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```
In [2]: pip install PyMySQL
        Requirement already satisfied: PyMySQL in c:\users\welcome\anaconda3\lib\site-packag
        Note: you may need to restart the kernel to use updated packages.
 In [3]: import sqlalchemy
         import pandas as pd
          import matplotlib.pyplot as plt
 In [4]: | db = sqlalchemy.create_engine('mysql+pymysql://root:1234@localhost:3306/sales_db')
 In [5]: query = "SHOW TABLES"
         sales = pd.read_sql_query(query,db) #instead of df i will write sales =
         sales
 Out[5]:
            Tables in sales db
          0
                        sales
In [10]: query = "SELECT * FROM SALES"
         df = pd.read_sql_query(query,db)
         df
Out[10]:
            id
                    product quantity
                                        price
                                   5 60000.0
          0
             1
                     Laptop
             2
                     Mobile
                                  10 20000.0
          2
             3
                      Tablet
                                  4 25000.0
          3
            4 Headphones
                                  15
                                      1500.0
          4 5
                 Smartwatch
                                  7
                                      0.0008
In [12]: query = """
         SELECT
             Product,
             SUM(quantity) AS Total_Qantity,
             SUM(quantity * price) AS Revenue
          FROM
             sales
         GROUP BY
             Product;
In [14]: # Run the summary query
         df = pd.read_sql_query(query, db)
```

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```
# Display output in Jupyter
display(df)
```

	Product	Total_Qantity	Revenue
0	Laptop	5.0	300000.0
1	Mobile	10.0	200000.0
2	Tablet	4.0	100000.0
3	Headphones	15.0	22500.0
4	Smartwatch	7.0	56000.0

```
In [16]: df.plot(kind='bar', x='Product', y='Revenue', legend=False)
    plt.title("Revenue by Product")
    plt.xlabel("Product")
    plt.ylabel("Total Revenue (₹)")
    plt.tight_layout()
    plt.show()
```

