compliance with regulations such as data sovereignty.

#### 4. Data Protection Technologies

Investigate one or more of the following technologies: tokenization, data masking, segmentation, or data minimization. Explain how it works and how it can be applied to protect sensitive data in transit and at rest.