Assignment: Create an Enhanced Python Backdoor

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Introduction:

In this assignment, you will have the opportunity to apply your knowledge and skills in ethical hacking and programming to enhance a Python reverse shell backdoor. The provided Python template code serves as the foundation for this assignment, offering you a starting point to develop and integrate one of the following features:

1. **Keylogger Feature:** You will create a keylogger capable of capturing and logging keystrokes on the target machine.
2. **Privilege Elevation:** Implement a feature to elevate privileges, potentially granting access to restricted files or functions.
3. **Audio and Desktop Recording:** You will add an option to capture screenshots of the target's desktop and potentially record audio, allowing you to monitor the user's environment.

This assignment is designed to challenge your understanding of backdoor development, ethical considerations, and your ability to integrate advanced functionality into existing code. Please be aware that ethical guidelines must be followed rigorously throughout the assignment, and all testing should be conducted in a controlled, authorized environment.

Assignment Worth (15%):

This assignment will contribute to your overall course grade and will be assessed based on the successful integration of the chosen feature, functionality, adherence to ethical guidelines, and the quality of the submitted report.

Read the following instructions carefully to proceed with the assignment successfully.

Requirements:

1. Python Template Code: Utilize the provided Python template code that was covered in the course.
2. Selected Feature: Choose one of the three features (Keylogger, Privilege Elevation, or Audio and Desktop Recording) to add to the existing code.
3. Functionality: Ensure the selected feature functions correctly and is integrated seamlessly into the backdoor code.

Assignment Steps:

1. **Use Python Template Code**:
    - Begin with the provided Python template code for a simple reverse shell, which was introduced in the course.
2. **Enhance the Backdoor**:
    - Depending on your chosen feature, write code to either create a keylogger, elevate privileges, or enable audio and desktop recording within the backdoor.
3. **Integration**:
    - Integrate the chosen feature into the existing code while ensuring that the backdoor remains functional and discreet.
4. **Testing and Evaluation**:
    - Test the enhanced backdoor in a controlled environment to ensure it operates as expected.
    - Verify that the added feature (e.g., keylogger, privilege elevation, or recording) performs its intended task effectively.
5. **Ethical Guidelines**:
    - Adhere to ethical guidelines throughout the development and testing process.
    - Respect privacy and security regulations, and obtain proper authorization if testing on systems you do not own.

Submission Requirements:

- Submit the modified Python backdoor code with the chosen feature integrated.
- Include a brief report detailing the implementation process, any challenges encountered, and the results of testing.

Note:

This assignment is for educational purposes only and should be executed in an ethical and legal manner. Unauthorized use of such tools on real systems without proper authorization is strictly prohibited and may result in legal consequences.