

Password Strength Evaluation Report

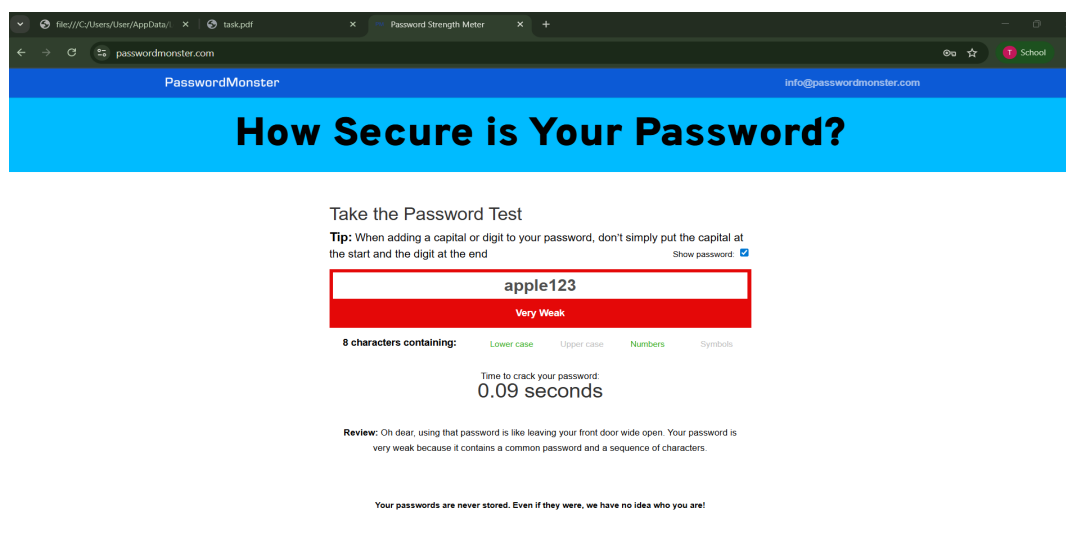
This report evaluates multiple passwords of varying complexity using an online Password Strength Checker tool. The goal of this evaluation is to understand how password length, character variety, and complexity impact security.

1. Passwords Tested & Results

Password: *apple123*

Strength: Very Weak

Time to crack: 0.09 seconds



Password: *Summer2025*

Strength: Very Weak

Time to crack: 13.57 seconds



Password: T!mE2\$ecure#2025

Strength: Very Strong

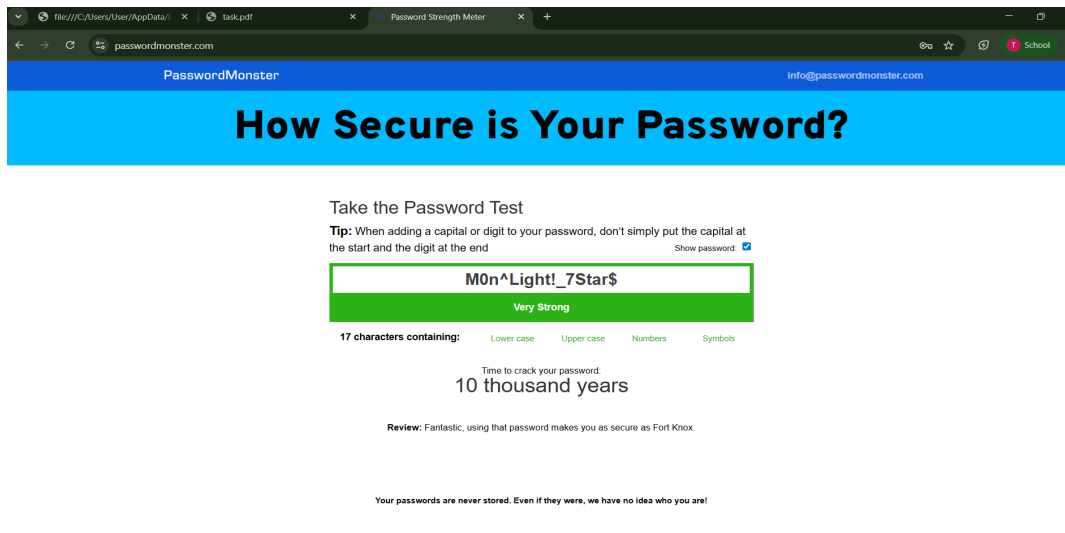
Time to crack: 86 years



Password: M0n^Light!_7Star\$

Strength: Very Strong

Time to crack: 10,000 years



2. Observations & Feedback

- Simple and short passwords such as 'apple123' are cracked instantly.
- Slightly longer but predictable passwords like 'Summer2025' are still very weak.
- Complex passwords with mixed characters such as 'T!mE2\$ecure#2025' greatly improve security.
- Highly complex and lengthy passwords like 'M0n^Light!_7Star\$' are extremely secure and practically uncrackable.

3. Best Practices for Strong Passwords

1. Use at least 12–16 characters.
2. Mix uppercase, lowercase, numbers, and special characters.
3. Avoid dictionary words or predictable patterns.
4. Do not reuse passwords across accounts.
5. Use a password manager for securely storing complex passwords.

4. Tips Learned

- Length increases strength exponentially.
- Randomness is key: predictable words or sequences are weak.
- Special characters and mixed casing slow down brute force attacks significantly.

5. Common Password Attacks

- **Brute Force:** Tries all possible combinations until the correct password is found.
- **Dictionary Attack:** Uses a list of common words or known passwords.
- **Hybrid Attack:** Combines dictionary words with variations (e.g., adding numbers or symbols).
- **Phishing:** Tricks users into revealing passwords voluntarily.

6. Conclusion

Password complexity directly impacts security. Simple and short passwords are vulnerable to instant cracking, while long, complex, and unpredictable passwords can resist brute force and dictionary attacks for decades or even millennia. Users should adopt best practices to ensure strong password hygiene.