### **CTF Topic: Hash Cracking and Generation using Online Hash Crack**

#### **Introduction**

Hash functions are widely used in cybersecurity for various purposes, including data integrity verification and password storage. Understanding how hashes are generated and how they can be cracked is crucial for security professionals. In this challenge, participants will use the Online Hash Crack tool for generating and cracking hashes to learn about the strengths and weaknesses of different hashing algorithms.

#### **2. Tools and Requirements**

* A standard web browser to access online tools.
* **Online Hash Generator**: [Online Hash Crack](https://www.onlinehashcrack.com/hash-generator.php)

#### **3. Scenario**

Alex is investigating a data breach where several hashed passwords were leaked. To understand the severity of the breach, Alex needs to generate hashes of known passwords and attempt to crack the leaked hashes using online tools. This exercise will demonstrate the process of hash generation highlighting the importance of using strong, secure hashing algorithms.

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#### **4. Process**

1. **Access the Online Hash Generator**: Open your web browser and go to [Online Hash Crack](https://www.onlinehashcrack.com/hash-generator.php).
2. **Generate a Hash**:
   * Input the plain text "cybersecurity".
   * Generate the hash and note the result.
   * In the second input plain text will be “hacking”.
   * After all search is completed, answer the question and complete the challenge.

#### **5. Let’s Begin the Challenge**

#### **Question**

* **Flag 1**: What is the MD5 hash of the string "cybersecurity"?
  + **Answer**: "B03A894E101746D09277F1F255CC8A40"
* **Flag 2**: What is the SHA384 hash of the string “ ?
  + **Answer**: "950BEDFD72A48C45D23559754B8224EDA4A1108C04A3D7097C4899C23C4FA033BE9BCF0BC7F529D581A1C5C7D7DE9805"

**HINT**









