```
In [30]:  import pandas as pd
          import matplotlib.pyplot as plt
          import seaborn as sns

          # file path
          excel_file_path = 'SaleData.xlsx'

          # Load the SaleData from excel
          df = pd.read_excel(excel_file_path)

          # Display the first few rows of the SaleData
          print("SaleData Overview:")
          print(df.head())

          # Basic statistics about numerical columns
          print("\nSummary Statistics:")
          print(df.describe())

          # Insights about sales by region
          plt.figure(figsize=(10, 6))
          sns.barplot(x='Region', y='Sale_amt', data=df, ci=None)
          plt.title('Total Sale Amount by Region')
          plt.xlabel('Region')
          plt.ylabel('Total Sale Amount')
          plt.show()

          # Insights about sales by manager
          plt.figure(figsize=(10, 6))
          sns.barplot(x='Manager', y='Sale_amt', data=df, ci=None)
          plt.title('Total Sale Amount by Manager')
          plt.xlabel('Manager')
          plt.ylabel('Total Sale Amount')
          plt.xticks(rotation=45)
          plt.show()

          # Relationship between Units and Sale Amount
          plt.figure(figsize=(10, 6))
          sns.scatterplot(x='Units', y='Sale_amt', data=df)
          plt.title('Relationship between Units and Sale Amount')
          plt.xlabel('Units')
          plt.ylabel('Sale Amount')
          plt.show()
```

```
SaleData Overview:
    OrderDate   Region  Manager  SalesMan         Item  Units  Unit_price  \
0  2018-01-06     East   Martha  Alexander   Television   95.0      1198.0
1  2018-01-23  Central  Hermann     Shelli  Home Theater  50.0       500.0
2  2018-02-09  Central  Hermann       Luis   Television   36.0      1198.0
3  2018-02-26  Central  Timothy      David   Cell Phone   27.0       225.0
4  2018-03-15     West  Timothy    Stephen   Television   56.0      1198.0

     Sale_amt
0   113810.0
1    25000.0
2    43128.0
3     6075.0
4    67088.0

Summary Statistics:
            Units   Unit_price       Sale_amt
count   45.000000    45.000000      45.000000
mean    54.083333   583.313889   30578.761111
std     45.096676   444.806622   32227.534943
min      2.000000    58.500000     250.000000
25%     28.000000   225.000000    4329.000000
50%     53.000000   500.000000   17100.000000
75%     75.000000  1198.000000   43128.000000
max    278.000000  1198.000000  113810.000000
```


Total Sale Amount by Region

Total Sale Amount by Manager

Relationship between Units and Sale Amount

```
In [ ]:
```