**System Requirements for SQL Injection Testing with SQLmap**

*Automated SQL Injection Testing in a Controlled Environment*

**1. Hardware Requirements**

| **Component** | **Minimum** | **Recommended** |
| --- | --- | --- |
| **Processor** | Intel Core i3 / AMD equivalent | Intel Core i5/i7 / Ryzen 5+ |
| **RAM** | 4 GB | 8 GB or higher |
| **Storage** | 20 GB free space | 50 GB free space |
| **Display** | 720p resolution | Full HD (1920×1080) |
| **Network** | Ethernet/Wi-Fi | Gigabit Ethernet + Wi-Fi 6 |

**2. Software Requirements**

| **Software** | **Version** | **Purpose** |
| --- | --- | --- |
| **Operating System** | Windows 10/11, Kali Linux, Ubuntu 20.04+ | Testing environment |
| **Python** | 3.8+ | Running SQLmap scripts |
| **SQLmap** | Latest stable release | Automated SQLi testing |
| **DVWA** | Latest version | Vulnerable test application |
| **XAMPP/Docker** | XAMPP 8+ / Docker 20+ | Local web server setup |
| **Web Browser** | Chrome / Firefox | Manual testing & debugging |

*(Optional Tools: Wireshark for traffic analysis, Postman for API testing)*

**3. Network & Configuration**

✔ **Internet Connection** – Required for tool installation.  
✔ **Localhost Access** – DVWA must run on http://localhost.  
✔ **MySQL Port (3306)** – Must be open for database connections.  
✔ **DVWA Security Level** – Set to **"Low"** for testing.

**4. Virtualization (Optional)**

* **Recommended VM**: Kali Linux (VirtualBox/VMware).
* **Network Mode**: Bridged (for LAN testing) or NAT (isolated).