**PYTHON PROJECT:**

For this project I used MYSQL in XAMPP PhPadmin to run my sql queries and Python IDLE to run python codes.

**Creating database and tables:**

FOR THIS FIRST I HAVE CREATED A DATABASE IN MYSQL NAMELY python and iam using xampp mysql.

In that I created two tables namely product\_table and customer\_table using your csv files and loaded those data in mysql.

For customer\_table I used this script,

INSERT INTO customer\_table (CustomerID, CustomerName, Creditcard)

VALUES

(1, 'Archie', aes\_encrypt('q†Ëšj\\', 'secretKey')),

(2, 'Buddy', aes\_encrypt('Ë[]&>[]£ºNßø[]4mïPl', 'secretKey'));

And for product\_table I used this script,

INSERT INTO product\_table (ProductName, ProductID, Cost, InStock) VALUES

('argle', 'a1', 5.00, 100),

('bargle', 'b1', 2.50, 200),

('cargle', 'c1', 1.25, 200);

These are the screenshots for those tables,

A computer screen shot of a chat window

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**PIP INSTALL:**

So after this I installed python IDLE and after installing python I installed pip to connect MYSQL and PYTHON,for this I gave the below command in command prompt.

pip install mysql-connector-python

**Connecting database to python:**

After this I have connected my database to python and for that I used this code and if it has any error it will show error orelse it will be connected successfully.

import mysql.connector

from mysql.connector import errorcode

try:

cm\_connection = mysql.connector.connect(

user="arish",

password="Akhil@1234",

host="127.0.0.1",

database="python")

except mysql.connector.error as err:

if err.errno == errorcode.ER\_ACCESS\_DENIED\_ERROR:

print("Invalid crendentials")

elif err.errno == errorcode.ER\_BAD\_DB\_ERROR:

print("Database not found")

else:

print("Cannot connect to database:", err)

else:

# execute database operations

cm\_connection.close() #this should be last line of program

The screenshot for this is,

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So,we have connected the database “python” to IDLE and lets proceed to next step.

**ACCESS PRODUCT TABLE:**

Now firstly Iam getting data from product\_table,for that iam using this code,

import mysql.connector

from mysql.connector import Error

# Constants

HOST = '127.0.0.1'

DATABASE = 'python'

USER = 'arish'

PASSWORD = 'Akhil@1234'

def connect\_to\_database():

"""Establish a connection to the database."""

try:

connection = mysql.connector.connect(host=HOST, database=DATABASE, user=USER, password=PASSWORD)

if connection.is\_connected():

print("Connected to the database")

return connection

except Error as e:

print(f"Error: {e}")

return None

def display\_products(connection):

"""Display all entries in the product table."""

try:

cursor = connection.cursor()

cursor.execute("SELECT \* FROM product\_table")

data = cursor.fetchall()

# Display product data

print("Product Table:")

for row in data:

print(row)

except Error as e:

print(f"Error: {e}")

def main():

"""Main function to run the program."""

connection = connect\_to\_database()

if connection:

display\_products(connection)

# Close the database connection when done

connection.close()

print("Connection closed.")

if \_\_name\_\_ == "\_\_main\_\_":

main()

And after this data is successfully loaded in python and this is the screenshot for this,

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**ACCESS CUSTOMER\_TABLE:**

So to load data from customertable iam using this code,

import mysql.connector

from mysql.connector import Error

# Constants

HOST = '127.0.0.1'

DATABASE = 'python'

USER = 'arish'

PASSWORD = 'Akhil@1234'

SECRET\_KEY = 'secretKey'

def connect\_to\_database():

"""Establish a connection to the database."""

try:

connection = mysql.connector.connect(host=HOST, database=DATABASE, user=USER, password=PASSWORD)

if connection.is\_connected():

print("Connected to the database")

return connection

except Error as e:

print(f"Error: {e}")

return None

def display\_customers(connection):

"""Display all entries in the customer table."""

try:

cursor = connection.cursor()

# Decrypt the AccountInfo column using aes\_decrypt

cursor.execute(f"SELECT CustomerID, CustomerName, aes\_decrypt(AccountInfo, %s) FROM customer\_table", (SECRET\_KEY,))

data = cursor.fetchall()

# Display customer data

print("Customer Table:")

for row in data:

print(row)

except Error as e:

print(f"Error: {e}")

def main():

"""Main function to run the program."""

connection = connect\_to\_database()

if connection:

display\_customers(connection)

# Close the database connection when done

connection.close()

print("Connection closed.")

if \_\_name\_\_ == "\_\_main\_\_":

main()

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**Create Sales Table:**

So now I have created sales table with columns,

Salesid,customerid,productid,quantity,totalsales and creditcard.

After Creating sales table ,need to take order.

**PLACE AN ORDER:**

And Now to take the order I used this code,

import mysql.connector

from mysql.connector import Error

# Constants

HOST = '127.0.0.1'

DATABASE = 'python'

USER = 'arish'

PASSWORD = 'Akhil@1234'

SECRET\_KEY = 'secretKey'

def connect\_to\_database():

"""Establish a connection to the database."""

try:

connection = mysql.connector.connect(host=HOST, database=DATABASE, user=USER, password=PASSWORD)

if connection.is\_connected():

print("Connected to the database")

return connection

except Error as e:

print(f"Error: {e}")

return None

def display\_table(connection, table\_name):

"""Display all entries in a table."""

try:

cursor = connection.cursor()

cursor.execute(f"SELECT \* FROM {table\_name}")

data = cursor.fetchall()

# Display table data

print(f"{table\_name.capitalize()} Table:")

for row in data:

print(row)

except Error as e:

print(f"Error: {e}")

def place\_order(connection):

"""Place an order and update the sales table."""

try:

# User input for order details

customer\_id = int(input("Enter Customer ID: "))

product\_id = input("Enter Product ID: ")

quantity = int(input("Enter Quantity: "))

# Get product pricing from product\_table

cursor = connection.cursor()

cursor.execute(f"SELECT Cost FROM product\_table WHERE ProductID = '{product\_id}'")

cost = cursor.fetchone()[0]

# Get customer account info (decrypted) from customer\_table

cursor.execute(f"SELECT aes\_decrypt(Creditcard, %s) as Creditcard FROM customer\_table WHERE CustomerID = {customer\_id}", (SECRET\_KEY,))

credit\_card\_info = cursor.fetchone()[0]

# Calculate total sales

total\_sales = cost \* quantity

# Update sales\_table

cursor.execute("INSERT INTO sales\_table (CustomerID, ProductID, Quantity, TotalSales, Creditcard) VALUES (%s, %s, %s, %s, %s)",

(customer\_id, product\_id, quantity, total\_sales, credit\_card\_info))

# Commit the transaction

connection.commit()

print("Order placed successfully.")

except Error as e:

# Handle errors

print(f"Error: {e}")

connection.rollback()

def main():

"""Main function to run the sales system."""

connection = connect\_to\_database()

if connection:

display\_table(connection, 'product\_table')

display\_table(connection, 'customer\_table')

# Place an order

place\_order(connection)

# Close the database connection when done

connection.close()

print("Connection closed.")

if \_\_name\_\_ == "\_\_main\_\_":

main()

THIS THE SCREENSHOT FOR THE CODE EXECUTION IN PYTHON,

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In the above screenshot we can see it shows order placed successfully

And also sales table has been updated as well and below is the screenshot of that,

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And finally order has been placed successfully .

OVERVIEW:

Firstly I created a database namely “python”,in that I created two tables namely product and customer and inserted the data and after doing that I created a sales table with columns and kept it empty.After this I installed idle python and installed pip to connect sql database and python.After I given a code to connect sql database and python.Then I wrote code to access data from sql database to python,After I ran code which displays two tables and prompts some input and after entering data then it shows order placed successfully and then sales table will be automatically filled and order will be placed successfully.