

# Creating Total Purchase Amount Variable

## Mathematical Formula:

Total purchase amount = Purchase frequency \* average purchase amount

## Python code based on the formula:

```
data['Total_Purchase_Amount'] = data['Frequency_of_Purchases'] * data['Average_Purchase_Amount']
```

# Creating Customer Lifetime Value Variable

## Mathematical Formula:

Customer lifetime value = Customer's Value \* Customer's lifespan

## Python code based on the formula:

```
data['CLV'] = data['Total_Purchase_Amount'] * data['Customer_Lifespan_Months']
```