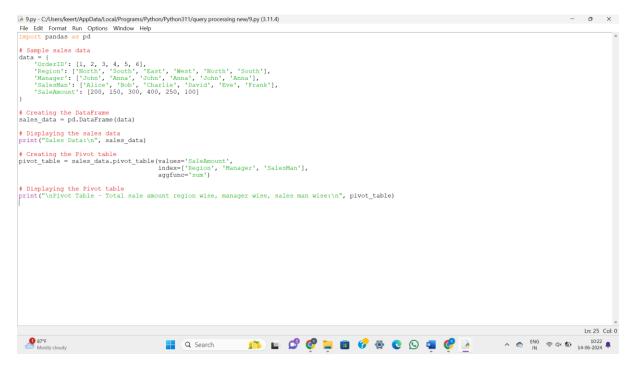9.Write a Pandas program to create a Pivot table and find the total sale amount region wise, manager wise, sales man wise. .(refer sales_data table)

CODE:

```python
import pandas as pd

# Sample sales data
data = [
    'OrderID': [1, 2, 3, 4, 5, 6],
    'Region': ['North', 'South', 'East', 'West', 'North', 'South'],
    'Manager': ['John', 'Anna', 'John', 'Anna', 'John', 'Anna'],
    'SalesMan': ['Alice', 'Bob', 'Charlie', 'David', 'Eve', 'Frank'],
    'SaleAmount': [200, 150, 300, 400, 250, 100]
}

# Creating the DataFrame
sales_data = pd.DataFrame(data)

# Displaying the sales data
print("Sales Data:\n", sales_data)

# Creating the Pivot table
pivot_table = sales_data.pivot_table(values='SaleAmount',
                                     index=['Region', 'Manager', 'SalesMan'],
                                     aggfunc='sum')

# Displaying the Pivot table
print("\nPivot Table - Total sale amount region wise, manager wise, sales man wise:\n", pivot_table)
```

OUTPUT:

```
Python 3.11.4 (tags/v3.11.4:d2340ef, Jun  7 2023, 05:45:37) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/keert/AppData/Local/Programs/Python/Python311/query processing new/9.py
Sales Data:
    OrderID Region Manager SalesMan  SaleAmount
0         1  North    John    Alice         200
1         2  South    Anna      Bob         150
2         3   East    John  Charlie         300
3         4   West    Anna    David         400
4         5  North    John      Eve         250
5         6  South    Anna    Frank         100

Pivot Table - Total sale amount region wise, manager wise, sales man wise:
                        SaleAmount
Region Manager SalesMan
East   John    Charlie         300
North  John    Alice           200
               Eve             250
South  Anna    Bob             150
               Frank           100
West   Anna    David           400
>>>
```