

## Post-Exploitation – Research Question

*This assignment explores the intersection of reinforcement learning (RL) agents and the post-exploitation phases in cybersecurity. Respond to the following research questions, providing a thoughtful examination of the ways RL agents can be employed, the foundational groundwork laid by previous studies, and potential limitations in improving these methods.*

### Instructions

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**Answer the Question:** Discuss how RL agents introduced in previous studies can be effectively employed by future researchers to enhance and automate specific aspects of post-exploitation phases in cybersecurity. Explore methodologies, potential applications, and the overarching impact of integrating RL agents into post-exploitation practices.

**Basis of Decision:** Examine the ways in which the authors of the study laid the groundwork for future researchers. Identify specific insights, methodologies, or frameworks introduced by the authors that can be built upon in subsequent studies. Highlight the contributions that pave the way for advancements in RL-based post-exploitation techniques.

**Consider Limitations:** Investigate potential limitations that future researchers might encounter in the improvement of RL-based post-exploitation methods. Reflect on challenges, ethical considerations, or technical constraints that could impede the seamless integration and enhancement of these approaches in cybersecurity practices.

**Real-World Relevance:** Relate your responses to real-world applications. Consider practical scenarios where RL agents can significantly impact the automation and enhancement of post-exploitation phases. Discuss how your insights can shape the future direction of research in this domain.

### Scope

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1. How can the RL agents introduced in the studies be effectively employed by future researchers to enhance and automate specific aspects of post-exploitation phases?
2. In what ways did the authors of the study lay the groundwork for future researchers, and what specific insights or methodologies can be built upon in subsequent studies?
3. What are some limitations that future researchers might encounter in the improvement of these methods?