**CTF – CRYPTO CHALLENGE**

**Instructions: Given the clues in the question, infer the encryption algorithm involved and solve the challenge.**

1. **Of Caesar, my Caesar**[**3**](https://www.infosecinstitute.com/resources/capture-the-flag/defeating-cryptography-solutions-to-net-force-ctf-challenges-using-practical-cryptanalysis/)
   * **Ciphertext**: lfdphlvdzlfrqtxhuhg
   * **Plaintext**:
2. **hsabtA**
   * **Ciphertext**: ZGYZHSRHHRNKOVYFGVZHBGLYIVZP
   * **Plaintext**:
3. **Rail Fence Cipher (Encryption)**
   * **Key**: 3
   * **Special Instructions**: Remove spaces when encrypting, do not use nulls.
   * **Alphabet**: “ABCDEFGHIJKLMNOPQRSTUVWXYZ”
   * **Plaintext**: Run away now
   * **Ciphertext**:
4. **Rail Fence Cipher (Decryption)**
   * **Key**: 3
   * **Special Instructions**: Remove any nulls that have been used.
   * **Alphabet**: “ABCDEFGHIJKLMNOPQRSTUVWXYZ”
   * **Ciphertext**: WSLDHTHUDEOAOWX
   * **Plaintext**:
5. **Another easy one (Vigenère)**
   * **Ciphertext**: wqceagvmwgia
   * **Plaintext**:

**Instructions: Complete the table. What is the hash for the following Strings? Use this link: MD5 Hash Generator**

**Table**

| **Id** | **String** | **Algorithm** | **Hash** |
| --- | --- | --- | --- |
| 6 | hello | MD5 | d131dd02c5e6eec4693d9a0698aff95c2fcab58712467eab4004583eb8fb7f8955ad340609f4b3028 |
| 7 | goodbye | MD5 | 3e488832571415a085125e8f7cdc99fd91dbdf280373c5bd8823e3156348f5bae6dacd436c919c6d |
| 8 | This is my favorite subject | SHA-256 | d53e2b487da03fd02396306d248cda0e99f33420f577ee8ce54b67080a80d1ec69821bcb6a88393 |
| 9 |  | SHA-256 | 96f9652b6ff72a70 d131dd02c5e6eec4693d9a0698aff95c2fcab50712467eab4004583eb8fb7f8955ad340609f4b3028 |
| 10 |  | MD5 Hex input | 3e4888325f1415a085125e8f7cdc99fd91dbd7280373c5bd8823e3156348f5bae6dacd436c919c6d |
|  |  | MD5 Hex input | d53e23487da03fd02396306d248cda0e99f33420f577ee8ce54b67080280d1ec69821bcb6a88393 |
|  |  |  | 96f965ab6ff72a70 |