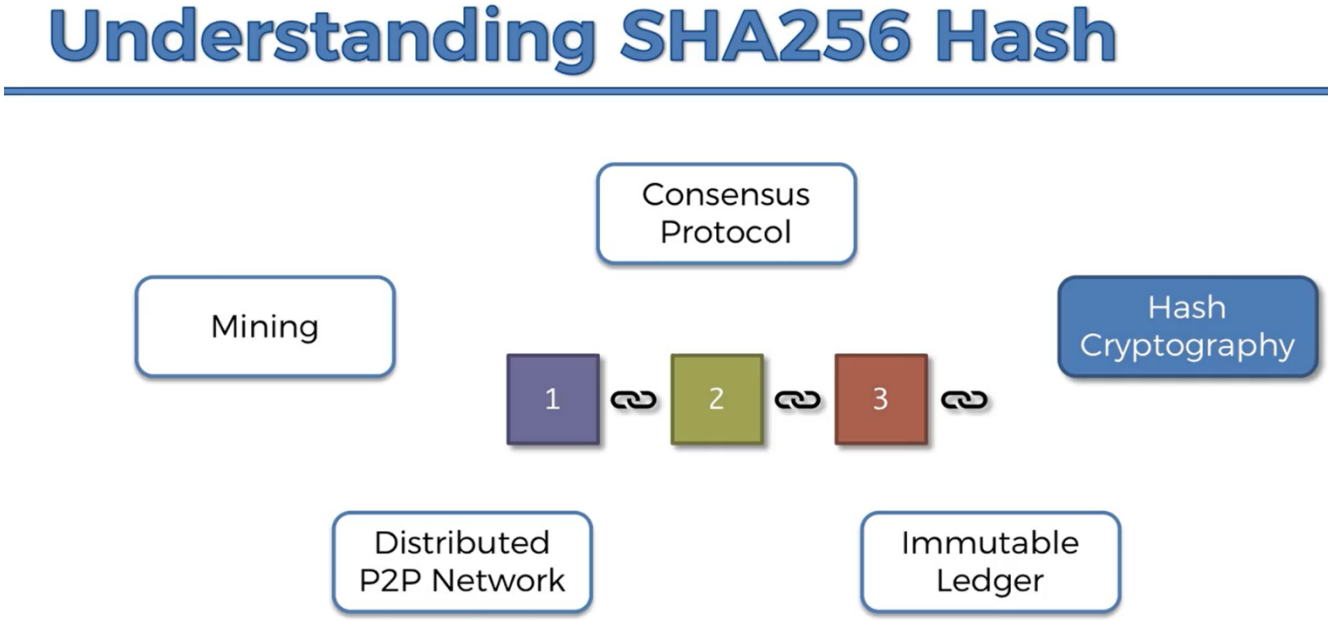
Hash Cryptography

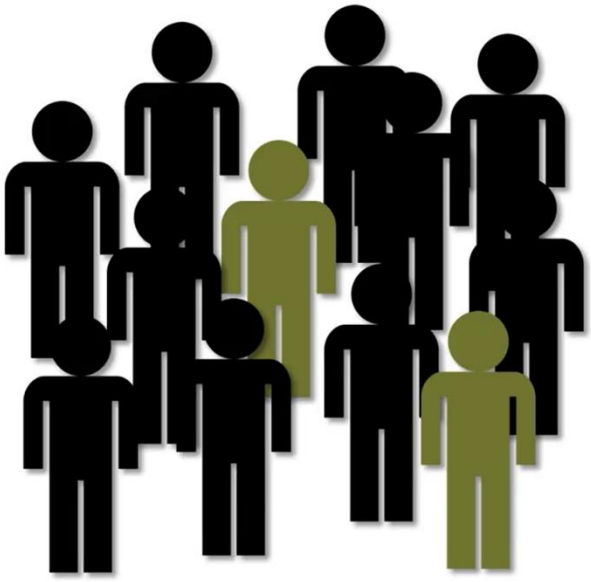


Hello welcome back to the course on block chain.

And today we're talking about cryptography. We're going to understand what role the SHA256 hash algorithm plays .

All right.

So there's our map and we're starting with hash cryptography.

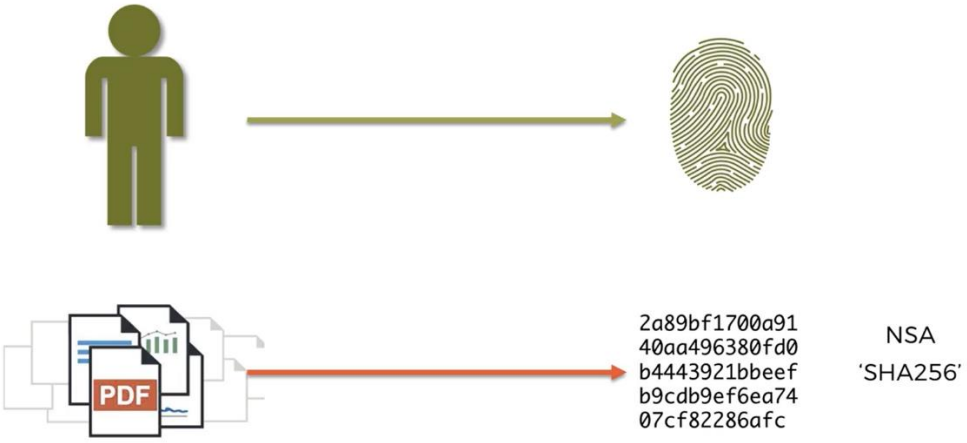


So let's look at a person there is a person could be me or you. And we have a fingerprint. And different people have different fingerprints so if you look at many different people they're all

By: Vasu D,Techno Triumph IT Innovative Solution LLP,India
Email: vasukrishna131@gmail.com

going to have different fingerprints to us it is there is a possibility that there'll be somebody with the same fingerprint. But it is very unlikely the ability of that is about one in 60 million.

So in a way you can say that a fingerprint is an identifier of a person and that's a very powerful concept which is used by forensics departments in the police where they can identify criminals just by their fingerprints and take that as evidence to court.



Now what if we could take the same principle and apply it to digital documents. But if we could come up with a sort of fingerprint that would identify these documents for us and such a fingerprint exists it's called SHA 256 hash and looks like above figure.SHA256 Algorithm is very secure.

So the algorithm behind Sha 256 was developed by the NSA. And I know what you're going to say. You've probably heard the NSA in the news in the past couple of years and you might have you know some you know like a great opinion about them or the opposite you might not like them or it might be indifferent to them regardless of what is said in the news about the NSA and all those things.

One thing they did do really well is this SHA 256 algorithm. It works well. It's very secure. And a lot of places in the World War applications use to store passwords. Check digital documents too.

Sha stands for secure hash algorithm and 256 is the number of bits it takes up in memory. The hash is always 64 characters long and it consists as you can see if not just from digits but actually from letters as well.

That's because it's a hexadecimal hash it has numbers from 0 to 9 and the letters A B C D E F. So there's a total of 16 of them there.

And the important thing to note here is that this algorithm works not just for word documents or text documents. It works for any digital document or any just digital digital.

So you could put a video into the algorithm you could put like text you could put an audio you could put an executable file you could put a whole operating system in there whatever you put in there it will spit out a fingerprint which is a shot of hash.

So let's have a look and action.

Use the following below link and browse in your system and check the video which is attached along with this document.

https://tools.superdatascience.com/blockchain/hash/