**Report**

**Title:** Scanning local area networks for open ports.

**Introduction:** port scanning is a technique used to identify open ports and services on a network. It involves sending network packets to a range of ports and analyzing the responses to determine which ports are open or closed. Nmap is a popular tool used for port scanning.

**Tools used:** Nmap and Wireshark.

**Results:**

**IP Address**: 192.168.29.164

**Open ports**:

135/tcp: open, service msrpc.

139/tcp: open, service netbios-ssn

445/tcp: open, service Microsoft-ds.

**Potential effects due to open ports are:**

1.Unauthorized Access

2.Malware and virus transmission

3.Denial of service and distributed denial of service attacks

4.Data Theft and Exploitation.