

Quiz: Hashing Functions (Remotely Proctored)

Due Jan 27 at 3:30pm **Points** 5 **Questions** 5 **Time Limit** 10 Minutes

Exam Requirements A webcam is required to take this exam.

Exam Security This exam will be monitored by **Proctorio**. [Learn more about Proctorio](https://proctorio.zendesk.com/hc/articles/200972514) (<https://proctorio.zendesk.com/hc/articles/200972514>).

Instructions

This is an individual quiz with a 10 minutes limit. The quiz will be proctored using Proctorio.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	5 minutes	5 out of 5

Score for this quiz: **5** out of 5

Submitted Jan 25 at 10:08pm

This attempt took 5 minutes.

Question 1

1 / 1 pts

What is a hashing function?

☐

It is a two-way function that enables people to compute very large prime numbers.

☒

It is a one-way function that takes any arbitrary text and transform it into an irreversible fixed-length sequence of letters and numbers.

☐

It is a one-way function that takes a fixed-length text, and transform it into an arbitrary large sequence of numbers.

☐

It is a two-way function that allows to encrypt and decrypt messages.

Correct!

Question 2

1 / 1 pts

Look up a SHA 256 hashing calculator online. What is the hash of the text "I do not understand what a hashing function is"?

Correct!

- ☒ 3c028bfeed72a196ddcfeffbe806d4fed2807c2219763af81acac8827ed26a
- ☐ 1457a089a131459f0007485f6f72cc20dde13f1bb2df4f7ba67c8c3baddd2e5b
- ☐ 039ebcfd8415695f9f943a8f53bd4a7d36c57ed47b6467855c1d3b44236f59a9
- ☐ 0c732cab40cbca4b1ed0afd0022ff4999d13433672fc6d36f246e85f0de19dde

Question 3

1 / 1 pts

How many possible SHA-256 hash combinations are there?

Correct!

- ☐ 256
- ☐ 2^{255}
- ☐ 2^{178}
- ☒ 2^{256}

Question 4

1 / 1 pts

What is a Salt?

- ☐ A string of text that replace passwords.
- ☐ A hacking scam

Correct!

☒ A string of text added to password to prevent brute-force hashing attacks.

☐ A string of text added to password to decrypt passwords.

Question 5

1 / 1 pts

What is the difference between a collision and a pre-image attack?



A collision is an attack where two texts produce the same hash. A pre-image is an attack that given an hash, we can find out the original text.



A collision is a pre-image attack with a salt at the beginning.



They are the same thing.



A pre-image is an attack where two texts produce the same hash. A collision is an attack that given an hash, we can find out the original text.

Correct!

Quiz Score: **5** out of 5