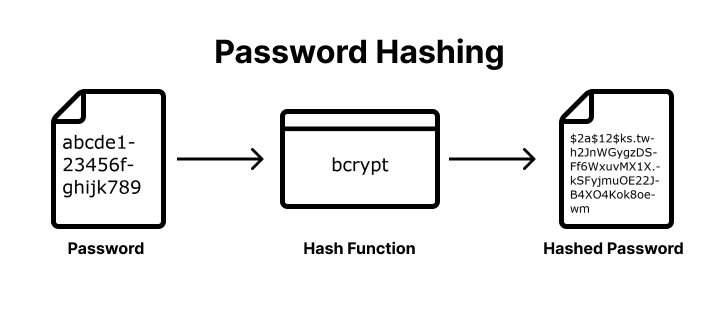
**CTF Challenge: Crack the Password Hash**

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# **Introduction**

Cracking password hashes involves breaking the cryptographic protection that secures stored passwords by reversing or bypassing the hashing process. Hash functions like MD5, SHA-1, and bcrypt convert passwords into unique fixed-size strings that are difficult to reverse. Attackers employ methods such as brute force, where they systematically guess passwords, and dictionary attacks, which use precompiled lists of common passwords. More advanced techniques include rainbow tables, which are precomputed tables of hash values for different passwords, allowing quick lookup of potential plaintext passwords. Understanding these methods helps in creating stronger, more secure password storage systems to protect against such attacks. In this challenge, you will reverse engineer a password hash to uncover the original plaintext password using online tools.



# Challenge Objective

Your objective is to crack the provided password hash and reveal the original password.

# Tools Required

* CrackStation:<https://crackstation.net/>

# Scenario



You have obtained a hashed password (42f749ade7f9e195bf475f37a44cafcb) from a compromised system. Your task is to crack this hash and retrieve the original password using online cracking tools.

# Begin

1. Obtain the hashed password : 42f749ade7f9e195bf475f37a44cafcb
2. Open CrackStation in your web browser: [CrackStation](https://crackstation.net/)
3. Copy and paste the given hash 42f749ade7f9e195bf475f37a44cafcb into the input field.
4. Complete the CAPTCHA verification.
5. Click the "Crack Hashes" button to start the process.

# Question

1. What is the original password for the given hash?

Ans: Password123

1. What type of hash algorithm was used to hash the password 42f749ade7f9e195bf475f37a44cafcb?

Ans: MD5 **OR** md5

# HINT

