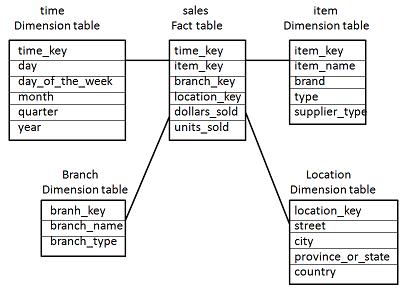
**Analytical Functions Practical**

Data model:



create table time (time\_key number(4) primary key , day number(2),

day\_of\_week number(2), month char(3),

quarter varchar2(2), year number(4));

create table item(item\_key varchar2(4) primary key, item\_name varchar2(15), brand varchar2(15), type varchar2(15),

supplier\_type varchar2(15));

create table branch(branch\_key varchar2(4) primary key, branch\_name varchar2(15), branch\_type varchar2(10));

create table location(location\_key number(4) primary key, street varchar2(15), city varchar2(15), province\_or\_state varchar2(15), country varchar2(15));

create table sales(time\_key number(4) references time(time\_key) ,

item\_key varchar2(4) references item(item\_key),

branch\_key varchar2(4) references branch(branch\_key),

location\_key number(4) references location(location\_key),

dollars\_sold number(6), units\_sold number(4) );

insert into time values(1,1,1,'MAR','Q1',2014);

insert into time values(2,2,1,'FEB','Q1',2014);

insert into time values(3,3,1,'MAR','Q1',2014);

insert into time values(4,4,1,'APR','Q2',2014);

insert into time values(5,1,1,'MAY','Q2',2014);

insert into time values(6,4,1,'NOV','Q4',2014);

insert into time values(7,1,1,'JUL','Q3',2014);

insert into time values(8,2,2,'APR','Q2',2013);

insert into time values(9,6,3,'MAY','Q2',2013);

insert into time values(10,1,2,'NOV','Q4',2013);

insert into time values(11,15,3,'JUL','Q3',2013);

SELECT \* FROM TIME;

INSERT INTO ITEM VALUES('I001','SOAP','GODREJ','C','REGULAR');

INSERT INTO ITEM VALUES('I002','BABY OIL','GODREJ','C','REGULAR');

INSERT INTO ITEM VALUES('I003','LIQUID SOAP','PnG','S','ADHOC');

INSERT INTO ITEM VALUES('I004','SHAMPOO','HL','C','REGULAR');

INSERT INTO ITEM VALUES('I005','BABY OIL','PnG','S','ADHOC');

INSERT INTO ITEM VALUES('I006','PERFUME','HL','C','REGULAR');

INSERT INTO ITEM VALUES('I007','SOAP','PnG','S','REGULAR');

SELECT \* FROM ITEM;

insert into branch values('B001','SOUTH MUMBAI','MAIN');

insert into branch values('B002','NORTH MUMBAI','NRI');

insert into branch values('B003','CENTRAL MUMBAI','MAIN');

insert into branch values('B004','CITY','MAIN');

insert into branch values('B005','CENTRAL MUMBAI','NRI');

SELECT \* FROM BRANCH;

INSERT INTO LOCATION VALUES(1001,'MG ROAD','MUMBAI','MH','INDIA');

INSERT INTO LOCATION VALUES(1002,'JM ROAD','PUNE','MH','INDIA');

INSERT INTO LOCATION VALUES(1003,'DF ROAD','NASIK','MH','INDIA');

INSERT INTO LOCATION VALUES(1004,'KARVE ROAD','PUNE','MH','INDIA');

INSERT INTO LOCATION VALUES(1005,'MJ STREET','NEW YORK','NY','USA');

SELECT \* FROM LOCATION;

INSERT INTO SALES VALUES(1,'I001','B001',1001,100000,300);

INSERT INTO SALES VALUES(1,'I002','B004',1003,25000,500);

INSERT INTO SALES VALUES(2,'I001','B001',1004,150000,600);

INSERT INTO SALES VALUES(2,'I002','B003',1001,122000,250);

INSERT INTO SALES VALUES(3,'I001','B004',1005,150000,450);

INSERT INTO SALES VALUES(3,'I003','B001',1001,99000,1000);

INSERT INTO SALES VALUES(3,'I001','B001',1003,65000,200);

INSERT INTO SALES VALUES(3,'I001','B004',1001,10000,700);

INSERT INTO SALES VALUES(1,'I003','B003',1002,24000,550);

INSERT INTO SALES VALUES(2,'I001','B001',1001,100000,300);

INSERT INTO SALES VALUES(2,'I001','B002',1002,55000,200);

INSERT INTO SALES VALUES(1,'I004','B003',1005,46000,150);

INSERT INTO SALES VALUES(5,'I004','B005',1001,80000,900);

INSERT INTO SALES VALUES(6,'I003','B002',1002,55500,250);

INSERT INTO SALES VALUES(6,'I001','B001',1005,90000,100);

INSERT INTO SALES VALUES(8,'I003','B002',1002,75000,150);

INSERT INTO SALES VALUES(4,'I001','B002',1002,80000,100);

INSERT INTO SALES VALUES(7,'I003','B002',1003,55500,120);

INSERT INTO SALES VALUES(7,'I002','B001',1005,90000,160);

INSERT INTO SALES VALUES(8,'I003','B002',1002,75000,650);

SELECT \* FROM SALES;