

# CSIS05I

## Database Systems II

### Lab (2)

### Solutions

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Views

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## Lab (2) Solutions

### Exercises:

1. Create the following views in SQL on the Store database schema:

a) A view that has the customer name and Customer Address, and its DOB is equal to '14/05/1990'.

```
CREATE VIEW [CustomerInformation] AS
SELECT CustFirstName, CustLastName, CustomerDOB, CustomerAddress
FROM Customer
WHERE CustomerDOB = '14/05/1990';
SELECT * FROM [CustomerInformation];
```

b) A view that has the Customer name and order ID in which the order must be delivered.

```
CREATE VIEW [Customer_orderInformation] AS
SELECT CustFirstName, CustLastName, OrderID, OrderStatus
FROM Customer, Orderr
WHERE CustomerID=CID
AND OrderStatus ='delivered';

SELECT * FROM [Customer_orderInformation];
```

c) A view that has the customer ID, and order date and its status with the product name and its description.

```
CREATE VIEW [Order_Product informationn ] AS
SELECT DateOfOrder, OrderStatus, Pname, Pdescription, CID
FROM Orderr, Product, Order_details
WHERE orderr.OrderID = order_details.OrderID
AND PID=ProductID ;

SELECT * FROM [Order_Product informationn];
```

2. Drop view that contains order ID and product name (view that you created in question 1(C)).

```
drop view [Order_Product informationn];
```

3. Create a view that has all the customer data, and name it VCustomerAllData, where the customer's firstname is 'Mark'.

```
create view VCustomerAllData As
Select *
FROM Customer
WHERE CustFirstName = 'mark';

SELECT * FROM VCustomerAllData;
```

4. Rename the VCustomerAllData to CustomerView.

```
exec sp_rename
'VCustomerAllData',
'CustomerView';
```

5. Create a view that has the product name and product description then name it VProductDetails, where the product description starts with 'S'.

```
create or alter view VProductDetails As
Select Pname, Pdescription
FROM Product
WHERE Pdescription like 's%';

select * from VProductDetails;
```

6. Alter the product's view to have with check options.

```
create or alter view VProductDetails As
Select PID, Pname, Pdescription
FROM Product
WHERE Pdescription like 's%' WITH CHECK OPTION;

insert into VProductDetails (PID, Pname, Pdescription)
Values ('50', 'Charger', 'smart charger');
```

7. Insert data into the product table using the view.

```
insert into VProductDetails (PID, Pname, Pdescription)
Values ('51', 'dvd', 'smart dvd');
```

8. Retrieve the data from the product's view.

```
select * from VProductDetails;
```

9. Create a view that contains the CustomerID, customerFirstName and DateOfOrder then name it VCustomerOrderDate.

```
create view vCustomerOrderDate As
Select DateOfOrder, CustomerID, CustFirstName
FROM Orderr, Customer
WHERE CustomerID = CID;
```

```
select * from vCustomerOrderDate;
```

10. Create an index on the VCustomerOrderDate view.

```
create or alter view vCustomerOrderDate
with schemabinding As
Select DateOfOrder, CustomerID, CustFirstName
FROM dbo.Orderr, dbo.Customer
WHERE CustomerID =CID;

create unique clustered index ClusteredINDEX_Custdetails
on vCustomerOrderDate (DateOfOrder, CustomerID, CustFirstName);
```

**- Extra question:**

11. Create a view that contains the orderID, product name, and customer's address, and name it vDetails.

```
create view vDetails As
Select orderr.OrderID, Pname, CustomerAddress, CustFirstName
FROM Orderr, Customer, Product, order_details
WHERE CustomerID = CID and orderr.OrderID = order_details.OrderID and
ProductID=PID;

select * from vDetails;
```