

WORKSHEET 3 SQL

Refer the following ERD and answer all the questions in this worksheet. You have to write the queries using mysql for the required Operation

Q1. Write SQL query to create table Customers.

Ans: # customers table

```
cursor.execute('CREATE TABLE Customers(customerNumber INT,customerName  
TEXT,customerLastName TEXT,customerFirstName TEXT,phone INT,adressLine1,adressLine2,city  
TEXT,state TEXT,postalcode INT,country TEXT,salesRepEmployeeNumber INT,creditLimit)')
```

ab.commit

Q2. Write SQL query to create table Orders.

Ans: # orders table

```
cursor.execute('CREATE TABLE Orders(orderNumber  
INT,orderDate,requiredDate,shippedDate,status,comments,customerNumber INT)')
```

ab.commit

Q3. Write SQL query to show all the columns data from the Orders Table

Ans: results = cursor.execute('SELECT * FROM Orders')

for row in results:

print(row)

Q4. Write SQL query to show all the comments from the OrdersTable.

Ans: results = cursor.execute("SELECT comments FROM Orders")

for row in results:

print(row)

Q5. Write a SQL query to show orderDate and Total number of orders placed on that date, from Orderstable.

Ans:

```
od =cursor.execute('SELECT orderDate FROM Orders')
```

```
for op in od:
```

```
    print(op)
```

```
'SELECT Orders COUNT(orderedDate) AS numoforders'
```

```
'FROM Orders'
```

```
'GROUP BY Orders';
```

Q6. Write a SQL query to show employeeNumber, lastName, firstName of all the employees from employees table

Ans: results = cursor.execute('SELECT employeeNumber,lastName,firstName FROM Employees')

```
for row in results:
```

```
    print(row)
```

Q7. Write a SQL query to show all orderNumber, customerName of the person who placed the respective order

Ans: sq1 = 'SELECT Customers.customerName, Customers.customerNumber,

Orders.orderNumber FROM Orders INNER JOIN Customers ON

Customers.customerNumber = Orders.customerNumber'

```
sq = cursor.execute(sq1)
```

```
for i in sq:
```

```
    print(i)
```

Q8. Write a SQL query to show name of all the customers in one column and salerepemployee name in another column.

Ans: SELECT 'customerName'

CONCAT('firstName','lastName')

```
FROM employees INNER JOIN Customers
ON Employees. 'employeeNumber' =Customers.'salesRepEmployeeNumber';
```

9. Write a SQL query to show Date in one column and total payment amount of the payments made on that date from the payments table.

```
Ans: results = cursor.execute('SELECT paymentDate,amount FROM Payments')
```

```
for row in results:
```

```
    print(row)
```

10. Write a SQL query to show all the products productName, MSRP, productDescription from the products table.

```
Ans: results = cursor.execute('SELECT products,productName,MSRP,productDescription FROM
Products')
```

```
for row in results:
```

```
    print(row)
```

11. Write a SQL query to print the productName, productDescription of the most ordered product.

```
Ans: result = cursor.execute('SELECT MAX(productName,productDescription) FROM Products')
```

```
print('most ordered product =',result.fetchone())
```

12. Write a SQL query to print the city name where maximum number of orders were placed.

```
Ans: max1 = cursor.execute("SELECT MAX(city) FROM
```

```
Customers")
```

```
print('Maximum orders = ', max1.fetchone())
```

13. Write a SQL query to get the name of the state having maximum number of customers.

```
Ans: SELECT 'state' FROM Customers
```

GROUP BY 'state'

ORDER BY COUNT('customerNumber') DESC

LIMIT 1

14. Write a SQL query to print the employee number in one column and Full name of the employee in the second column for all the employees.

Ans: SELECT 'employeeNumber', CONCAT('firstName','lastName') as 'Full name' FROM Employees;

```
results = cursor.execute('SELECT employeeNumber,Full name FROM Employees')
```

for row in results:

```
    print(row)
```

15. Write a SQL query to print the orderNumber, customer Name and total amount paid by the customer for that order (quantityOrdered × priceEach).

Ans: SELECT customerName,orderNumber SUM(quantityordered*priceeach) AS allorderstotal

FROM Customers NATURAL JOIN Orders NATURAL JOIN customerNumber

GROUP BY customername,orderNumber