WORKSHEET - 3 SQL

Submitted by Darshik A S

1)
```
CREATE TABLE customers (
        customerNumber INT NOT NULL,
        customerName VARCHAR(50) NOT NULL,
        contactLastName VARCHAR(50) NOT NULL,
        contactFirstName VARCHAR(50) NOT NULL,
        Phone VARCHAR(50) NOT NULL,
        addressLine1 VARCHAR(100) NOT NULL,
        addressLine2 VARCHAR(100) NOT NULL,
        city VARCHAR(50) NOT NULL,
        State VARCHAR(50) NOT NULL,
        postalCode VARCHAR(50) NOT NULL,
        country VARCHAR(50) NOT NULL,
        salesRepEmployeeNumber INT,
        creditLimit FLOAT NOT NULL,
        PRIMARY KEY (customerNumber),
        FOREIGN KEY (salesRepEmployeeNumber ) REFERENCES employees
        (employeeNumber)
    );
```

2)
```
CREATE TABLE orders (
        orderNumber INT NOT NULL
        orderDate DATETIME NOT NULL
        requiredDate DATETIME NOT NULL
        shippedDate DATETIME NOT NULL
        status VARCHAR(50) NOT NULL
        Comments TEXT DEFAULT NULL
        customerNumber INT,
        PRIMARY KEY (orderNumber),
        FORIEGN KEY (customerNumber) REFERENCES customers
        (customerNumber)
    );
```

3) SELECT * FROM orders;

4) SELECT comments FROM orders;

5) SELECT orderDate, COUNT(orderDate) FROM orders GROUP BY orderDate;

6) SELECT employeeNumber, firstName, lastName FROM employees;

7) SELECT o.orderNumber, c.customerName FROM orders o JOIN customers c USING (customerNumber);

8) SELECT c.customerName, e.firstName FROM customers c JOIN employees e ON c.salesRepEmployeenumber = e.employeeNumber;

9) SELECT paymentDate , SUM(amount) FROM paymen010.ts GROUP BY paymentDate;

10) SELECT productName, MSRP, productDescription FROM products;

11) SELECT x.productName, x.productDescription FROM (SELECT p.productName , p.productDescription, SUM(quantityOrdered) AS sq FROM orderdetails o JOIN products p USING (productCode) GROUP BY productCode) AS x ORDER BY x.sq DESC LIMIT 1;

12) SELECT city FROM (SELECT c.city, COUNT(o.orderNumber) AS co FROM orders o JOIN customers c USING (customerNumber) GROUP BY c.city ORDER BY co DESC limit 1) AS x;

13) SELECT state FROM customers GROUP BY state HAVING COUNT(state) = (SELECT COUNT(state) AS cnt FROM customers GROUP BY state ORDER BY cnt DESC LIMIT 1);

14) SELECT employeeNumber, CONCAT (firstName, " ", lastName) AS fullName FROM employees;

15) SELECT o.orderNumber, cx.customerName, SUM (o.quantityOrdered *o.priceEach) FROM orderdetails AS o JOIN (SELECT o.orderNumber, c.customerName FROM customers c JOIN orders o USING(customerNumber)) AS cx ON o.orderNumber = cx.orderNumber GROUP BY o.orderNumber;