

# PASSWORDS

THE LAST LINE OF DEFENSE  
BETWEEN A HACKER AND  
YOUR PERSONAL INFORMATION

## HOW PASSWORDS ARE HACKED:

### GUESSING

Commonly used passwords such as 123456, qwerty, abc123, password, and 111111 or default passwords are guessed.



### SPIDERING

Information is gathered from social media to come up with word lists used for **dictionary** and **brute force attacks**.



### PHISHING

Hackers trick you into sharing your credentials by setting up fake login screens that pretend to be an official website.



### WI-FI MONITORING

Hackers connected to public Wi-Fi connections observe information inputted by others connected to the same Wi-Fi.



### BRUTE FORCE ATTACK

Algorithms that combine alpha-numeric characters and symbols.

### DICTIONARY ATTACK

Systematically entering similar terms from various dictionaries.



## PASSWORDS SHOULD NOT INCLUDE:



### REUSED PASSWORDS

If you reuse passwords across multiple sites, they may be leaked and used to access your other accounts.



### PERSONAL INFORMATION

Hackers routinely troll Facebook and Twitter for clues to passwords like these.



### DICTIONARY WORDS

Password-cracking tools freely available online often come with dictionary lists that will try thousands of common names and passwords.



### FAMOUS QUOTES AND WELL-KNOWN PHRASES OR LYRICS

Cybercriminals exploit databases of popular phrases, making them highly predictable and easy to crack.



### WORD CHARACTER ALTERNATIVES

Replacing letters with numbers or special characters does not work if the original word mirrors an existing dictionary word. Attackers expect character alternatives and can predict their usage.

## PASSWORDS SHOULD INCLUDE:

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### AT LEAST 8 CHARACTERS

iNuPKdaRf

### UPPER AND LOWER CASES

i2Nu5PK7da9Rf

### NUMBERS

i!Nu5@PK7d#a9R^f

### SYMBOLS

OR

## PASSPHRASES INSTEAD OF PASSWORDS

A passphrase is a multi-word password that creates a phrase. A strong passphrase is 20-30 characters and is a random combination of words that are meaningless together.

epoxy hippo double bread listen neuron plaza

## TWO-STEP VERIFICATION

This extra log-in step provides an additional layer of security by requiring multiple forms of verification.

