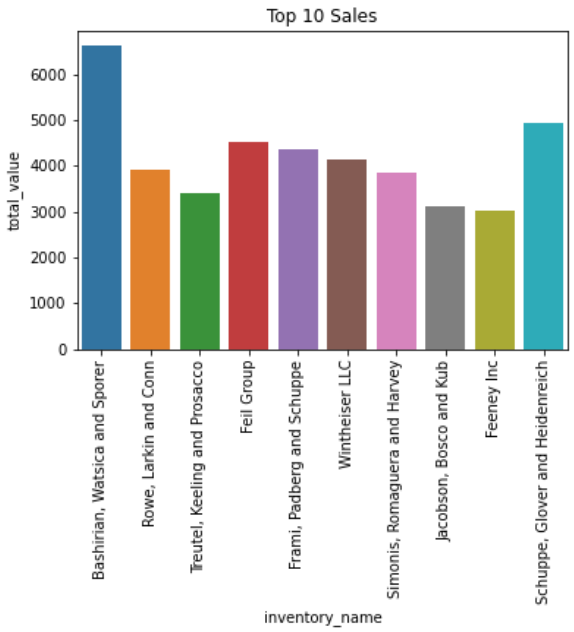
V. Database Access via Python

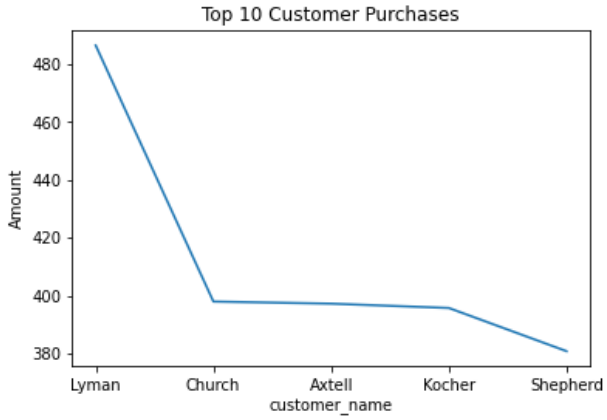
The database is accessed using Python and visualization of analyzed data is shown below. The connection of MySQL to Python is done using mysql.connector, followed by cursor.excecute to run and fetch all from query, followed by converting the list into a dataframe using pandas library and using matplotlib to plot the graphs for the analytics.

```
sns.barplot(x='inventory_name', y='total_value', data=Sales_df)

# Add labels and title to the plot
plt.xlabel('inventory_name')
plt.ylabel('total_value')
plt.title('Top 10 Sales')
plt.xticks(rotation=90)

# Show the plot
plt.show()
```

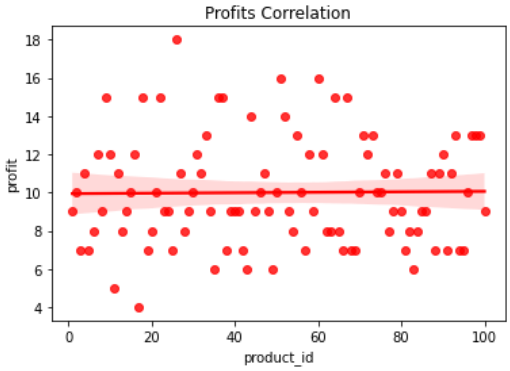



```
# Create the line plot using Seaborn
sns.lineplot(x='customer_name', y='Amount', data=customers_df)

# Add labels and title to the plot
plt.xlabel('customer_name')
plt.ylabel('Amount')
plt.title('Top 10 Customer Purchases')
```

```
: Text(0.5, 1.0, 'Top 10 Customer Purchases')
```



```
# Create the scatter plot using Seaborn
sns.regplot(x='product_id', y='frequency', data=stock_df, color='red')

# Add labels and title to the plot
plt.xlabel('product_id')
plt.ylabel('profit')
plt.title('Profits Correlation')

# Show the plot
plt.show()
```



VI. Database Access via Tableau and performing analysis