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Lab Course Name: Principles of  
Database Management Systems

Lab Slot: L29+L30

## EXERCISE 3

**Aim:** To understand types of function in SQL

**Question:** Execute the following queries based on the schema specified in exercise 1



```

1 create table Suppliers(SupplNo NUMBER(10) PRIMARY KEY,Suppname VARCHAR(20),Status NUMBER(10),City VARCHAR(20));
2 create table Items(ItemNo NUMBER(10) PRIMARY KEY,Itemname VARCHAR(20),SupplNo NUMBER(10),Price NUMBER(10),CONSTRAINT fk_Suppliers FOREIGN KEY(SupplNo) REFERENCES Suppliers(SupplNo) );
3 create table Shipments(ItemNo NUMBER(10),Qty NUMBER(10),manufactured DATE,CONSTRAINT fk_Items FOREIGN KEY(ItemNo) REFERENCES Items(ItemNo));
4 insert into Suppliers values(1,'Britannia',10,'Delhi');
5 insert into Suppliers values(2,'New Bakers',30,'Mumbai');
6 insert into Suppliers values(3,'Mother Dairy',10,'Delhi');
7 insert into Suppliers values(4,'Cookz',50,'Bangalore');
8 insert into Suppliers values(5,'Haldiram',40,'Jaipur');
9 insert into Suppliers values(6,'Nestle',70,'Kampur');
10 insert into Suppliers values(7,'Cake wala',20,'Tirupati');
11 insert into Suppliers values(8,'Bakers love',30,'Chennai');
12 insert into Suppliers values(9,'Cooling shop',10,'Shimla');
13 insert into Items values(11,'Milk',1,15);
14 insert into Items values(13,'Cake',2,5);
15 insert into Items values(17,'Bread',1,9);
16 insert into Items values(27,'Milk Bread',4,14);
17 insert into Items values(45,'Plain Biscuit',5,6);
18 insert into Items values(54,'Cream Biscuit',6,10);
19 insert into Items values(29,'Ice cream',7,16);
20 insert into Items values(36,'Cold Drink',8,8);
21 insert into Items values(41,'Nankhoni',9,15);
22 insert into Shipments values(15,10,'20-JUL-2020');
23 insert into Shipments values(17,20,'21-OCT-2019');
24 insert into Shipments values(34,20,'19-NOV-2019');
25 insert into Shipments values(27,20,'15-DEC-2020');
26 insert into Shipments values(45,10,'17-JAN-2021');
27 insert into Shipments values(11,10,'23-FEB-2020');
28 insert into Shipments values(29,10,'12-MAR-2021');
29 insert into Shipments values(36,30,'11-APR-2020');
30 insert into Shipments values(41,30,'29-AUG-2021');
  
```



```

1 select * from Suppliers;
2
3
4
  
```

SUPPNO	SUPPNAME	STATUS	CITY
1	Britannia	10	Delhi
2	New Bakers	30	Mumbai
3	Mother Dairy	10	Delhi
4	Cookz	50	Bangalore
5	Haldiram	40	Jaipur
6	Nestle	70	Kampur
7	Cake wala	20	Tirupati
8	Bakers love	30	Chennai
9	Cooling shop	10	Shimla

Live SQL

SQL Worksheet

```
1 select * from Items
```

ITEMNO	ITEMNAME	SUPPID	PRICE
11	Milk	1	15
13	Cake	2	5
17	Bread	3	9
27	Milk Bread	4	14
45	Plain Biscuit	5	6
34	Cream Biscuit	6	10
29	Ice cream	7	16
36	Cold Drink	8	8
41	Samkeen	9	15

Live SQL

SQL Worksheet

```
1 select * from Shipments
```

ITEMNO	QTY	MANUFACTURED
13	10	20-JUL-20
17	20	21-OCT-19
34	20	19-NOV-19
27	20	15-DEC-20
45	10	17-MAR-21
11	10	23-FEB-20
29	10	12-MAR-21
36	30	11-APR-20
41	30	29-AUG-21

Download CSV

## 1. Apply SQL queries to retrieve data by using all numeric functions.

Live SQL

SQL Worksheet

```
1 select cos(Qty) from Shipments WHERE ItemNo=41;
2 select Qty from Shipments WHERE ItemNo=41;
```

COS(QTY)
.15425144988758405671866214661421819673

Download CSV

QTY
30

Download CSV

Live SQL

SQL Worksheet

```
1 select cosh(Qty) from Shipments WHERE ItemNo=41;
2 select Qty from Shipments WHERE ItemNo=41;
```

COSH(QTY)
5343237298762.2318734952343721588156092

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QTY
30

Download CSV

 Live SQL

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SQL Worksheet

Clear Find Actions Save Run

```
1 select exp(Supplio) from Items WHERE ItemNo=17;
2 select Supplio from Items WHERE ItemNo=17;
```

EXP(SUPPNO)
20.08553692318766774892852965458171789706

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SUPPNO
3

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 Live SQL

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SQL Worksheet

Clear Find Actions Save Run

```
1 select power(Qty,2),Qty from Shipments;
2
```

POWER(QTY,2)	QTY
100	10
400	20
400	20
400	20
25	5
10000	100
100	10
900	30
900	30

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 Live SQL

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SQL Worksheet

Clear Find Actions Save Run

```
1 select ItemNo,Qty,mod(ItemNo,Qty) from Shipments;
2
```

ITEMNO	QTY	MOD(ITEMNO,QTY)
13	10	3
17	20	17
34	20	14
27	20	7
45	5	0
11	100	11
29	10	9
36	30	6
41	30	11

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SQL Worksheet

Clear Find Actions Save Run

```
1 alter table Items modify Price NUMBER(20,3);
```

Table altered.


 Live SQL

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SQL Worksheet Clear Find Actions Save Run

1 update Items set Price=14.5631 where ItemNo=27;

1 row(s) updated.

 Live SQL

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SQL Worksheet Clear Find Actions Save Run

1 select ceil(Price) from Items WHERE ItemNo=27;  
2 select Price from Items WHERE ItemNo=27;

CEIL(PRICE)
15

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PRICE
14.563

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SQL Worksheet Clear Find Actions Save Run

1 select Price,floor(Price) from Items WHERE ItemNo=27;

PRICE	FLOOR(PRICE)
14.563	14

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SQL Worksheet Clear Find Actions Save Run

1 select Price,round(Price,2) from Items WHERE ItemNo=27;

PRICE	ROUND(PRICE,2)
14.563	14.56

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SQL Worksheet

Clear Find Actions Save Run

1 update Items set Price=-2 WHERE ItemNo=41;

1 row(s) updated.

Live SQL

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SQL Worksheet

Clear Find Actions Save Run

1 select Price,abs(Price) from Items WHERE ItemNo=41;

PRICE	ABS(PRICE)
-2	2

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SQL Worksheet

Clear Find Actions Save Run

1 select Price,sign(Price) from Items WHERE ItemNo=41;

PRICE	SIGN(PRICE)
-2	-1

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SQL Worksheet

Clear Find Actions Save Run

1 select SuppNo,ln(SuppNo) from Suppliers WHERE City='Mumbai';

SUPPNO	LN(SUPPNO)
2	,6931471805599453804172321214581765680782

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## 2. Apply SQL queries to retrieve data by using all character functions

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SQL Worksheet Clear Find Actions Save Run

```
1 select initcap(Suppname) from Suppliers;
```

INITCAP(SUPPNAME)
Britannia
New Bakers
Mother Dairy
Cookz
Haidiran
Nestle
Cake Hala
Bakers Love
Cooling Shop

Download CSV  
9 rows selected.

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SQL Worksheet Clear Find Actions Save Run

```
1 select lower(city) from Suppliers;
```

LOWER(CITY)
delhi
mumbai
delhi
bangalore
jaipur
kanpur
tirupati
chennai
shimla

Download CSV  
9 rows selected.

Live SQL

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SQL Worksheet Clear Find Actions Save Run

```
1 select upper(Itemname) from Items;
```

UPPER(ITEMNAME)
MILK
CAKE
BREAD
MILK BREAD
PLAIN BISCUIT
CREAM BISCUIT
ICE CREAM
COLD DRINK
NAMKEEN

Download CSV  
9 rows selected.

Live SQL

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SQL Worksheet

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```
1 select ltrim('Plain Biscuit','Plain') from Items WHERE Price=6;
```

```
LTRIM('PLAINBISCUIT','PLAIN')
```

Biscuit

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SQL Worksheet

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```
1 select rtrim('Milk Bread','ad') from Items WHERE Price=16;
```

```
RTRIM('MILKBREAD','AD')
```

Milk Bre

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SQL Worksheet

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```
1 select translate('Cookz','C','b') from Suppliers WHERE Suppno=6;
```

```
TRANSLATE('COOKZ','C','B')
```

bookz

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SQL Worksheet

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```
1 select replace('New Bakers','B','cra') from Suppliers WHERE Suppno=2;
```

```
REPLACE('NEUBAKERS','B','CRA')
```

New craakers

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SQL Worksheet

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[Save](#)
[Run](#)

```
1 select substr('Cold Drink',2,7) from Items WHERE Price=8 ;
```

```
SUBSTR('COLDORINK',2,7)
```

old Dri

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SQL Worksheet

Clear
Find
Actions
Save
Run

```
1 select lpad(City,10,'*') lpd from Suppliers;
```

LPD
#####Dehi
#####Mumbai
#####Dehi
#####Bangalore
#####Jaipur
#####Kanpur
#####Tirupati
#####Chennai
#####Shila

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9 rows selected.

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SQL Worksheet

Clear
Find
Actions
Save
Run

```
1 select rpad(City,10,'*') lpd from Suppliers;
```

LPD
Dehi#####
Mumbai#####
Dehi#####
Bangalore#
Jaipur####
Kanpur####
Tirupati##
Chennai####
Shila#####

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9 rows selected.

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SQL Worksheet

Clear
Find
Actions
Save
Run

```
1 update Shipments set Qty=100 where ItemNo=11;
```

1 row(s) updated.

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Feedback
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SQL Worksheet

Clear
Find
Actions
Save
Run

```
1 select length(Itemname) from Items where ItemNo=11;
2 select Itemname from Items where ItemNo=11;
```

LENGTH(ITEMNAME)
4

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ITEMNAME
Milk

Download CSV

Live SQL

SQL Worksheet

```
1 select chr(Qty) from Shipments where ItemNo=11;
2 select Qty from Shipments where ItemNo=11;
```

CHR(QTY)

d
---

Download CSV

QTY

100
-----

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Live SQL

SQL Worksheet

```
1 select Suppname || ' is located in ' || City from Suppliers;
```

SUPPNAME||'ISLOCATEDIN'||CITY

Britannia is located in Delhi
New Bakers is located in Mumbai
Mother Dairy is located in Delhi
Cookz is located in Bangalore
Haldiram is located in Jaipur
Nestle is located in Kanpur
Cake wala is located in Tirupati
Bakers love is located in Chennai
Cooling shop is located in Shirdi

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9 rows selected.

### 3. Apply SQL queries to retrieve data by using all date functions.

Live SQL

SQL Worksheet

```
1 select sysdate from dual;
```

SYSDATE

14-OCT-21
-----------

Download CSV

Live SQL

SQL Worksheet

```
1 select manufactured, add_months(manufactured,4) from Shipments;
```

MANUFACTURED	ADD_MONTHS(MANUFACTURED,4)
20-JUL-20	20-NOV-20
21-OCT-19	21-FEB-20
19-NOV-19	19-MAR-20
15-DEC-20	15-APR-21
17-JAN-21	17-MAY-21
23-FEB-20	23-JUN-20
12-MAR-21	12-JUL-21
11-APR-20	11-AUG-20
29-AUG-21	29-DEC-21

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Live SQL

SQL Worksheet

```
1 select manufactured,sysdate,months_between(sysdate,manufactured) from Shipments;
```

MANUFACTURED	SYSDATE	MONTHS_BETWEEN(SYSDATE,MANUFACTURED)
20-JUL-20	14-OCT-21	14.83140643667861409796893667861409796894
21-OCT-19	14-OCT-21	23.79914837218248506571807216248506571807
19-NOV-19	14-OCT-21	22.863664501194743130227001194743130227
15-DEC-20	14-OCT-21	9.99269675925925925925925925925925926
17-JAN-21	14-OCT-21	8.92818063022700119474313022700119474313
23-FEB-20	14-OCT-21	19.73463224313022700119474313022700119474
12-MAR-21	14-OCT-21	7.88947895288764635683345288764635683345
11-APR-20	14-OCT-21	18.12172001732377538829151732377538829152
29-AUG-21	14-OCT-21	1.54188385683345288764635683345288764636

Download CSV

Live SQL

SQL Worksheet

```
1 select manufactured,round(manufactured,'yyyy') from Shipments WHERE ItemNo=41;
```

MANUFACTURED	ROUND(MANUFACTURED, 'YYYY')
29-AUG-21	01-JAN-22

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Live SQL

SQL Worksheet

```
1 select manufactured,trunc(manufactured,'yyyy') from Shipments WHERE ItemNo=41;
```

MANUFACTURED	TRUNC(MANUFACTURED, 'YYYY')
29-AUG-21	01-JAN-21

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Live SQL

SQL Worksheet

```
1 select manufactured,next_day(manufactured,'Sunday') from Shipments;
```

MANUFACTURED	NEXT_DAY(MANUFACTURED, 'SUNDAY')
20-JUL-20	26-JUL-20
21-OCT-19	27-OCT-19
19-NOV-19	24-NOV-19
15-DEC-20	20-DEC-20
17-JAN-21	24-JAN-21
23-FEB-20	01-MAR-20
12-MAR-21	14-MAR-21
11-APR-20	12-APR-20
29-AUG-21	05-SEP-21

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Built with ❤️ using Oracle APEX running on Oracle Cloud Infrastructure and Oracle Kubernetes Engine

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SQL Worksheet

```
1 select manufactured,last_day(manufactured) from Shipments;
```

MANUFACTURED	LAST_DAY(MANUFACTURED)
20-JUL-20	31-JUL-20
21-OCT-19	31-OCT-19
19-NOV-19	30-NOV-19
15-DEC-20	31-DEC-20
17-JAN-21	31-JAN-21
23-FEB-20	29-FEB-20
12-MAR-21	31-MAR-21
11-APR-20	30-APR-20
29-AUG-21	31-AUG-21

#### 4. Apply SQL queries to retrieve data by using all conversion functions.

Live SQL

SQL Worksheet

```
1 select to_char(manufactured,'dd "of" fmonth yyyy "is a good day") from Shipments;
```

TO_CHAR(MANUFACTURED,'DD"OF"FMONTHYYYY"IS A GOOD DAY")
20 of July 2020 is a good day
21 of October 2019 is a good day
19 of November 2019 is a good day
15 of December 2020 is a good day
17 of January 2021 is a good day
23 of February 2020 is a good day
12 of March 2021 is a good day
11 of April 2020 is a good day
29 of August 2021 is a good day

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Live SQL

SQL Worksheet

```
1 select to_date('January 20 1984','month-dd-yyyy') from dual;
```

TO_DATE('JANUARY201984','MONTH-DD-YYYY')
20-JAN-84

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Live SQL

SQL Worksheet

```
1 select Price,round(Price,2) from Items WHERE ItemId=27;
```

PRICE	ROUND(PRICE,2)
14.563	14.56

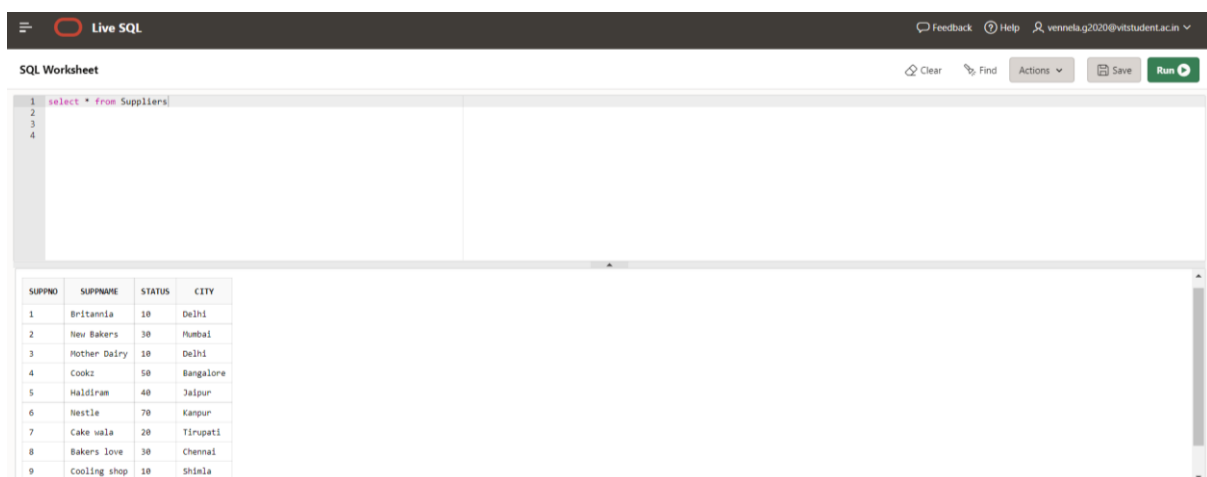
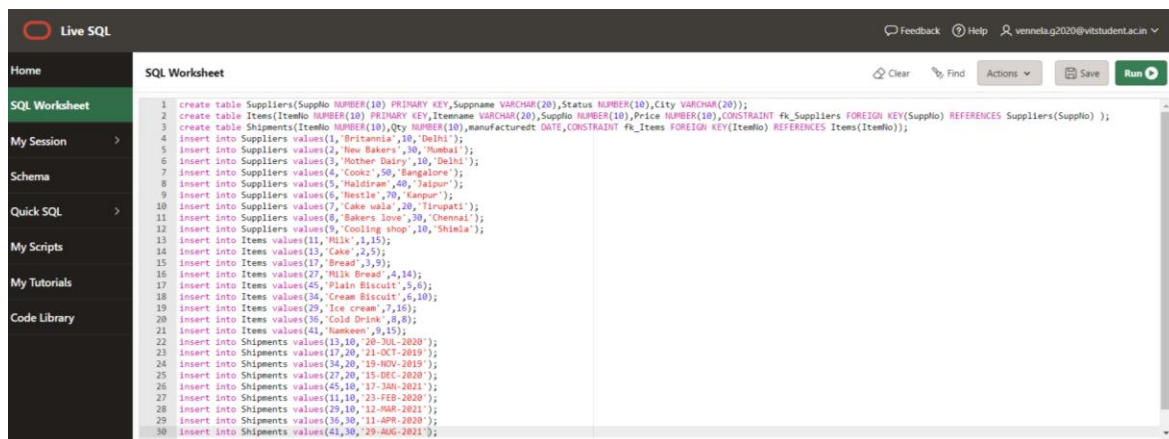
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## EXERCISE 4

**Aim:** To understand different operators and group functions in SQL

**Question:** Execute the following queries based on the schema specified in exercise 1



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SQL Worksheet

Clear Find Actions Save Run

```
1 select * from Items
2
3
4
```

ITEMNO	ITEMNAME	SUPPNO	PRICE
11	Milk	1	15
13	Cake	2	5
17	Bread	3	9
27	Milk Bread	4	14
45	Plain Biscuit	5	6
34	Cream Biscuit	6	10
29	Ice cream	7	16
36	Cold Drink	8	8
41	Namkeen	9	15

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SQL Worksheet

Clear Find Actions Save Run

```
1 select * from Shipments
2
```

ITEMNO	QTY	MANUFACTURED
13	10	20-JUL-20
17	20	21-OCT-19
34	20	19-NOV-19
27	20	15-DEC-20
45	10	17-JAN-21
11	10	23-FEB-20
29	10	12-MAR-21
36	30	11-APR-20
41	30	29-AUG-21

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**1. Apply SQL queries to retrieve data by using all arithmetic, logical, set and comparative operators**

## Arithmetic Operators

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SQL Worksheet

Clear Find Actions Save Run

```
1 select ItemNo,Qty,(ItemNo*Qty) from Shipments
```

ITEMNO	QTY	(ITEMNO*QTY)
13	10	23
17	20	37
34	20	54
27	20	47
45	10	55
11	10	21
29	10	39
36	30	66
41	30	71

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SQL Worksheet

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```
1 select ItemNo,Supplio,(ItemNo-Supplio),price from Items WHERE price=15
```

ITEMNO	SUPPNO	(ITEMNO-SUPPNO)	PRICE
11	1	10	15
41	9	32	15

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2 rows selected.

ITEMNO	SUPPNO	(ITEMNO-SUPPNO)	PRICE
11	1	10	15
41	9	32	15

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2 rows selected.

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### SQL Worksheet

Clear
Find
Actions
Save
Run

```
1 select SuppNo,Status,(SuppNo*Status) from Suppliers WHERE Status=10
```

SUPPNO	STATUS	(SUPPNO*STATUS)
1	10	10
3	10	30
9	10	90

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3 rows selected.

SUPPNO	STATUS	(SUPPNO*STATUS)
1	10	10
3	10	30
9	10	90

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### SQL Worksheet

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[Save](#)
[Run](#)

```
1 select * from Suppliers WHERE City='Delhi' or City='Jaipur'
```

SUPPNO	SUPPNAME	STATUS	CITY
1	Britannia	10	Delhi
3	Mother Dairy	10	Delhi
5	Maldiran	40	Jaipur

[Download CSV](#)

3 rows selected.

SUPPNO	SUPPNAME	STATUS	CITY
1	Britannia	10	Delhi
3	Mother Dairy	10	Delhi
5	Haldiram	40	Jaipur

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3 rows selected

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SQL Worksheet

Clear Find Actions Save Run

```
1 select Suppname from Suppliers WHERE City='Delhi' and Status=10
```

SUPPNAME
Britannia
Mother Dairy

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2 rows selected.

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SQL Worksheet

Clear Find Actions Save Run

```
1 select Suppname,City from Suppliers WHERE not City= 'Delhi'
```

SUPPNAME	CITY
New Bakers	Mumbai
Cookz	Bangalore
Haldiram	Jalpur
Nestle	Kanpur
Cake wala	Tirupati
Bakers love	Chennai
Cooling shop	Shimla

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7 rows selected.

## Set Operators

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SQL Worksheet

Clear Find Actions Save Run

```
1 SELECT Suppname FROM Suppliers WHERE Status=10 or Status=30 UNION SELECT Suppname FROM Suppliers WHERE City='Delhi' or City='Mumbai';
```

SUPPNAME
Bakers love
Britannia
Cooling shop
Mother Dairy
New Bakers

Download CSV  
5 rows selected.

Live SQL

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SQL Worksheet

Clear Find Actions Save Run

```
1 SELECT Suppname FROM Suppliers WHERE Status=10 or Status=30 UNION ALL SELECT Suppname FROM Suppliers WHERE City='Delhi' or City='Mumbai';
```

SUPPNAME
Britannia
New Bakers
Mother Dairy
Bakers love
Cooling shop
Britannia
New Bakers
Mother Dairy

Download CSV  
8 rows selected.



Live SQL

SQL Worksheet

```
1 SELECT Suppname FROM Suppliers WHERE Status=10 or Status=30 INTERSECT SELECT Suppname FROM Suppliers WHERE City='Delhi' or City='Mumbai';
```

SUPPNAME
Britannia
Mother Dairy
New Bakers

Download CSV  
3 rows selected.

Live SQL

SQL Worksheet

```
1 SELECT Suppname FROM Suppliers WHERE Status=10 or Status=30 MINUS SELECT Suppname FROM Suppliers WHERE City='Delhi' or City='Mumbai';
```

SUPPNAME
Bakers love
Cooling shop

Download CSV  
2 rows selected.

## Comparative Operators

Live SQL

SQL Worksheet

```
1 SELECT Suppname FROM Suppliers WHERE City='Tirupati';
```

SUPPNAME
Cake vala

Live SQL

SQL Worksheet

```
1 SELECT Suppname,City FROM Suppliers WHERE City!='Delhi';
```

SUPPNAME	CITY
New Bakers	Mumbai
Cookz	Bangalore
Haldiram	Jaipur
Nestle	Kanpur
Cake vala	Tirupati
Bakers love	Chennai
Cooling shop	Shimla

Download CSV  
7 rows selected.

Live SQL

SQL Worksheet

```
1 SELECT Itemname,Price from Items WHERE Price<10
```

ITEMNAME	PRICE
Cake	5
Bread	9
Plain Biscuit	6
Cold Drink	8

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Live SQL

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SQL Worksheet

Clear Find Actions Save Run

```
1 SELECT Itemname,Price from Items WHERE Price<=10
```

ITEMNAME	PRICE
Cake	5
Bread	9
Plain Biscuit	6
Cream Biscuit	10
Cold Drink	8

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5 rows selected.

Live SQL

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SQL Worksheet

Clear Find Actions Save Run

```
1 SELECT Itemname,Price from Items WHERE Price>10
```

ITEMNAME	PRICE
Milk	15
Milk Bread	14
Ice cream	16
Hankeen	15

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4 rows selected.

Live SQL

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SQL Worksheet

Clear Find Actions Save Run

```
1 SELECT Itemname,Price from Items WHERE Price>=10
```

ITEMNAME	PRICE
Milk	15
Milk Bread	14
Cream Biscuit	10
Ice cream	16
Hankeen	15

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5 rows selected.

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SQL Worksheet

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```
1 select ItemNo,Qty from Shipments where Qty between 20 and 30;
```

ITEMNO	QTY
17	20
34	20
27	20
36	30
41	30

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5 rows selected.

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SQL Worksheet

Clear Find Actions Save Run

```
1 select ItemNo,Qty from Shipments where Qty not between 20 and 30;
```

ITEMNO	QTY
13	10
45	10
11	10
29	10

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4 rows selected.

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2 rows selected.

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7 rows selected

Download CSV  
2 rows selected.

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## 2. Apply SQL queries to retrieve data by using all aggregate functions

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SQL Worksheet

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Find
Actions
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Run

```

1 select MIN(Qty) from Shipments;
2 select Qty from Shipments;

```

MIN(QTY)
10

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QTY
10
20
20
20
10
10
10
30
30

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0 rows selected.

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SQL Worksheet

Clear
Find
Actions
Save
Run

```

1 select MAX(Qty) from Shipments;
2 select Qty from Shipments;

```

MAX(QTY)
30

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QTY
10
20
20
20
10
10
10
30
30

Download CSV

9 rows selected.

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SQL Worksheet

Clear
Find
Actions
Save
Run

```

1 select SUM(Price) from Items;
2 select Price from Items;

```

SUM(PRICE)
98

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PRICE
15
5
9
14
6
10
16
8
15

Download CSV

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SQL Worksheet

Clear Find Actions Save Run

```
1 select COUNT(*) from Suppliers;
2 select * from Suppliers;
3
```

COUNT(\*)

9

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SUPPNO	SUPPNAME	STATUS	CITY
1	Britannia	10	Delhi
2	New Bakers	30	Mumbai
3	Mother Dairy	10	Delhi
4	Cooks	50	Bangalore
5	Haldiram	40	Jaipur
6	Nestle	70	Kanpur
7	Cake wala	20	Tirupati
8	Bakers love	30	Chennai
9	Cooling shop	10	Shimla

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SQL Worksheet

Clear Find Actions Save Run

```
1 select COUNT(City) from Suppliers;
2 select City from Suppliers;
3
```

COUNT(CITY)

9

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CITY

Delhi

Mumbai

Delhi

Bangalore

Jaipur

Kanpur

Tirupati

Chennai

Shimla

Download CSV

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SQL Worksheet

Clear Find Actions Save Run

```
1 select COUNT(DISTINCT City) from Suppliers;
2 select City from Suppliers;
3
```

COUNT (DISTINCTCITY)

8

Download CSV

CITY

Delhi

Mumbai

Delhi

Bangalore

Jaipur

Kanpur

Tirupati

Chennai

Shimla

Download CSV

0 rows collected

### 3. Apply SQL queries to retrieve data by using all aggregate functions and applying a condition over the aggregate function

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SQL Worksheet

```
1 select COUNT(DISTINCT City) from Suppliers WHERE City like 'DN';
2 select City from Suppliers ;
3
```

COUNT(DISTINCTCITY)

1

Download CSV

CITY
Delhi
Mumbai
Delhi
Bangalore
Jaipur
Kanpur
Tirupati
Chennai
Shila

Download CSV

Live SQL

SQL Worksheet

```
1 select COUNT(Qty) from Shipments WHERE ItemNo='41' or ItemNo='36';
2 select ItemNo,Qty from Shipments ;
3
```

COUNT(QTY)

2

Download CSV

ITEMNO	QTY
13	10
17	20
34	20
27	20
45	10
11	10
29	10
36	30
41	30

Download CSV

9 rows selected.

Live SQL

SQL Worksheet

```
1 select COUNT(*) from Items WHERE Price<=10;
2 select * from Items ;
3
```

COUNT(\*)

5

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ITEMNO	ITEMNAME	SUPNO	PRICE
11	Milk	1	15
13	Cake	2	5
17	Bread	3	9
27	Milk Bread	4	14
45	Plain Biscuit	5	6
34	Cream Biscuit	6	10
29	Ice cream	7	16
36	Cold Drink	8	8
41	Hamkeen	9	15

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SQL Worksheet

Clear
Find
Actions
Save
Run

```

1 select MAX(Price) from Items WHERE ItemId<15;
2 select ItemId,Price from Items ;
3

```

MAX(PRICE)

15

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ITEMID	PRICE
11	15
13	5
17	9
27	14
45	6
34	10
29	16
36	8
41	15

[Download CSV](#)

9 rows selected.

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SQL Worksheet

Clear
Find
Actions
Save
Run

```

1 select MIN(Price) from Items WHERE Itemname like 'M%' or Itemname like 'I%';
2 select Itemname,Price from Items ;
3

```

MIN(PRICE)

14

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ITEMNAME	PRICE
Milk	15
Cake	5
Bread	9
Milk Bread	14
Plain Biscuit	6
Cream Biscuit	10
Ice cream	16
Cold Drink	8
Hamkeen	15

[Download CSV](#)

9 rows selected.

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SQL Worksheet

Clear
Find
Actions
Save
Run

```

1 select AVG(Status) from Suppliers WHERE Suppname like 'B%' or Suppname like 'C%';
2 select Suppname,Status from Suppliers ;
3

```

AVG(STATUS)

24

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SUPPNAME	STATUS
Britannia	10
New Bakers	30
Mother Dairy	10
Cookz	50
Haldiram	40
Nestle	70
Cake wala	20
Bakers love	30
Cooling shop	10

[Download CSV](#)

9 rows selected.

20BDS0146

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SQL Worksheet

Clear Find Actions Save Run

```
1 select SUP(ItemNo) from Items WHERE Price>=7;
2 select ItemNo,Price from Items ;
3
```

SUP(ItemNo)
195

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ITEMNO	PRICE
11	15
13	5
17	9
27	14
45	6
34	10
29	16
36	8
41	15

Download CSV

9 rows selected.

SQL Worksheet

Clear Find Actions Save Run

```
1 select ItemNo,SUP(ItemNo+100) from Items WHERE Price>=7 GROUP BY ItemNo;
2
3
```

ITEMNO	SUP(ItemNo+100)
11	111
17	117
27	127
34	134
29	129
36	136
41	141

Download CSV

7 rows selected.