

SQL ASSIGNMENT - 1

Creating table named **products**

```
use Northwind;
Create Table Products (
    ProductID int primary key identity(1,1),
    ProductName nvarchar(100) NOT NULL,
    SupplierID int NOT NULL,
    CategoryID int NOT NULL,
    QuantityPerUnit nvarchar(20) NOT NULL,
    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'
)

select * from Products
```

| ProductID | ProductName | SupplierID | CategoryID | QuantityPerUnit | UnitPrice | UnitsInStock | UnitsOnOrder | ReorderLevel | Discontinued |
|-----------|-------------|------------|------------|-----------------|-----------|--------------|--------------|--------------|--------------|
|-----------|-------------|------------|------------|-----------------|-----------|--------------|--------------|--------------|--------------|

Inserting data into Created Table

```

INSERT INTO Products ("ProductName", "SupplierID", "CategoryID", "QuantityPerUnit", "UnitPrice", "UnitsInStock", "UnitsOnOrder", "ReorderLevel", "Discontinued")
VALUES('Santoor Soap', 8, 4, '1 kg pkg.', 21, 22, 30, 30, 'NO')

INSERT INTO Products ("ProductName", "SupplierID", "CategoryID", "QuantityPerUnit", "UnitPrice", "UnitsInStock", "UnitsOnOrder", "ReorderLevel", "Discontinued")
VALUES('Pears soap', 5, 4, '10 - 500 g pkgs.', 38, 86, 0, 0, 'NO')

INSERT INTO Products ("ProductName", "SupplierID", "CategoryID", "QuantityPerUnit", "UnitPrice", "UnitsInStock", "UnitsOnOrder", "ReorderLevel", "Discontinued")
VALUES('Dabur hair Oil', 6, 8, '2 kg box', 6, 24, 0, 5, 'NO')

INSERT INTO Products ("ProductName", "SupplierID", "CategoryID", "QuantityPerUnit", "UnitPrice", "UnitsInStock", "UnitsOnOrder", "ReorderLevel", "Discontinued")
VALUES('Headphone', 6, 7, '40 - 100 g pkgs.', 23, 35, 0, 0, 'NO')

INSERT INTO Products ("ProductName", "SupplierID", "CategoryID", "QuantityPerUnit", "UnitPrice", "UnitsInStock", "UnitsOnOrder", "ReorderLevel", "Discontinued")
VALUES('TATA Salt', 6, 2, '24 - 250 ml bottles', 15, 39, 0, 5, 'NO')

INSERT INTO Products ("ProductName", "SupplierID", "CategoryID", "QuantityPerUnit", "UnitPrice", "UnitsInStock", "UnitsOnOrder", "ReorderLevel", "Discontinued")
VALUES('Ginger', 7, 3, '32 - 500 g boxes', 17.45, 29, 0, 10, 'YES')

INSERT INTO Products ("ProductName", "SupplierID", "CategoryID", "QuantityPerUnit", "UnitPrice", "UnitsInStock", "UnitsOnOrder", "ReorderLevel", "Discontinued")
VALUES('Water Bottle', 7, 6, '20 - 1 kg tins', 39, 0, 0, 0, 'YES')

INSERT INTO Products ("ProductName", "SupplierID", "CategoryID", "QuantityPerUnit", "UnitPrice", "UnitsInStock", "UnitsOnOrder", "ReorderLevel", "Discontinued")
VALUES('Tigers bam', 7, 8, '16 kg pkg.', 62, 42, 0, 0, 'NO')

INSERT INTO Products ("ProductName", "SupplierID", "CategoryID", "QuantityPerUnit", "UnitPrice", "UnitsInStock", "UnitsOnOrder", "ReorderLevel", "Discontinued")
VALUES('Parle Chocolate Biscuits', 8, 3, '10 boxes x 12 pieces', 9, 25, 0, 5, 'NO')

INSERT INTO Products ("ProductName", "SupplierID", "CategoryID", "QuantityPerUnit", "UnitPrice", "UnitsInStock", "UnitsOnOrder", "ReorderLevel", "Discontinued")
VALUES('red boxes', 8, 3, '30 gift boxes', 81, 40, 0, 0, 'NO')

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INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Rice',8,3,'24 pkgs. x 4 pieces',10,3,40,5,'NO')

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

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

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('red bull',10,1,'12 - 355 ml cans',45,20,0,0,'YES')

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

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('tuver dal',11,3,'100 - 250 g bags',31,15,0,0,'NO')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('water bag',11,3,'100 - 100 g pieces',43,49,0,30,'NO')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('jeera',12,7,'25 - 825 g cans',45,6,26,0,0,'YES')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('school bag',12,6,'50 bags x 30 saugs.',123,0,0,0,'YES')

```

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INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('powder',19,8,'12 - 12 oz cans',9,85,0,10,'NO')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('French fries',20,5,'32 - 1 kg pkgs.',14,26,0,0,'YES')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Mocha Coffee',20,1,'16 - 500 g tins',46,17,10,25,'NO')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Capachino',20,2,'20 - 2 kg bags',19,27,0,15,'NO')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Wagh bakri TEa',21,8,'1k pkg.',9,5,70,15,'NO')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Orange Drinks',21,8,'4 - 450 g glasses',12,95,0,0,'NO')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Red wine',22,3,'10 - 4 oz boxes',9,36,0,0,'NO')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Chocolate',22,3,'10 pkgs.',12,15,70,25,'NO')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Kurkure',23,3,'24 - 50 g pkgs.',20,10,60,15,'NO')

INSERT "Products"("ProductName","SupplierID","CategoryID","QuantityPerUnit","UnitPrice","UnitsInStock","UnitsOnOrder","ReorderLevel","Discontinued")
VALUES('Pasta',23,3,'12 - 100 g bars',16,65,0,30,'NO')

```

Viewing the Inserted Data:

```
select * from Products
```

100 %

Results

Messages

| | ProductID | ProductName | SupplierID | CategoryID | QuantityPerUnit | UnitPrice | UnitsInStock | UnitsOnOrder | ReorderLevel | Discontinued |
|----|-----------|----------------|------------|------------|---------------------|-----------|--------------|--------------|--------------|--------------|
| 1 | 1 | Santoor Soap | 8 | 4 | 1 kg pkg. | 21 | 22 | 30 | 30 | NO |
| 2 | 2 | Pears soap | 5 | 4 | 10 - 500 g pkgs. | 38 | 86 | 0 | 0 | NO |
| 3 | 3 | Dabur hair Oil | 6 | 8 | 2 kg box | 6 | 24 | 0 | 5 | NO |
| 4 | 4 | Headphone | 6 | 7 | 40 - 100 g pkgs. | 23 | 35 | 0 | 0 | NO |
| 5 | 5 | TATA Salt | 6 | 2 | 24 - 250 ml bottles | 15 | 39 | 0 | 5 | NO |
| 6 | 6 | Ginger | 7 | 3 | 32 - 500 g boxes | 17 | 29 | 0 | 10 | YES |
| 7 | 7 | Water Bottle | 7 | 6 | 20 - 1 kg tins | 39 | 0 | 0 | 0 | YES |
| 8 | 8 | Tigers bam | 7 | 8 | 16 kg pkg. | 62 | 42 | 0 | 0 | NO |
| 9 | 9 | Parle Choc... | 8 | 3 | 10 boxes x 12 pi... | 9 | 25 | 0 | 5 | NO |
| 10 | 10 | red boxes | 8 | 3 | 30 gift boxes | 81 | 40 | 0 | 0 | NO |
| 11 | 11 | Rice | 8 | 3 | 24 pkgs. x 4 pie... | 10 | 3 | 40 | 5 | NO |
| 12 | 12 | mug Dal | 9 | 5 | 24 - 500 g pkgs. | 21 | 104 | 0 | 25 | NO |
| 13 | 13 | Tumeric | 9 | 5 | 12 - 250 g pkgs. | 9 | 61 | 0 | 25 | NO |
| 14 | 14 | red bull | 10 | 1 | 12 - 355 ml cans | 45 | 20 | 0 | 0 | YES |
| 15 | 15 | Cream | 11 | 3 | 20 - 450 g glasses | 14 | 76 | 0 | 30 | NO |
| 16 | 16 | tuver dal | 11 | 3 | 100 - 250 g bags | 31 | 15 | 0 | 0 | NO |
| 17 | 17 | water bag | 11 | 3 | 100 - 100 g piec... | 43 | 49 | 0 | 30 | NO |
| 18 | 18 | jeera | 12 | 7 | 25 - 825 g cans | 45 | 26 | 0 | 0 | YES |
| 19 | 19 | school bag | 12 | 6 | 50 bags x 30 sa... | 123 | 0 | 0 | 0 | YES |
| 20 | 20 | tuffan glass | 13 | 8 | 10 - 200 g glasses | 25 | 10 | 0 | 15 | NO |
| 21 | 21 | powder | 19 | 8 | 12 - 12 oz cans | 9 | 85 | 0 | 10 | NO |
| 22 | 22 | French fries | 20 | 5 | 32 - 1 kg pkgs. | 14 | 26 | 0 | 0 | YES |
| 23 | 23 | Mocha Coff... | 20 | 1 | 16 - 500 g tins | 46 | 17 | 10 | 25 | NO |
| 24 | 24 | Capachino | 20 | 2 | 20 - 2 kg bags | 19 | 27 | 0 | 15 | NO |
| 25 | 25 | Wagh bakri... | 21 | 8 | 1k pkg. | 9 | 5 | 70 | 15 | NO |
| 26 | 26 | Orange Drin... | 21 | 8 | 4 - 450 g glasses | 12 | 95 | 0 | 0 | NO |
| 27 | 27 | Red wine | 22 | 3 | 10 - 4 oz boxes | 9 | 36 | 0 | 0 | NO |
| 28 | 28 | Chocolate | 22 | 3 | 10 pkgs. | 12 | 15 | 70 | 25 | NO |
| 29 | 29 | Kurkure | 23 | 3 | 24 - 50 g pkgs. | 20 | 10 | 60 | 15 | NO |
| 30 | 30 | Pasta | 23 | 3 | 12 - 100 g bars | 16 | 65 | 0 | 30 | NO |

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 UnitPrice < 20 AND Discontinued = 'NO'
```

```
select ProductId,ProductName,UnitPrice
```

100 %

Results Messages

| | ProductId | ProductName | UnitPrice |
|----|-----------|--------------------------|-----------|
| 1 | 3 | Dabur hair Oil | 6 |
| 2 | 5 | TATA Salt | 15 |
| 3 | 9 | Parle Chocolate Biscuits | 9 |
| 4 | 11 | Rice | 10 |
| 5 | 13 | Tumeric | 9 |
| 6 | 15 | Cream | 14 |
| 7 | 21 | powder | 9 |
| 8 | 24 | Capachino | 19 |
| 9 | 25 | Wagh bakri TEa | 9 |
| 10 | 26 | Orange Drinks | 12 |
| 11 | 27 | Red wine | 9 |
| 12 | 28 | Chocolate | 12 |
| 13 | 30 | Pasta | 16 |

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
```

100 %

Results Messages

| | ProductId | ProductName | UnitPrice |
|---|-----------|--------------|-----------|
| 1 | 1 | Santoor Soap | 21 |
| 2 | 4 | Headphone | 23 |
| 3 | 5 | TATA Salt | 15 |
| 4 | 6 | Ginger | 17 |
| 5 | 12 | mug Dal | 21 |
| 6 | 20 | tuffan glass | 25 |
| 7 | 24 | Capachino | 19 |
| 8 | 29 | Kurkure | 20 |
| 9 | 30 | Pasta | 16 |

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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 )
```

100 %

Results Messages

| | ProductName | UnitPrice |
|----|--------------|-----------|
| 1 | Pears soap | 38 |
| 2 | Water Bottle | 39 |
| 3 | Tigers bam | 62 |
| 4 | red boxes | 81 |
| 5 | red bull | 45 |
| 6 | tuver dal | 31 |
| 7 | water bag | 43 |
| 8 | jeera | 45 |
| 9 | school bag | 123 |
| 10 | Mocha Coffee | 46 |

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

```
select top 10 ProductName,UnitPrice
from Products
order by UnitPrice DESC
```

100 %

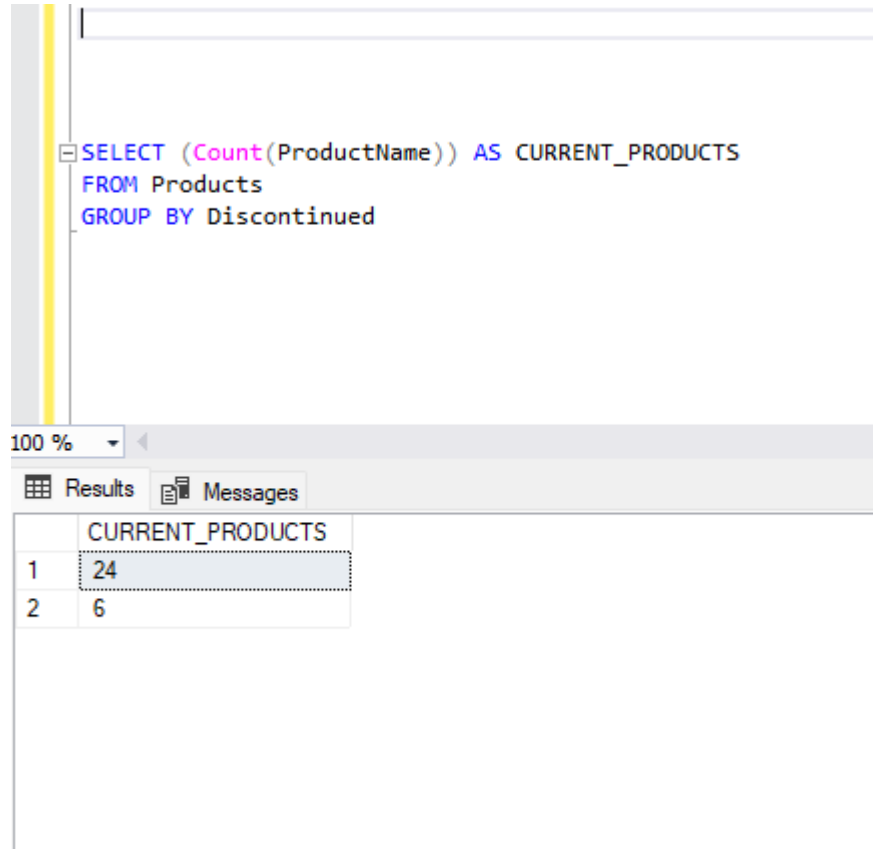
Results Messages

| | ProductName | UnitPrice |
|----|--------------|-----------|
| 1 | school bag | 123 |
| 2 | red boxes | 81 |
| 3 | Tigers bam | 62 |
| 4 | Mocha Coffee | 46 |
| 5 | red bull | 45 |
| 6 | jeera | 45 |
| 7 | water bag | 43 |
| 8 | Water Bottle | 39 |
| 9 | Pears soap | 38 |
| 10 | tuver dal | 31 |

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5. Write a query to count current and discontinued products

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The screenshot shows a SQL query window with the following text:

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

Below the query window, the 'Results' tab is active, displaying a table with two columns: 'CURRENT_PRODUCTS' and an index column. The table contains two rows of data:

| | CURRENT_PRODUCTS |
|---|------------------|
| 1 | 24 |
| 2 | 6 |

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 UnitsOnOrder>UnitsInStock
```

100 %

Results Messages

| | ProductName | UnitsOnOrder | UnitsInStock |
|---|----------------|--------------|--------------|
| 1 | Santoor Soap | 30 | 22 |
| 2 | Rice | 40 | 3 |
| 3 | Wagh bakri TEa | 70 | 5 |
| 4 | Chocolate | 70 | 15 |
| 5 | Kurkure | 60 | 10 |