1. List at least 5 (five) data points that are required for the analysis and detection of a credit card fraud. (3 marks)

The data points that are required for the analysis and detection of fraud must hold important and relevant value to this goal. Such data points include IP address, shipping address, transaction date, transaction time, transaction value, and units purchased.

1. Identify 3 (three) errors/issues that could impact the accuracy of your findings, based on a data table provided. (3 marks)

The transaction value is missing for the third piece of transaction data. The IP address is missing of the fifth piece of transaction data. Finally, the IP address is missing again for ninth piece of transaction data.

1. Identify 2 (two) anomalies, or unexpected behaviors, that would lead you to believe the transaction may be suspect, based on a data table provided. (2 marks)

The first anomaly is that from transaction data numbered 3 to 6, the credit card under the User ID “johnp” started shipping purchases to other places, and the transaction happens on the same day with purchase value far exceeding the usual amount. The second anomaly is that for the last transaction data, under the User ID “ellend”, both the IP address and the transaction value are abnormal.

1. Briefly explain your key take-away from the provided data visualization chart. (1 mark)

The data visualization chart displays the overall changes in transaction value as more transactions are made for each account. The key take-away is that both accounts, under the names of “johnp” and “ellend”, exhibits a spike in the transaction value, signaling the likelihood of a credit card fraud.

1. Identify the type of analysis that you are performing when you are analyzing historical credit card data to understand what a fraudulent transaction looks like. [Hint: The four types of Analytics include: Descriptive, Diagnostic, Predictive, Prescriptive] (1 mark)

Diagnostic