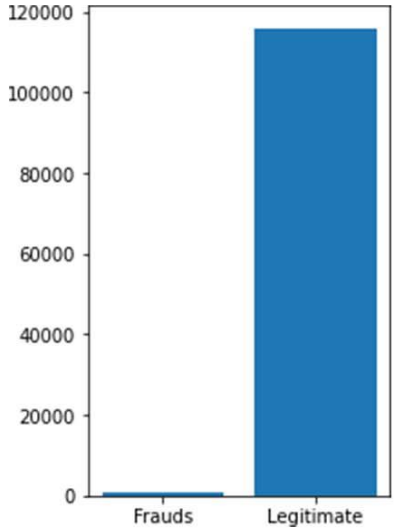
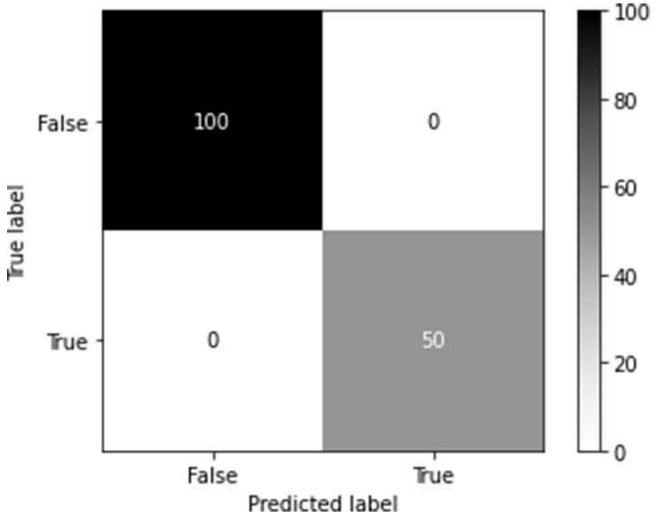


The graph at the right shows how imbalanced the data recieved from the transactions are.
The fraudulent transactions are merely 0.7% of the total transactions.
This poses as a challenge to thte AI algorithm that is trying to distinguish between legitimate and fraudulent transactions.

	transactionTime	eventId	posEntryMode
2850	2017-01-10T14:35:25Z	13926310A1	79
14021	2017-02-17T22:23:59Z	54055682A1	79
15141	2017-02-21T08:10:37Z	46260102A1	79

	transactionTime	eventId	transactionAmount
116997	2018-01-26T07:28:44Z	103791735A1	-0.15
39618	2017-05-13T00:06:32Z	19836588A1	-0.14
75376	2017-09-02T13:42:14Z	69707765A1	-0.13

Plus there are a lot of transactions which have values that don't make sense



Inspite of these difficulties the algorithm we trained is perfectly able to predict the legitimacy of a transaction with 100% accurracy.
The matrix you see to your left shows how the AI was able to predict all the 50 transactions that were fraudulent and all those 100 ones that were not.
Note that the AI did not train on any of these 150 transactions.

This trained algorithm can be readily implemented onto the banking servers and can help predict the legitimacy of millions of transactions per day.

What's even more interesting is that this algorithm takes seconds to train itself using 5000 transactions. Which means that the algorithm can adapt to any noticable change in the patterns it has learnt previously.

Implementing such an algorithm would make the customers trust the bank, thereby increasing customer loyalty.