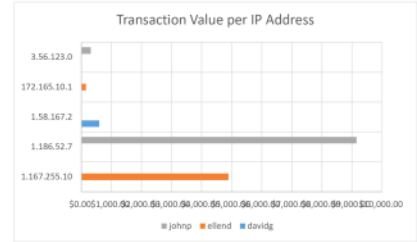
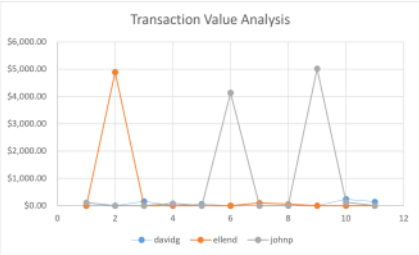
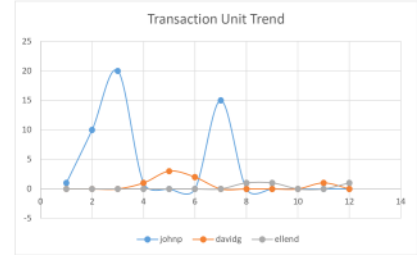


NAME: Paolo Carl Angelo Sarino

IP Address	User ID	Number	Age	Shipping Address	Transaction Date	Time	Value	Category	Purchased
3.56.123.0	johnp	25671147	32	1542, Orchid Lane, WA 98706, US	January 6 2020	7:12:45 AM	\$109.99	Home Decor	1
1.186.52.7	johnp	25671147	32	In-store	March 6 2020	1:11:10 AM	\$2,009.99	Electronics	10
1.186.52.7	johnp	25671147	32	P.O. Box 1049	March 6 2020	1:22:24 AM	\$3,010.50	Tools	20
3.56.123.0	johnp	25671147	32	1542, Orchid Lane, WA 98706, US	May 15 2020	3:00:05 PM	\$121.58	Clothing	1
1.186.52.7	johnp	25671147	32	In-store	June 3 2020	1:15:12 AM	\$4,131.00	Electronics	15
3.56.123.0	johnp	25671147	32	1542, Orchid Lane, WA 98706, US	June 10 2020	10:28:10 AM	\$79.23	Electronics	2
172.165.10.1	ellend	11568528		P.O. Box 1322	June 7 2020	3:53:12 PM	\$99.99	Clothing	1
172.165.10.1	ellend	11568528		P.O. Box 1322	June 8 2020	5:15:30 PM	\$53.15	Beauty	1
1.167.255.10	ellend	11568528		P.O. Box 5401	July 2 2020	12:05:10 AM	\$4,895.00	Laptop	1
1.58.167.2	davidg	51422789	47	90 Robinson Blvd, Alberta, 97602,	May 15 2020	5:02:08 PM	\$234.20	Furniture	1
1.58.167.2	davidg	51422789	47	90 Robinson Blvd, Alberta, 97602,	May 18 2020	7:12:45 PM	\$141.00	Kitchen Supplies	3
1.58.167.2	davidg	51422789	47	90 Robinson Blvd, Alberta, 97602,	June 1 2020	5:34:15 PM	\$157.25	Car Spares	2
1.58.167.2	davidg	51422789	47	90 Robinson Blvd, Alberta, 97602,	June 13 2020	6:02:10 PM	\$59.99	Kitchen Supplies	1



davidg	Moving Average	% Increase
\$59.99	\$59.99	0%
\$141.00	\$100.50	68%
\$157.25	\$119.41	19%
\$234.20	\$148.11	24%
ellend		
\$53.15	\$53.15	69%
\$99.99	\$76.57	5%
\$4,895.00	\$1,682.71	2198%
johnp		
\$79.23	\$79.23	0%
\$109.99	\$94.61	19%
\$121.58	\$103.60	10%
\$2,009.99	\$580.20	460%
\$3,010.50	\$1,066.26	84%
\$4,131.00	\$1,577.05	48%

Look For:
A change in frequency of orders placed, for example, a customer who typically places a couple of orders a month, suddenly makes numerous transactions within a short span of time, sometimes within minutes of the previous order.
Orders that are significantly higher than a user's average transaction.
Bulk orders of the same item with slight variations such as color or size—especially if this is atypical of the user's transaction history.
A sudden change in delivery preference, for example, a change from home or office delivery address to in-store, warehouse, or PO Box delivery.
A mismatched IP Address, or an IP Address that is not from the general location

Questions
List at least 5 (five) data points that are required for the analysis and detection of a credit card fraud.
1.a IP Address
1.b Shipping Address
1.c Transaction Value
1.d Units
1.e Transaction Time
1.f User ID
Identify 3 (three) errors/issues that could impact the accuracy of your findings, based on a data table provided. (3 marks)
2.a Some of the issues are inconsistent date format like ome data are formatted as MM-DD-YY while others are YYYY-MM-DD
2.b Missing or Incomplete Address Information like "In-store" which is very generalized
2.c Ambiguous Product Categories like Home Décor. doesn't give information about specific
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)
3.a Sudden change of IP address of JohnP
3.b Unusually high order value of JohnP based on previous historical data
Briefly explain your key take-away from the provided data visualization chart. (1 mark)
4.a 3 UserID have different transaction trends. JohnP's transactions are inconsistent from the user demographic such as IP address, average order value, and time. Ellen's unusually high was also a suspicion but further evidence needed to support.
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)
5.a Descriptive Analysis