**Independent work of master's student 1**

**Purpose of the task:** describe and evaluate the security level of Windows operating systems and suggest measures to improve security.

1. **Overview of Windows operating systems:** review the security of the Windows operating system , what features it has, what it is supported by Provide general information about the different versions of Windows operating systems that you plan to analyze. This may include Windows 7, Windows 10, Windows Server, etc.
2. **Vulnerability Identification:** Conduct an analysis of vulnerabilities specific to selected Windows operating systems. Use vulnerability databases, Microsoft publications, and other sources of information.
3. **Assess security measures:** Evaluate the security measures provided by Windows operating systems. Consider aspects such as access control, antivirus protection, network security and more.
4. **Security Policy Analysis:** Explore the security policies that can be configured in Windows operating systems, such as password policies, audit settings, and access controls.
5. **Identify security controls:** Review the tools and technologies available in Windows to control security, such as Windows Defender, firewalls, Group Policies, and others.
6. **Assessing relevance and updates:** Evaluate how Windows operating systems are updated and supported by the manufacturer. Learn the process of installing updates and security patches.
7. **Recommendations for Security Improvements:** Based on your analysis, suggest specific measures to improve the security of Windows operating systems, including recommendations for setting up security policies and using additional security tools.
8. **Conclusion:** Summarize your analysis of the security of Windows operating systems and formulate the main conclusions.
9. **List of sources used:** List all sources of information you used in performing your analysis.
10. **Presentation of Findings:** Prepare a report presenting the results of your analysis and recommendations. This may include graphics, tables and other visual materials.