

SQL ASSIGNMENT - 1

Creating table named **products**

```
DROP TABLE IF EXISTS products;

CREATE TABLE products (
    ProductID int NOT NULL identity(1,1),
    ProductName nvarchar(75) NOT NULL,
    SupplierID int NOT NULL,
    CategoryID int NOT NULL,
    QuantityPerUnit varchar(20) NOT NULL DEFAULT '0',
    UnitPrice int NOT NULL DEFAULT '0',
    UnitsInStock int NOT NULL DEFAULT '0',
    UnitsOnOrder int NOT NULL DEFAULT '0',
    ReorderLevel int NOT NULL DEFAULT '0',
    Discontinued nvarchar(5) NOT NULL DEFAULT 'No',
    PRIMARY KEY (ProductID)
)
```

Inserting data into Created Table

```
INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Chai',1,1,'10 boxes x 20 bags',18,39,0,10,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Chang',1,1,'24 - 12 oz bottles',19,17,40,25,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Aniseed Syrup',1,2,'12 - 550 ml bottles',10,13,70,25,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Chef Anton's Cajun Seasoning',2,2,'48 - 6 oz jars',22,53,0,0,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Chef Anton's Gumbo Mix',2,2,'36 boxes',21.35,0,0,0,'Yes')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Grandma's Boysenberry Spread',3,2,'12 - 8 oz jars',25,120,0,25,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Uncle Bob's Organic Dried Pears',3,7,'12 - 1 lb pkgs.',30,15,0,10,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Northwoods Cranberry Sauce',3,2,'12 - 12 oz jars',40,6,0,0,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Mishi Kobe Niku',4,6,'18 - 500 g pkgs.',97,29,0,0,'Yes')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Ikura',4,8,'12 - 200 ml jars',31,31,0,0,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Manjimup Dried Apples',24,7,'50 - 300 g pkgs.',53,20,0,10,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Filo Mix',24,5,'16 - 2 kg boxes',7,38,0,25,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Perth Pasties',24,6,'48 pieces',33,0,0,0,'Yes')
```

Jaydev Bhatt

```
INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Tkura',4,8,'12 - 200 ml jars',31,31,0,0,'No')

INSERT "products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Manjimup Dried Apples',24,7,'50 - 300 g pkgs.',53,20,0,10,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Filo Mix',24,5,'16 - 2 kg boxes',7,38,0,25,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Perth Pasties',24,6,'48 pieces',33,0,0,0,'Yes')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Tourtière',25,6,'16 pies',8,21,0,10,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Pâté chinois',25,6,'24 boxes x 2 pies',24,115,0,20,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Gnocchi di nonna Alice',26,5,'24 - 250 g pkgs.',38,21,10,30,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Ravioli Angelo',26,5,'24 - 250 g pkgs.',20,36,0,20,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Escargots de Bourgogne',27,8,'24 pieces',13,62,0,20,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Raclette Courdavault',28,4,'5 kg pkg.',56,0,0,0,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Camembert Pierrot',28,4,'15 - 300 g rounds',34,19,0,0,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Sir Rodney's Scones',8,3,'24 pkgs. x 4 pieces',10,3,40,5,'Yes')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Gustaf's Knäckebröd',9,5,'24 - 500 g pkgs.',21,104,0,25,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Tunnbröd',9,5,'12 - 250 g pkgs.',9,61,0,25,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Guaraná Fantástica',10,1,'12 - 355 ml cans',4.5,20,0,0,'Yes')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('NuNuCa Nuß-Nougat-Creme',11,3,'20 - 450 g glasses',14,76,0,30,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Gumbär Gummibärchen',11,3,'100 - 250 g bags',31.23,15,0,0,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Schoggi Schokolade',11,3,'100 - 100 g pieces',43.9,49,0,30,'Yes')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Rössle Sauerkraut',12,7,'25 - 825 g cans',45.6,26,0,0,'Yes')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Thüringer Rostbratwurst',12,6,'50 bags x 30 sausgs.',123.79,0,0,0,'No')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Nord-Ost Matjeshering',13,8,'10 - 200 g glasses',25.89,10,0,15,'Yes')
```

Viewing the Inserted Data:

→ `SELECT * FROM products`

SELECT * FROM products										
100 %										
Results Messages										
	ProductID	ProductName	SupplierID	CategoryID	QuantityPerUnit	UnitPrice	UnitsInStock	UnitsOnOrder	ReorderLevel	Discontinued
1	1	Chai	1	1	10 boxes x 20 bags	18	39	0	10	No
2	2	Chang	1	1	24 - 12 oz bottles	19	17	40	25	No
3	3	Aniseed Syrup	1	2	12 - 550 ml bottles	10	13	70	25	No
4	4	Chef Anton's Cajun Seasoning	2	2	48 - 6 oz jars	22	53	0	0	No
5	5	Chef Anton's Gumbo Mix	2	2	36 boxes	21	0	0	0	Yes
6	6	Grandma's Boysenberry Spread	3	2	12 - 8 oz jars	25	120	0	25	No
7	7	Uncle Bob's Organic Dried Pears	3	7	12 - 1 lb pkgs.	30	15	0	10	No
8	8	Northwoods Cranberry Sauce	3	2	12 - 12 oz jars	40	6	0	0	No
9	9	Mishi Kobe Niku	4	6	18 - 500 g pkgs.	97	29	0	0	Yes
10	10	Ikura	4	8	12 - 200 ml jars	31	31	0	0	No
11	11	Manjimup Dried Apples	24	7	50 - 300 g pkgs.	53	20	0	10	No
12	12	Filo Mix	24	5	16 - 2 kg boxes	7	38	0	25	No
13	13	Perth Pasties	24	6	48 pieces	33	0	0	0	Yes
14	14	Tourtière	25	6	16 pies	8	21	0	10	No
15	15	Pâté chinois	25	6	24 boxes x 2 pies	24	115	0	20	No
16	16	Gnocchi di nonna Alice	26	5	24 - 250 g pkgs.	38	21	10	30	No
17	17	Ravioli Angelo	26	5	24 - 250 g pkgs.	20	36	0	20	No
18	18	Escargots de Bourgogne	27	8	24 pieces	13	62	0	20	No
19	19	Raclette Courdavault	28	4	5 kg pkg.	56	0	0	0	No
20	20	Camembert Pierrot	28	4	15 - 300 g rounds	34	19	0	0	No
21	21	Sir Rodney's Scones	8	3	24 pkgs. x 4 pieces	10	3	40	5	Yes
22	22	Gustaf's Knäckebröd	9	5	24 - 500 g pkgs.	21	104	0	25	No
23	23	Tunnbröd	9	5	12 - 250 g pkgs.	9	61	0	25	No
24	24	Guaraná Fantástica	10	1	12 - 355 ml cans	4	20	0	0	Yes
25	25	NuNuCa Nuß-Nougat-Creme	11	3	20 - 450 g glasses	14	76	0	30	No
26	26	Gumbär Gummibärchen	11	3	100 - 250 g bags	31	15	0	0	No
27	27	Schoggi Schokolade	11	3	100 - 100 g pieces	43	49	0	30	Yes
28	28	Rössle Sauerkraut	12	7	25 - 825 g cans	45	26	0	0	Yes
29	29	Thüringer Rostbratwurst	12	6	50 bags x 30 sausgs.	123	0	0	0	No
30	30	Nord-Ost Matjeshering	13	8	10 - 200 g glasses	25	10	0	15	Yes

1. Write a query to get a Product list (id, name, unit price) where current products cost less than \$20.

→ **SELECT** productId, ProductName, UnitPrice **FROM** products **WHERE** Discontinued='No'
AND UnitPrice < 20

	productId	ProductName	UnitPrice
1	1	Chai	18
2	2	Chang	19
3	3	Aniseed Syrup	10
4	12	Filo Mix	7
5	14	Tourtière	8
6	18	Escargots de Bourgogne	13
7	23	Tunnbröd	9
8	25	NuNuCa Nuß-Nougat-Creme	14

2. Write a query to get Product list (id, name, unit price) where products cost between \$15 and \$25

SELECT productId, ProductName, UnitPrice **FROM** products **WHERE** UnitPrice BETWEEN 15 AND 25

	productId	ProductName	UnitPrice
1	1	Chai	18
2	2	Chang	19
3	4	Chef Anton's Cajun Seasoning	22
4	5	Chef Anton's Gumbo Mix	21
5	6	Grandma's Boysenberry Spread	25
6	15	Pâté chinois	24
7	17	Ravioli Angelo	20
8	22	Gustaf's Knäckebröd	21
9	30	Nord-Ost Matjeshering	25

3. Write a query to get Product list (name, unit price) of above average price

→ **SELECT** ProductName, UnitPrice **FROM** products **WHERE** UnitPrice > (**SELECT** **AVG**(UnitPrice) **FROM** products)

	ProductName	UnitPrice
1	Northwoods Cranberry Sauce	40
2	Mishi Kobe Niku	97
3	Ikura	31
4	Manjimup Dried Apples	53
5	Perth Pasties	33
6	Gnocchi di nonna Alice	38
7	Raclette Courdavault	56
8	Camembert Pierrot	34
9	Gumbär Gummibärchen	31
10	Schoggi Schokolade	43
11	Rössle Sauerkraut	45
12	Thüringer Rostbratwurst	123

4. Write a query to get Product list (name, unit price) of ten most expensive products

SELECT DISTINCT ProductName **as** Most_Ten_Expensive_Products, UnitPrice
FROM Products **AS** a
WHERE 10 >= (**SELECT COUNT**(**DISTINCT** UnitPrice)
FROM Products **AS** b
WHERE b.UnitPrice >= a.UnitPrice)
ORDER BY UnitPrice **desc**;

	Most_Ten_Expensive_Products	UnitPrice
1	Thüringer Rostbratwurst	123
2	Mishi Kobe Niku	97
3	Raclette Courdavault	56
4	Manjimup Dried Apples	53
5	Rössle Sauerkraut	45
6	Schoggi Schokolade	43
7	Northwoods Cranberry Sauce	40
8	Gnocchi di nonna Alice	38
9	Camembert Pierrot	34
10	Perth Pasties	33

5. Write a query to count current and discontinued products

```
SELECT (Count(ProductName)) AS CURRENT_PRODUCTS  
FROM Products  
GROUP BY Discontinued
```

	CURRENT_PRODUCTS
1	22
2	8

6. Write a query to get Product list (name, units on order , units in stock) of stock is less than the quantity on order.

```
SELECT ProductName, UnitsOnOrder , UnitsInStock  
FROM Products  
WHERE (UnitsInStock < UnitsOnOrder) AND (Discontinued='No')
```

	ProductName	UnitsOnOrder	UnitsInStock
1	Chang	40	17
2	Aniseed Syrup	70	13