Security risk assessment report

Review the following scenario. Then complete the step-by-step instructions.

You are a security analyst working for a social media organization. The organization recently experienced a major data breach, which compromised the safety of their customers' personal information, such as names and addresses. Your organization wants to implement strong network hardening practices that can be performed consistently to prevent attacks and breaches in the future. After inspecting the organization's network, you discover four major vulnerabilities. The four vulnerabilities are as follows:

- 1. The organization's employees' share passwords.
- 2. The admin password for the database is set to the default.
- 3. The firewalls do not have rules in place to filter traffic coming in and out of the network.
- 4. Multifactor authentication (MFA) is not used.

If no action is taken to address these vulnerabilities, the organization is at risk of experiencing another data breach or other attacks in the future.

Part 1: Select up to three hardening tools and methods to implement

- 1. Password Policies
- 2. Firewall Maintenance
- 3. Multifactor Authentication (MFA)

Part 2: Explain your recommendations

1. Adhering to the NIST latest recommended password policies will ensure that passwords are harder to crack with the use of hashing or salting. This will prevent, or at least minimize successful brute force attacks.

- 2. Firewall maintenance will ensure that correct security configurations are in place, which will minimize the attack surface and protect against various DDOS/DOS attacks. This includes making sure only the necessary ports needed are open and filtering out any unused ports.
- 3. Multifactor authentication allows for much stronger security of user accounts and access to certain assets. This is an additional security feature that will also help towards defending against brute force attacks and unauthorized access.