

**CY2002**

**Digital Forensics**

**Assignment 01**

**Assignment Title**

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**Date:** 4th September 2024

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# **Introduction**

In this project, I aimed to create a write Blocker via registry settings on a Windows system. The script was originally found on GitHub in PowerShell (.ps1) format and was later converted to Python for better integration with a Flask web application. The goal of this project was to allow users to enable or disable write protection.

# **Details and Steps**

## Conversion from PowerShell to Python

The original script was found on GitHub in PowerShell format. The conversion involved translating the PowerShell commands into Python's os.system and subprocess calls, which are used to interact with the Windows registry and manage USB write protection settings..

## Flask Integration

To create a user-friendly interface, Flask was chosen as the web framework. The script was embedded into a Flask application that allows users to:

* + View the current status of USB write protection.
  + Enable write protection with a single click.
  + Disable write protection similarly.

## Core Functionality

* + **Check Status**: The script queries the Windows registry to check whether USB write protection is enabled or disabled.
  + **Enable Protection**: The script adds several registry keys and values to enforce write protection on USB devices.
  + **Disable Protection**: The script removes these registry entries to disable write protection.
  + **Force Update and Restart Explorer**: After modifying the registry, the gpupdate command is run to force the policy update, and the Windows Explorer process is restarted to apply changes immediately.

# **Summary**

This project successfully converted a USB write protection script from PowerShell to Python, integrating it into a Flask web application. The resulting application provides a simple yet effective way for users to manage USB write protection on Windows systems through a web interface. The conversion process and Flask integration were essential in creating a user-friendly tool that automates complex registry operations, making it accessible even to non-technical users.

# **References**

https://github.com/digitalsleuth/Registry-Write-Block