3.2 Challenge: Histogram

Wednesday, August 10, 2022 3:33 PM

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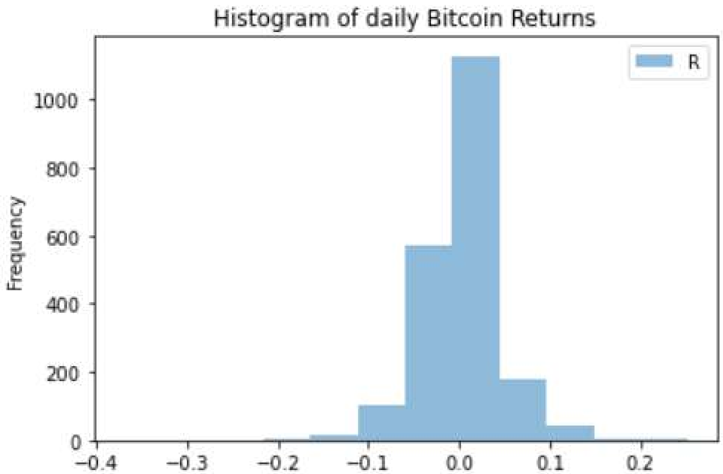
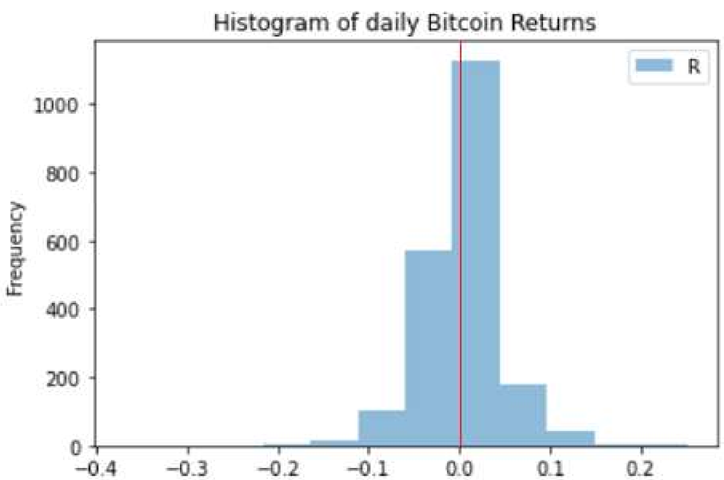
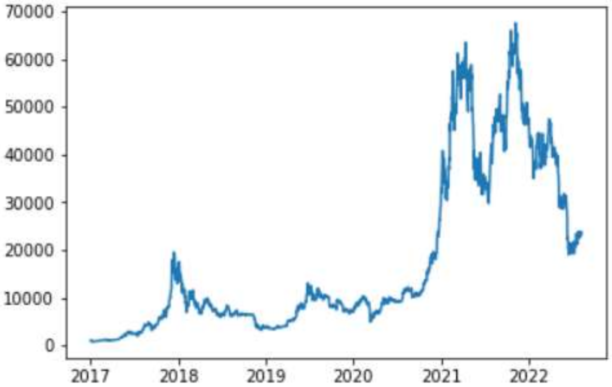
```
r_bitcoin = pd.DataFrame(BTC[["R"]])
hist=r_bitcoin.plot.hist(bins=12,alpha=0.5,title="Histogram of daily Bitco
```



AT FIRST SIGHT, IT MIGHT SEEM THAT THE DAILY FREQUENCY RETURNS OF THE BITCOIN SINCE 2017 UNTIL TODAY (08/10/2022) TENDS IN ITS MAJORITY TO BE EITHER 0 OR NEGATIVE. BUT AFTER DRAWING A VERTICAL LINE ALIGNED TO THE 0, I WAS ABLE TO REALIZE THAT THE FREQUENCY OF RETURNS TENDS TO BE IN ITS MAJORITY POSITIVE.



EVEN THOUGH THERE IS MORE PROBABILITY OF A POSITIVE RETURN, I WOULD NOT SAY THAT THE DIFFERENCE BETWEEN THE PROBABILITY OF A POSITIVE AND A NEGATIVE RETURN IS THAT MUCH. AND THIS POINT ABOVE ACTUALLY MATCHES WITH THE ANALYSIS OF THE PLOTTED GRAPH OF THE RETURNS, WHICH SHOWS AN INCREMENT OF THE RETURNS OVER TIME.



ANOTHER REALLY IMPORTANT POINT TO HIGHLIGHT IS THAT THE HISTOGRAM EXPOSES A NORMAL DISTRIBUTION (BELL-SHAPED).