Hash Cracking Challenge – "The Key Quartet"

**Objective:**

Students will identify different hashing algorithms, understand their characteristics, and **crack 4 different hashes** at once to reveal a secret phrase.

Challenge: "The Key Quartet"

You intercepted the following hashes from a suspect's system. You believe each hash created from **different plaintext** and each uses a **different algorithm**.

Your task is to:

* **Identify** each hashing algorithm.
* **Crack** the hashes using online tools or a cracking script.
* **Retrieve the original plaintext** common to all four.

Given Hashes:

1. b62ba115efc8e9dc0509fc81d2b3facd
2. 1a3a310a48b8dc75f6134aa40b159b5252f92312ea2676d69efabd825e51c96d
3. b7ca31ba186ba9e0204611513df2282edd423cef13da9f5f15c084560d6f0b82e8a9e705974a0fdeca0763afd7a7f042a90d28cfa9b028a0e3ec05740ffcd9d3
4. 5f82612d8e8db55afd923f698c7535d978a99337f6744bdcee422a97adce7a29763746069be1ec42da5ea1d0650ff678a147c7baaa2a91ae54e1386fe0909f96

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