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Panel C, Batch C1

Ics Lab A5

(A+) 42  
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FAQs

1. List down some hashing Algorithms.

Ans. -MDS

-SHA1

-SHA 256

-SHA-3

-Whirlpool

-Blake 2

-RIPEMD-160

2. What is the MDS message-digest algorithm?

Ans. MDS is a widely used cryptographic hash function that produces a 128-bit (16 byte) hash value. It was designed by Ronald Rivest in 1991 and is commonly used for checksums and to check the integrity of files. MDS is now considered cryptographically broken and unsuitable for further use due to vulnerabilities that allow for collision attacks.

3. What are Alternatives to MDS algorithm?

Ans. -SHA 256, 384 and S12. These are part of SHA-2 family and are considered more secure than MDS

- SHA3 The member of Secure Hash Algorithm family
- Blake2. Cryptographic hash Function  
Faster than MD5 and SHA2

4. Difference Between MD5 and SHA Algorithm  
Ans.

MD5	SHA
1. Message digest length is 128	- message digest length is 160
2. Attack to find the original message is $2^{128}$ operations	- Attack to Find the original message - $2^{160}$
3. There have been reported attempts to compromise its security.	- No successful claims of attacks have been reported so far
4. Faster due to 64 iterations and a 128-bit buffer	- Slower due to 80 iteration and a 160-bit buffer.

