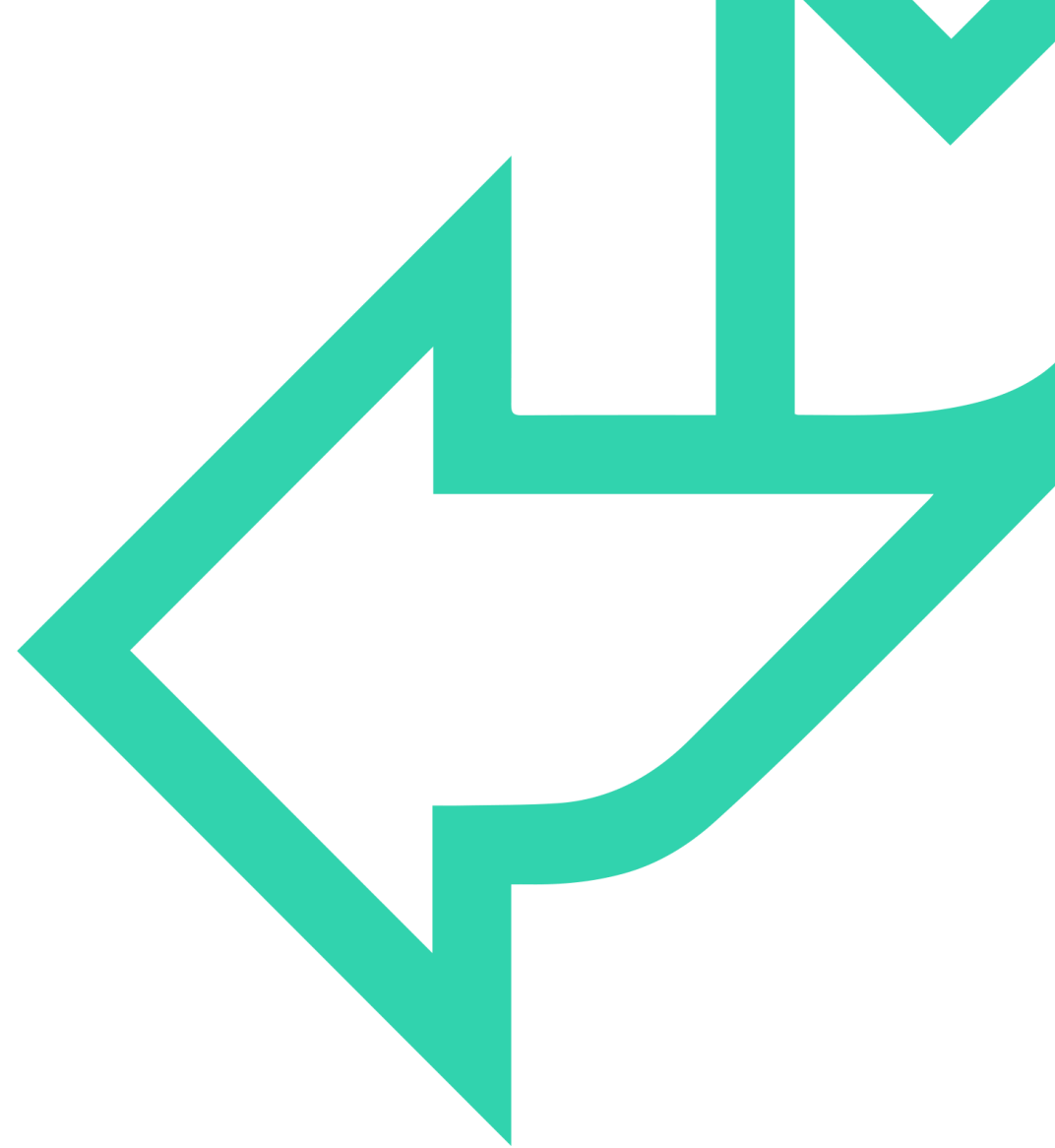




Views and Stored Procedures



Overview



- Views
- Using views
- Stored procedures
- Using stored procedures

At the end of this module you will be able to:

- use a predefined view
- create a simple view
- use a predefined stored procedure

OBJECTIVES



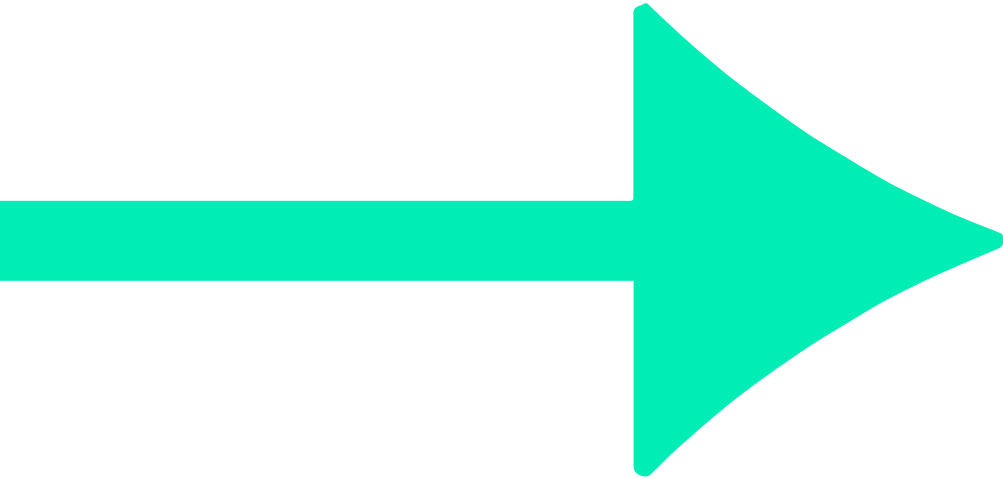
Views





Views

- **Stored select statements**
- **Act just like tables**
- **Benefits:**
 - Reusable
 - Simplify complex queries
 - Limit access to sensitive data



Using views

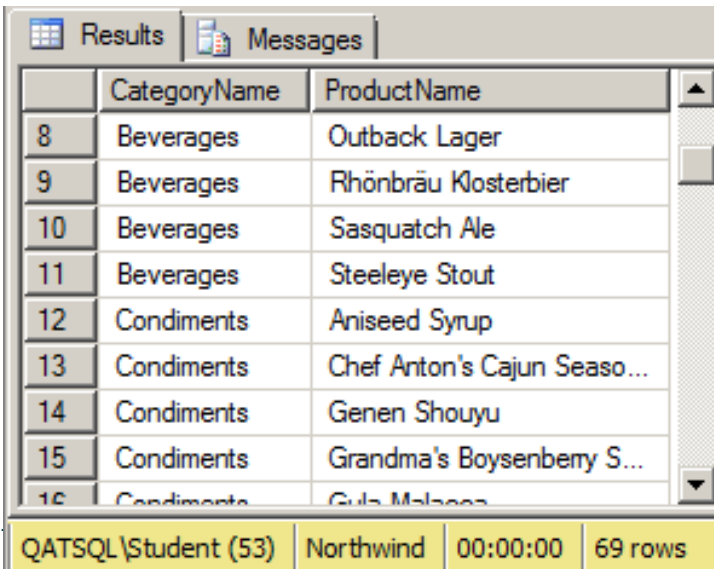




Using views

```
SELECT
    CategoryName,
    ProductName
FROM
    dbo.Products AS p
JOIN
    dbo.Categories AS c
ON
    p.CategoryID =
    c.CategoryID
WHERE
    p.Discontinued = 0
ORDER BY
    CategoryName,
    ProductName
```

```
SELECT
    CategoryName,
    ProductName
FROM
    dbo.[Products by Category]
ORDER BY
    CategoryName,
    ProductName
```



	CategoryName	ProductName
8	Beverages	Outback Lager
9	Beverages	Rhönbräu Klosterbier
10	Beverages	Sasquatch Ale
11	Beverages	Steeleye Stout
12	Condiments	Aniseed Syrup
13	Condiments	Chef Anton's Cajun Seaso...
14	Condiments	Genen Shouyu
15	Condiments	Grandma's Boysenberry S...
16	Condiments	Gula Melacca

QATSQL\Student (53) Northwind 00:00:00 69 rows



Using views (2)

```
SELECT
    p.ProductID,
    p.ProductName,
    SUM(Quantity) AS TotalSales
FROM
    dbo.[Current Product List] AS p
JOIN
    dbo.[Order Details] AS od
ON
    p.ProductID = od.ProductID
GROUP BY
    p.ProductID, p.ProductName
```

The screenshot shows a SQL Server Enterprise Manager window with two tabs: 'Results' and 'Messages'. The 'Results' tab is active, displaying a table with the following data:

	ProductID	ProductName	TotalSales
1	23	Tunnbröd	580
2	46	Spegesild	548
3	69	Gudbrandsdalsost	714
4	75	Rhönbräu Klosterbier	1155
5	15	Genen Shouyu	122
6	3	Aniseed Syrup	328
7	52	Filo Mix	500
8	72	Mozzarella di Giovanni	806
9	66	Louisiana Hot Spiced Olives	228

At the bottom of the window, a status bar shows the following information: 'RTM) | QATSQL\Student (51) | Northwind | 00:00:00 | 69 rows'.

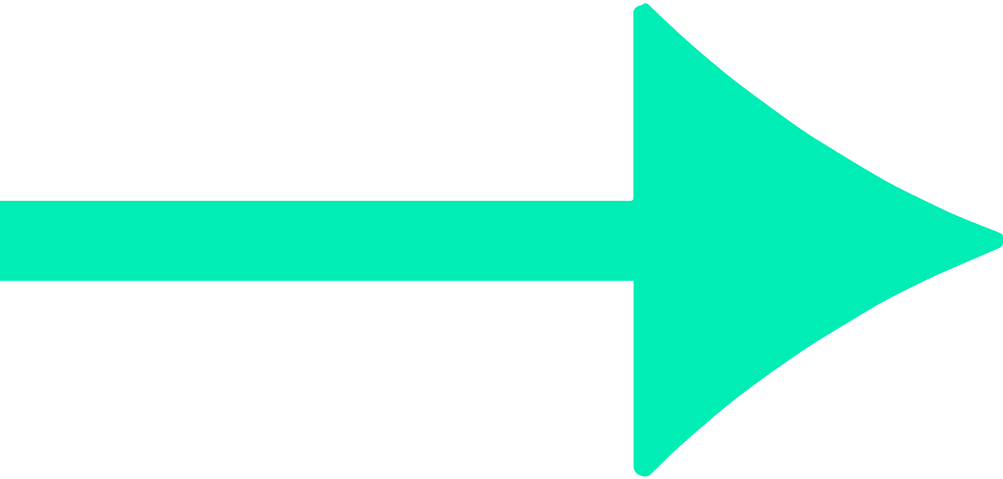
Stored procedures





Stored procedures

- Set of SQL statements stored in the database
- Can accept parameters
- Can return records
- Can modify the database
- Can perform complex logic



Using stored procedures

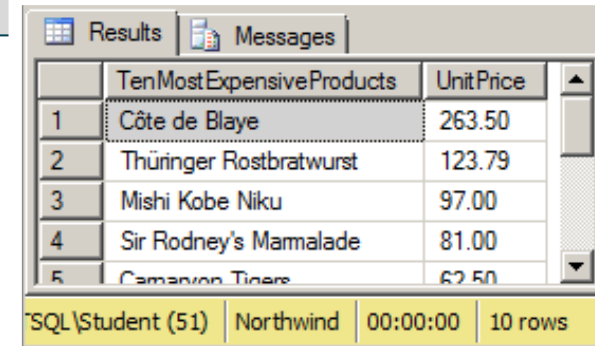




Using stored procedures

- **EXECUTE** <<procedure-name>>
- **EXEC** <<procedure-name>> param1, ..., paramN

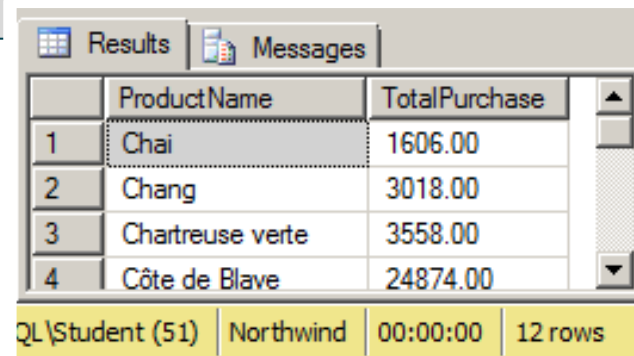
```
EXEC dbo.[Ten Most Expensive Products]
```



	TenMostExpensiveProducts	UnitPrice
1	Côte de Blaye	263.50
2	Thüringer Rostbratwurst	123.79
3	Mishi Kobe Niku	97.00
4	Sir Rodney's Marmalade	81.00
5	Camaron Tigris	62.50

SQL\Student (51) | Northwind | 00:00:00 | 10 rows

```
EXEC dbo.SalesByCategory  
    'Beverages', 1996
```



	ProductName	TotalPurchase
1	Chai	1606.00
2	Chang	3018.00
3	Chartreuse verte	3558.00
4	Côte de Blaye	24874.00

SQL\Student (51) | Northwind | 00:00:00 | 12 rows



HANDS-ON LAB

- Using views
- Creating views
- Using stored procedures



Review

- Views
- Using views
- Stored procedures
- Using stored procedures

