What is Bitcoin?

- Bitcoin is a Block-chain Technology

- Powering the cryptocurrency Bitcoin(BTC)

- It is first Decentralized digital currency.

- It is split on August 1st 2017

- It is highly volatile and has higher returns than conventional financial trading.

- Can get Bitcoin by mining

- Can purchase on different crypto providers platform (Coinbase, WazirX, coinDCX, unoCoin)

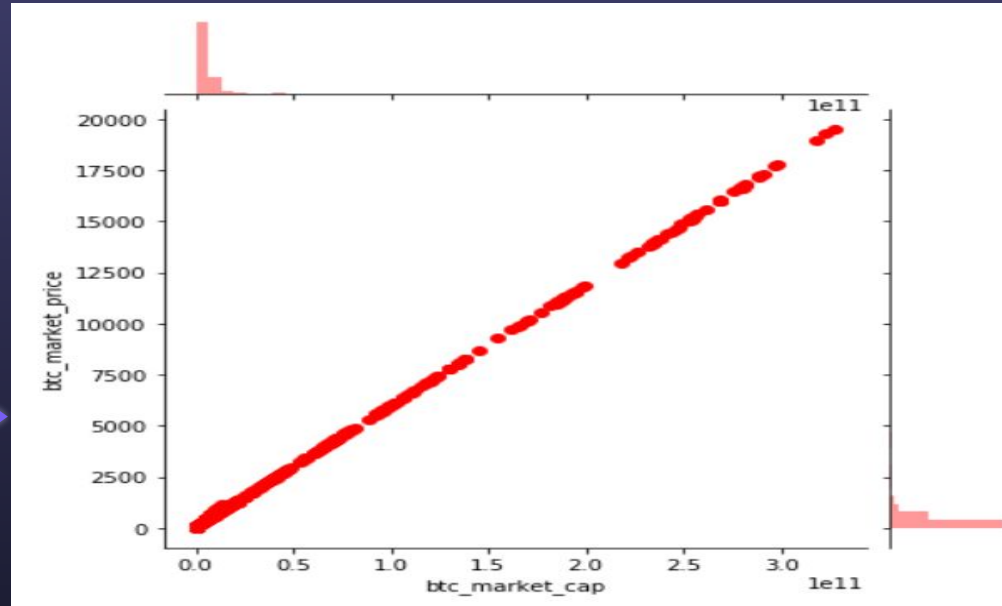- Trading is similar to stock market.

Overview

- **Imported dataset**
- **Dealing with correlation**
- **Dealing with null values**
- **Model**
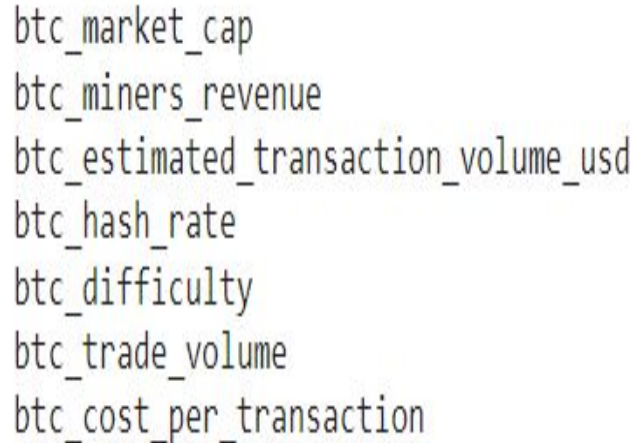- **Feature Scaling**
- **Error Evaluation**

Correlation Between btc_market_price and btc_market_cap (market capitalization). btc_market_price is highly correlated with btc_market_cap.

Model

For predicting the Bitcoin price, we use LinearRegression() from sklearn.linear_model.

Features

btc_market_cap
btc_miners_revenue
btc_estimated_transaction_volume_usd
btc_hash_rate
btc_difficulty
btc_trade_volume
btc_cost_per_transaction

Features used to predict price.

btc_market_cap : The total USD value of bitcoin supply in circulation.

btc_miners_revenue : Total value of coinbase block rewards and transaction fees paid to miners.

btc_estimated_transaction_volume : The total estimated value of transactions on the Bitcoin blockchain

btc_hash_rate : The estimated number of tera hashes per second the Bitcoin network is performing.

btc_difficulty : A relative measure of how difficult it is to find a new block.

btc_trade_volume : The total USD value of trading volume on major bitcoin exchanges.

btc_cost_per_transaction : miners revenue divided by the number of transactions.

Result

```
pred = lr.predict(X_test)
pred[0]
```

605.6689857208096

```
y_test.iloc[0]
```

593.33

Mean Squared Error = 653.2945043654856

Root Mean Squared Error = 25.55962645199428

Mean Absolute Error = 16.9805142692437

References

https://raw.githubusercontent.com/WidhyaOrg/datasets/master/bitcoin_dataset.csv

https://slideplayer.com/slide/15717146/

https://price-prediction-of-bitcoin.herokuapp.com/

https://github.com/Preeti-sahani/Bitcoin_price_prediction

Thank you!

Do you have any questions?