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In [ ]: import pandas as pd

data = pd.read_excel('Data.xlsx', sheet_name='RAW DATA')
```

What is the net UOS revenue for August and September?

Net revenue is the difference between sum of credit and debit of successful transactions.

```
In [ ]: totalCredit = data[data['status'] == 'confirmed']['credit'].sum()
totalDebit = data[data['status'] == 'confirmed']['debit'].sum()
netRevenue = totalCredit - totalDebit

print(f'Net Revenue = {netRevenue: ,} UOS')
```

Net Revenue = -2,517,673.03297794 UOS

What is the net USD revenue for August and September? (you can use the average daily UOS-USD rate as basis)

Today's average daily UOS-USD is approximately \$0.19 (December 21, 2022).

Thus, Net USD revenue is calculated by multiplying UOS revenue by UOS-USD rate.

```
In [ ]: UOSUSD = 0.19
netUSDRevenue = netRevenue * UOSUSD;

print(f'Net USD revenue = ${ netUSDRevenue: ,}')
```

Net USD revenue = \$-478,357.8762658086

How many successful transactions did we have?

Total number of transactions with status of "confirmed".

```
In [ ]: totalSuccessfulTransactions = data[data['status'] == 'confirmed'].count()[0];

print(f'Successful transactions = {totalSuccessfulTransactions}')
```

Successful transactions = 8816

How many successful buyers did we have?

This is achieved by calculating unique accounts among successful transactions.

```
In [ ]: totalSuccessfulBuyers = data[data['status'] == 'confirmed']['from'].nunique()

print(f'Successful buyers = {totalSuccessfulBuyers}')

Successful buyers = 431
```

What is the average basket for successful transactions?

Average basket is the sum of total successful transactions values divided by the number of them.

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In [ ]: successfulTransactions = data[data['status'] == 'confirmed']
averageBasket = (successfulTransactions['debit'].sum() + successfulTransactions['credit'].sum()) / totalSuccessfulT

print(f'Average basket for successful transactions = {averageBasket} UOS')

Average basket for successful transactions = 452.2995495034097 UOS
```

What is the refund rate for August and September?

Refund rate is refunded transactions divided by total transactions.

```
In [ ]: totalRefundedTransactions = data[data['status'] == 'refunded'].count()[0]
totalTransactions = data.count()[0]
refundRate = totalRefundedTransactions / totalTransactions

print(f'Refund rate = {refundRate * 100}%')

Refund rate = 43.392834210864265%
```

Considering "from" field as the buyer, how many of them had a successful transactions, what is our current buyer success rate?

Considering number of unique users in all successful transactions as successful buyers:

```
In [ ]: totalSuccessfulBuyers = data[data['status'] == 'confirmed']['from'].nunique()
totalBuyers = data['from'].nunique()
```

```

buyerSuccessRate = (totalSuccessfulBuyers / totalBuyers) * 100

print(f'There are {totalSuccessfulBuyers} successful buyers and buyer success rate is {buyerSuccessRate}%')

```

There are 431 successful buyers and buyer success rate is 68.30427892234549%

Considering "from" field as the buyer, can you tell who are the 10 buyers? Please exclude ultra.games from the data

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In [ ]: uniqueBuyers = data[(data['from'] != 'ultra.games') & (data['status'] == 'confirmed')].groupby('from')['credit'].sum()

print(uniqueBuyers.sort_values(ascending=False)[:10])

```

```

from
dn1ns2og3ka4    10754.890000
aa1aa2ab3ef4     8919.170000
us1gu2ai3oc4     8633.100000
hm1uz2sm3tp4     8552.070000
ie1tx2gg3oc4     8460.610000
ia1rz2gc3uv4     7471.947722
ce1hf2yf3oj4     6969.760000
ge1wo2vp3zy4     6303.200000
fm1ij2fo3yl4     6199.380000
pl1pu2hb3ir4     6114.150000
Name: credit, dtype: float64

```