Task 6

Create a Strong Password and Evaluate Its Strength

Objective

To understand the key features of a strong password, create multiple passwords with varying complexity, evaluate their strength using online tools, and summarize best practices and findings.

Step 1–2: Passwords Created: -

Passwords	Type
123456789098765431	Weak
aAJ@03	Good
Aaj@03JunE	Strong
Aaaj@0|3$_june^2#0>2!5	Very Strong

Step 3–4: Password Strength Evaluation: -

Passwords	Strength Score (%)
123456789098765431	29%
aAJ@03	56%
Aaj@03JunE	90%
Aaaj@0|3$_june^2#0>2!5	100%

Step 5: Best Practices for Creating Strong Passwords

- Use at least 12–16 characters.
- Combine uppercase, lowercase, numbers, and symbols.
- Avoid personal information (names, birthdays).
- Do not use common or dictionary words.
- Use passphrases that are easy to remember but hard to guess.
- Never reuse passwords across accounts.

Step 6: Tips Learned from Evaluation

- Longer passwords increase strength significantly.
- Random character use adds complexity.
- Passphrases (e.g., 2bOrNot2B@2025!) are both strong and memorable.
- A mix of unrelated words and characters creates strong passwords.
- Password managers help store strong, unique passwords safely.

Step 7: Common Password Attacks

- **Brute Force Attack**: Tries every possible combination; short/simple passwords are easily cracked.
- **Dictionary Attack**: Uses a list of common words and known passwords.
- **Credential Stuffing**: Uses previously leaked credentials to access accounts.
- **Phishing**: Tricks users into revealing passwords through fake websites or messages.

Step 8: How Password Complexity Affects Security

- Simple passwords (like password123) can be cracked in seconds.
- Moderate passwords are better but still vulnerable.
- Strong passwords with complexity and length can resist cracking for years.
- Password complexity and uniqueness significantly reduce the risk of successful attacks.

Screen shorts: -

Test Your Password		Minimum Requirements
Password:	Aaj@03JunE	• Minimum 8 characters in length • Contains 3/4 of the following items: - Uppercase Letters - Lowercase Letters - Numbers - Symbols
Hide:	☐	
Score:	90%	
Complexity:	Very Strong	

Test Your Password		Minimum Requirements
Password:	Aaaj@0|3$_june^2#0>2!5	• Minimum 8 characters in length • Contains 3/4 of the following items: - Uppercase Letters - Lowercase Letters - Numbers - Symbols
Hide:	☐	
Score:	100%	
Complexity:	Very Strong	

Test Your Password		Minimum Requirements
Password:	aAJ@03	• Minimum 8 characters in length • Contains 3/4 of the following items: - Uppercase Letters - Lowercase Letters - Numbers - Symbols
Hide:	☐	
Score:	56%	
Complexity:	Good	

Test Your Password		Minimum Requirements
Password:	123456789098765431	• Minimum 8 characters in length • Contains 3/4 of the following items: - Uppercase Letters - Lowercase Letters - Numbers - Symbols
Hide:	☐	
Score:	29%	
Complexity:	Weak	