Question-1

1. Peer-to-Peer Focus

The bitcoin payment system is purely peer-to-peer, meaning that users are able to send and receive payments to or from anyone on the network around the world without requiring approval from any external source or authority.

2. Accessibility

Because users are able to send and receive bitcoins with only a smartphone or computer, bitcoin is theoretically available to populations of users without access to traditional banking systems, credit cards and other methods of payment.

3. No Third-Party Seizure

Since there are multiple redundant copies of the transactions database, no one can seize bitcoins. The most someone can do is force the user, by other means, to send the the bitcoins to someone else. This means that governments can't freeze someone's wealth, and thus users of Bitcoins will have complete freedom to do anything they want with their money.

4. No Taxes

There is no way for a third party to intercept transactions of Bitcoins, and therefore there is no viable way to implement a Bitcoin taxation system. The only way to pay a tax would be, if someone voluntarily sends a percentage of the amount being sent as tax.

5. No Paperwork

Anyone, from any country, of any age can accept Bitcoins within minutes. There is no ID card, passport or proof of address that all conventional banks required to open an account.

6. No Physical Form

Since Bitcoins do not have a physical form, it cannot be used in physical stores. It would always have to be converted to other currencies.

7. Reduced Transaction Fees

Transaction fees for bitcoin payments are significantly lower in comparison to the ones made for credit and debit card purchases.

8. No Involvement of Any Third Party

The entire process of bitcoin transactions is peer to peer.There's no involvement of a third party. No one can freeze, tax, or claim your coins. They cannot be stolen and cannot be seized by the government in no possible circumstances.

9. Independence

Since Bitcoin isn't created or controlled by any state entity, such as a central bank, it's not beholden to political influence. Since it exists outside from any political system.

10. Better Security

Blockchain is far more secure than other record keeping systems because each new transaction is encrypted and linked to the previous transaction. Blockchain, as the name suggests, is formed by a network of computers coming together to confirm a ‘block’, this block is then added to a ledger, which forms a ‘chain’.

Question-2

● The International Monetary Fund estimated that large U.S. and European banks lost more than $1 trillion on toxic assets and from bad loans from January 2007 to September 2009.

● Lack of investor confidence in bank solvency and declines in credit availability led to plummeting stock and commodity prices in late 2008 and early 2009

● Economies worldwide slowed during this period since credit tightened and international trade declined

● The U.S. unemployment rate peaked at 10.0% in October 2009, the highest rate since 1983 and roughly twice the pre-crisis rate.

● Reductions in the growth rates of developing countries were due to falls in trade, commodity prices, investment and remittances sent from migrant workers. This led to a dramatic rise in the number of households living below the poverty line.

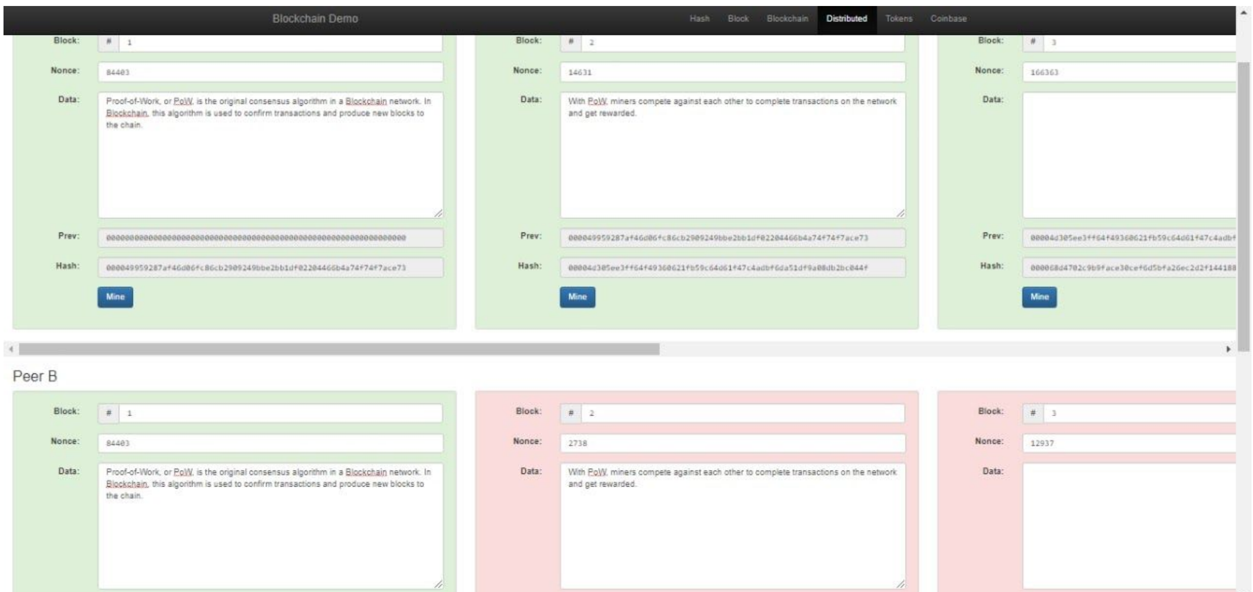
● The causes of the bubble are disputed, the precipitating factor for the Financial Crisis of 2007–2008 was the bursting of the United States housing bubble and the subsequent subprime mortgage crisis, which occurred due to a high default rate and resulting foreclosures of mortgage loans, particularly adjustable-rate mortgages.

● In Investment Banks, many countries and big companies invest in order to get high returns on their investment. In this case, the investment bank gives CDO to the investors. Now, a question arises that the CDO is made with mortgage paper, it is risky, if people fail to pay loan. But that risk was taken by insurance companies. Now everybody covered their risk and start to invest.

- the problem occur when more people build trust in the US investment bank and start to do high investment in order to get huge returns. Now, investment bank need more CDO, which means, the commercial banks have to give more loans to people. The commercial banks starts to give loan to those people who don’t have power to return loan without checking their credit worthiness. This is where the financial crises starts to emerge and whole global economy destroyed because every country somehow link their trade with the USA due to globalization.

- People fail to give their EMIs and it lead to NPA (Non performing Assets). (NPA: When loan is not recoverable). Now, commercial banks starts to acquire properties. Commercial banks acquire huge property which lead to drop in the prices to properties. i.e Supply of property is more than the demand. Hence, prices of property drops. It further cause no return on the investments which were done in the investment bank. Thus, Lemans Brothers investment bank got bankrupt because, it can’t able to give return on the investment which was done by other countries and companies in it because there are huge NPA in the country. Insurance sector also fail because CDO are insured and insurance companies can’t able to give claim to all of the claim seekers. Commercial banks fail because they have huge number of properties and there is no one who can buy them. They have to sell property at a very low price which can’t able to fill gap between their losses and profits.

Question-3


Blockchain Demo
Hash
Block
Blockchain
Distributed
Tokens
Coinbase
Block:
1
Nonce:
84403
Data:
Proof-of-Work, or PoW, is the original consensus algorithm in a Blockchain network. In Blockchain, this algorithm is used to confirm transactions and produce new blocks to the chain.
Prev:
0000000000000000000000000000000000000000000000000000000000000000
Hash:
000049959287af46d06fc86cb2909249bbe2bb1df02204466b4a74f74f7ace73
Mine
Block:
2
Nonce:
14631
Data:
With PoW, miners compete against each other to complete transactions on the network and get rewarded.
Prev:
000049959287af46d06fc86cb2909249bbe2bb1df02204466b4a74f74f7ace73
Hash:
00004d305ee3ff64f49360621fb59c64d61f47c4adbf6da51df9a08db2bc044f
Mine
Block:
3
Nonce:
166363
Data:
Prev:
00004d305ee3ff64f49360621fb59c64d61f47c4adbf
Hash:
000068d4702c9b9face30cef6d5bfa26ec2d2f144188
Mine
Peer B
Block:
1
Nonce:
84403
Data:
Proof-of-Work, or PoW, is the original consensus algorithm in a Blockchain network. In Blockchain, this algorithm is used to confirm transactions and produce new blocks to the chain.
Block:
2
Nonce:
2738
Data:
With PoW, miners compete against each other to complete transactions on the network and get rewarded.
Block:
3
Nonce:
12937
Data: