

WORKSHEET 3 SQL

1. create table customers (customerNumber int auto_increment, customerName varchar(20), contactLastName varchar(20), contactFirstName varchar(20), phone int, addressLine1 varchar(20), addressLine2 varchar(20), city varchar(20), state varchar(20), postalCode int, country varchar(20), salesRepEmployeeNumber int, creditLimit int, primary key (customerNumber));
2. create table orders (orderNumber int, orderDate date, requiredDate date, shippedDate date, status varchar(10), comments varchar(60), customerNumber int, primary key (orderNumber), constraint fk_orders foreign key (customerNumber) references customers (customerNumber));
3. select * from orders;
4. select comments from orders;
5. select orderDate, count(*) from orders where orderDate='2022-06-12';
6. select employeeNumber, lastName, firstName from employees;
7. select orders.orderNumber, customers.customerName from orders
left join customers on customers.customerNumber=orders.customerNumber union
select orders.orderNumber, customers.customerName from orders
cross join customers on customers.customerNumber=orders.customerNumber;
8. select customerName, salesRepEmployeeNumber from customers;
9. select paymentDate, amount from payments;
10. select productName, MSRP, productDescription from products;

```
11. select products.productName,products.productDescription from products
right join orderdetails on products.productCode=orderdetails.productCode
GROUP BY orderdetails.productCode
ORDER BY orderdetails.quantityOrdered DESC
LIMIT 1;
```

[NOTE- Here I've selected the 'right join' as in my example query I'm getting the most ordered product with the help of doing the same.]

```
12. select city,count(*) from
(select customers.city,customers.customerNumber,orders.orderNumber from orders
left join
customers on orders.customerNumber=customers.customerNumber
union
select customers.city,customers.customerNumber,orders.orderNumber from orders
right join
customers on orders.customerNumber=customers.customerNumber) as ap
GROUP BY customerNumber
ORDER BY COUNT(*) DESC
limit 1;
```

```
13. select state,count(*) from customers
group by state
order by count(*) desc
limit 1;
```

```
14. select employeeNumber,CONCAT(firstName,' ',lastName) as FullName from employees;
```

```
15. select o.orderNumber,c.customerName,(quantityOrdered * amount) as totalAmount
from customers as c
inner join
payments as p on p.customerNumber=c.customerNumber
inner join
orders as o on o.customerNumber=p.customerNumber
inner join
orderdetails as od on o.orderNumber=od.orderNumber
group by orderNumber;
```

Note- I've practiced the above queries by creating all these tables with the help of MYSQL, so some of the code may be differ from your answer.