

SecureBank Project 5 – Detailed Submission

Submitted by: Judy Raj

Task 1: Identified Vulnerability - CVE-2024-43451 identified via IBM X-Force Exchange.

Task 2: Google Dorking Investigation - Dorking commands used: site:CVE-2024-43451, site:gov CVE-2024-43451, site:gov CVE-2024-43451 filetype:pdf - Results include references on government sites and PDF reports detailing the vulnerability.

Task 3: Penetration Testing Plan (Questions & Answers) - Scope: A (Include all systems, networks, and applications) - Primary Objective: A (Identify all possible vulnerabilities) - Rules of Engagement: B (Notify staff after business hours) - Discovery Approach: C (Combine automated and manual techniques) - Exploitation Strategy: C (Mix of high-severity and easily exploitable vulnerabilities) - Reporting: C (Provide both a technical report and an executive summary)

Task 4: Symmetric Encryption (Steps) - Created userdetails with sample credentials (admin / P@ssw0rd123 / admin@example.com / 123-456-7890) - Generated AES passkey and stored in 'passkey' - Encrypted userdetails -> userdetails_encrypt - Displayed encrypted binary output and decrypted to userdetails_decrypt to verify content - Verified decrypted content matches original credentials