REALATIONAL

DATABASE

MANAGEMNET

SYSTEM PROJECT

[Pantaloons Store management system]

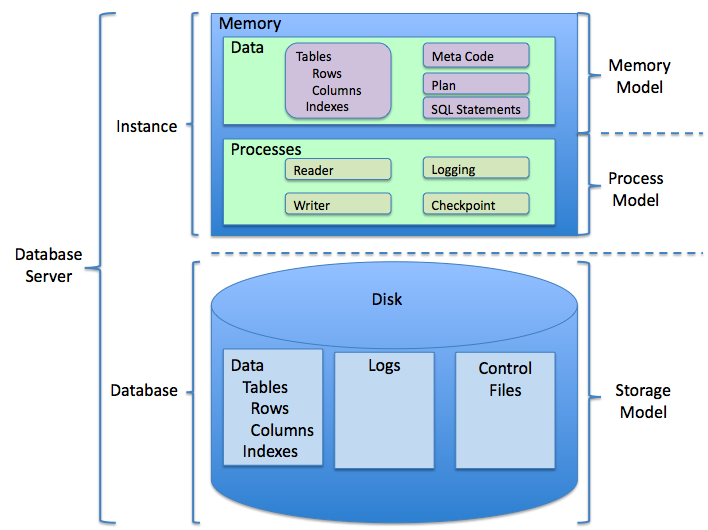
ENROLLMENT NO: 1706027

SHWETA GABHANE

MARCH, 2019

Pantaloons Store Management System Project Report

A relational database management system(RDBMS) is a database management system based on the relational model invented by E.F.Codd . Most of the databases in widespread used today are based on his relational database model.



RDBMS have been a common choice for the storage of information in databases used for financial record, manufacturing and logistical information personal data and other application. Relational Databases have often replaced legacy hierarchical databases and network databases because they were easier to implement.

Functional Dependency

Functional Dependency is a set of constraints between two attributes in a relation. It says that if two tuples have same values for attributes A1,A2,..An, then same values for attributes B1,B2,..Bn. Functional Dependency by an arrow sign ( -> ) that X -> Y, where X functionally determines Y . The left hand side attributes determine the value of attributes on the right hand side.

Normalization

If a database design is not perfect it may contain anomalies , which are like a bad dream for any database administrator . Managing a database with anomalies is next to impossible.

* Update Anomalies
* Deletion Anomalies
* Insert Anomalies

Normalization is a method to remove all these anomalies and bring the database to a consistent state.

* First Normal Form

First normal form is defined in the defined in the definition of relations (tables) itself. This rule defines that all the attributes in a relation must have atomic values/domains .

* Second Normal Form

If we follow second normal form,then every non-prime attribute should be fully functional dependent on prime key attribute i.e. if X->A holds, then there should be not be any proper subset Y or X for which Y->A also holds true.

Entity Relationship Diagram for Pantaloons Clothing System

Create Table Women

create table women(women\_id int not null,men\_brand varchar(255),primary key(women\_id));



Inserting Values in Table Women

insert into women values(1011,'Vero Moda');

insert into women values(1012,'Vero Moda');

insert into women values(1013,'Vero Moda');

insert into women values(1021,'Ginger');

insert into women values(1022,'Ginger');

insert into women values(1023,'Ginger');

insert into women values(1031,'Zara');

insert into women values(1032,'Zara');

insert into women values(1033,'Zara');

insert into women values(1041,'Max');

insert into women values(1042,'Max');

insert into women values(1043,'Max');

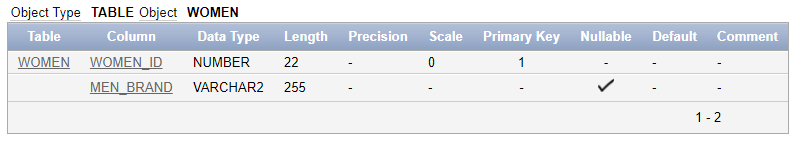
insert into women values(1051,'Agibe');

insert into women values(1052,'Agibe');

insert into women values(1053,'Agibe');

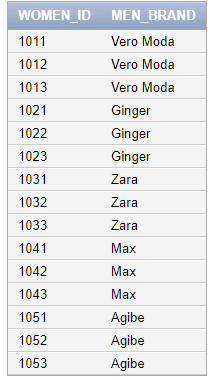
Describe Table Women

desc women;



Display Table Women

select \*from women;



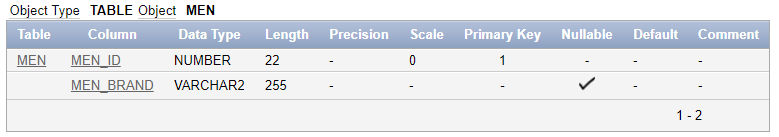
Create Table Men

create table men(men\_id int not null,men\_brand varchar(255),primary key(men\_id));



Describe Table Men

desc men;



Inserting Values in Table Men

insert into men values(101,'Allen Solly');

insert into men values(102,'Allen Solly');

insert into men values(103,'Allen Solly');

insert into men values(201,'Louis Phillipe');

insert into men values(202,'Louis Phillipe');

insert into men values(203,'Louis Phillipe');

insert into men values(301,'Lee Cooper');

insert into men values(302,'Lee Cooper');

insert into men values(303,'Lee Cooper');

insert into men values(401,'Puma');

insert into men values(402,'Puma');

insert into men values(403,'Puma');

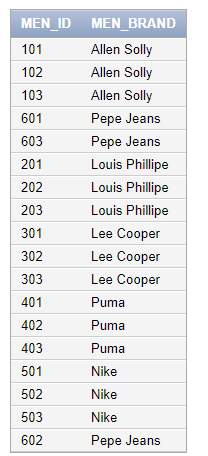
insert into men values(501,'Nike');

insert into men values(502,'Nike');

insert into men values(503,'Nike');

Display Table Men

select \*from men;



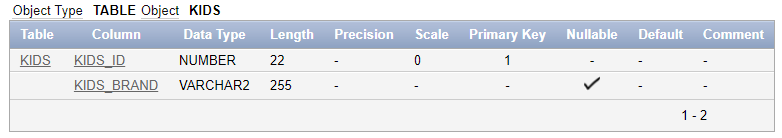
Create Table Kids

create table kids(kids\_id int not null,kids\_brand varchar(255),primary key(kids\_id));



Describe Table Kids

Desc kids;



Inserting Values in Table Kids

insert into kids values(601,'Disney');

insert into kids values(602,'Disney');

insert into kids values(603,'Disney');

insert into kids values(701,'Gini and Jony');

insert into kids values(102,'Gini and Jony');

insert into kids values(703,'Gini and Jony');

insert into kids values(801,'Cartoon network');

insert into kids values(802,'Cartoon network');

insert into kids values(803,'Cartoon network');

insert into kids values(901,'Angry Birds');

insert into kids values(902,'Angry Birds');

insert into kids values(903,'Angry Birds');

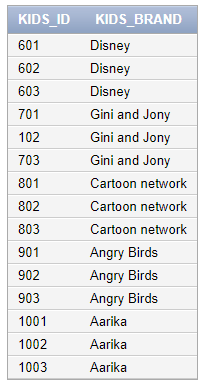
insert into kids values(1001,'Aarika');

insert into kids values(1002,'Aarika');

insert into kids values(1003,'Aarika');

Display Table Kids

Select \*from kids;



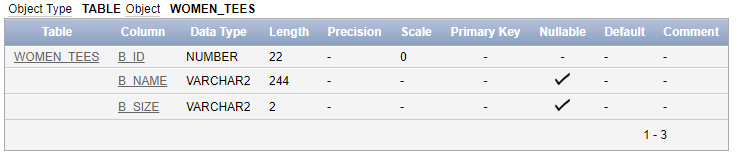
Create Table Women\_Tees

create table women\_tees(b\_id int not null,b\_name varchar(244),b\_size varchar(2),foreign key(b\_id) references women(women\_id));



Describe Table Women\_Tees

Desc women\_tees;



Inserting Values in Table Women\_Tees

insert into women\_tees values(1011,'Vero Moda','S');

insert into women\_tees values(1011,'Vero Moda','M');

insert into women\_tees values(1011,'Vero Moda','L');

insert into women\_tees values(1021,'Ginger','S');

insert into women\_tees values(1021,'Ginger','M');

insert into women\_tees values(1021,'Ginger','L');

insert into women\_tees values(1031,'Zara','S');

insert into women\_tees values(1031,'Zara','M');

insert into women\_tees values(1031,'Zara','L');

insert into women\_tees values(1041,'Max','S');

insert into women\_tees values(1041,'Max','M');

insert into women\_tees values(1041,'Max','L');

insert into women\_tees values(1051,'Agibe','S');

insert into women\_tees values(1051,'Agibe','M');

insert into women\_tees values(1051,'Agibe','L');

Display Table Women\_Tees

select \*from women\_tees;



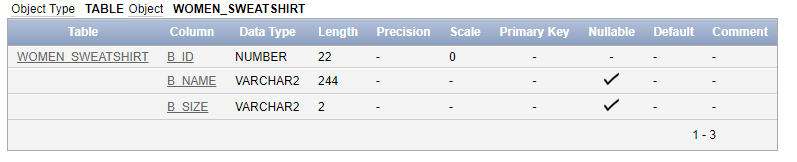
Create Table Women\_Sweatshirts

create table women\_sweatshirt(b\_id int not null,b\_name varchar(244),b\_size varchar(2),foreign key(b\_id) references women(women\_id));



Describe Table Women\_Sweatshirts

Desc women\_sweatshirts;



Inserting Values in Table Women\_Sweatshirt

insert into women\_sweatshirt values(1012,'Vero Moda','S');

insert into women\_sweatshirt values(1012,'Vero Moda','M');

insert into women\_sweatshirt values(1012,'Vero Moda','L');

insert into women\_sweatshirt values(1022,'Ginger','S');

insert into women\_sweatshirt values(1022,'Ginger','M');

insert into women\_sweatshirt values(1022,'Ginger','L');

insert into women\_sweatshirt values(1032,'Zara','S');

insert into women\_sweatshirt values(1032,'Zara','M');

insert into women\_sweatshirt values(1032,'Zara','L');

insert into women\_sweatshirt values(1042,'Max','S');

insert into women\_sweatshirt values(1042,'Max','M');

insert into women\_sweatshirt values(1042,'Max','L');

insert into women\_sweatshirt values(1052,'Agibe','S');

insert into women\_sweatshirt values(1052,'Agibe','M');

insert into women\_sweatshirt values(1052,'Agibe','L');

Display Table Women\_Sweatshirt

select \*from women\_sweatshirt;



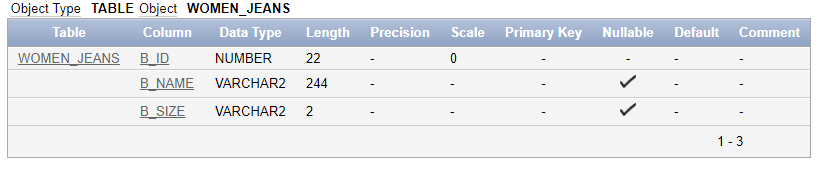
Create Table Women\_Jeans

create table women\_jeans(b\_id int not null,b\_name varchar(244),b\_size varchar(2),foreign key(b\_id) references women(women\_id));



Describe Table Women\_Jeans

Desc women\_jeans;



Inserting Values in Table Women\_Jeans

insert into women\_jeans values(1013,'Vero Moda','S');

insert into women\_jeans values(1013,'Vero Moda','M');

insert into women\_jeans values(1013,'Vero Moda','L');

insert into women\_jeans values(1023,'Ginger','S');

insert into women\_jeans values(1023,'Ginger','M');

insert into women\_jeans values(1023,'Ginger','L');

insert into women\_jeans values(1033,'Zara','S');

insert into women\_jeans values(1033,'Zara','M');

insert into women\_jeans values(1033,'Zara','L');

insert into women\_jeans values(1043,'Max','S');

insert into women\_jeans values(1043,'Max','M');

insert into women\_jeans values(1043,'Max','L');

insert into women\_jeans values(1053,'Agibe','S');

insert into women\_jeans values(1053,'Agibe','M');

insert into women\_jeans values(1053,'Agibe','L');

Display Table Women\_Jeans

select \*from women\_jeans;



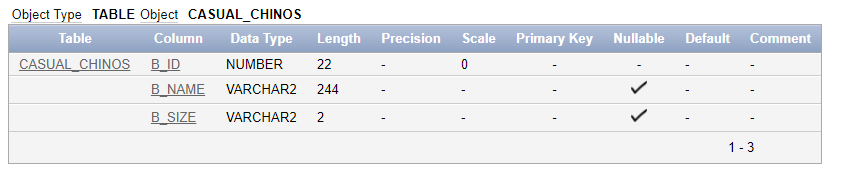
Create Table Men\_Chinos

create table casual\_chinos(b\_id int not null,b\_name varchar(244),b\_size varchar(2),foreign key(b\_id) references men(men\_id));



Describe Table Men\_Chinos

Desc casual\_chinos;



Inserting Values in Table Men\_Chinos

insert into casual\_chinos values(103,'Allen Solly','S');

insert into casual\_chinos values(103,'Allen Solly','M');

insert into casual\_chinos values(103,'Allen Solly','L');

insert into casual\_chinos values(203,'Louis Phillipe','S');

insert into casual\_chinos values(203,'Louis Phillipe','M');

insert into casual\_chinos values(203,'Louis Phillipe','L');

insert into casual\_chinos values(303,'Lee Cooper','S');

insert into casual\_chinos values(303,'Lee Cooper','M');

insert into casual\_chinos values(303,'Lee Cooper','L');

insert into casual\_chinos values(403,'Nike','S');

insert into casual\_chinos values(403,'Nike','L');

insert into casual\_chinos values(403,'Nike','M');

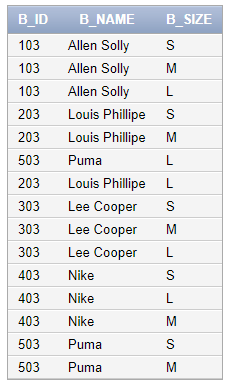
insert into casual\_chinos values(503,'Puma','S');

insert into casual\_chinos values(503,'Puma','M');

insert into casual\_chinos values(503,'Puma','L');

Display Table Men\_Chinos

select \*from casual\_chinos;



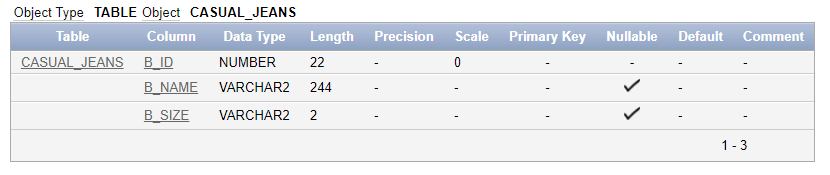
Create Table Men\_Jeans

create table casual\_jeans(b\_id int not null,b\_name varchar(244),b\_size varchar(2),foreign key(b\_id) references men(men\_id));



Describe Table Men\_Jeans

Desc casual\_jeans;



Inserting Values in Table Men\_Jeans

insert into casual\_jeans values(101,'Allen Solly','S');

insert into casual\_jeans values(101,'Allen Solly','M');

insert into casual\_jeans values(101,'Allen Solly','L');

insert into casual\_jeans values(201,'Louis Phillipe','S');

insert into casual\_jeans values(201,'Louis Phillipe','M');

insert into casual\_jeans values(201,'Louis Phillipe','L');

insert into casual\_jeans values(301,'Lee Cooper','S');

insert into casual\_jeans values(301,'Lee Cooper','M');

insert into casual\_jeans values(301,'Lee Cooper','L');

insert into casual\_jeans values(401,'Nike','S');

insert into casual\_jeans values(401,'Nike','L');

insert into casual\_jeans values(401,'Nike','M');

insert into casual\_jeans values(501,'Puma','S');

insert into casual\_jeans values(501,'Puma','M');

insert into casual\_jeans values(501,'Puma','L');

Display Table Men\_Jeans

select \*from casual\_jeans;



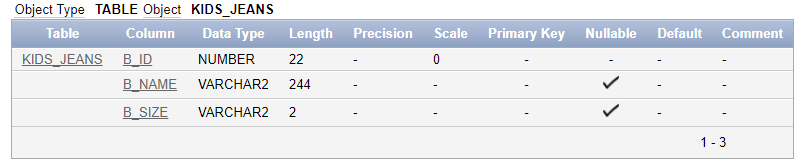
Create Table Kids\_Jeans

create table kids\_jeans(b\_id int not null,b\_name varchar(244),b\_size varchar(2),foreign key(b\_id) references kids(kids\_id));



Describe Table Kids\_Jeans

Desc kids\_jeans;



Inserting Values in Table Kids\_Jeans

insert into kids\_jeans values(601,'Disney','S');

insert into kids\_jeans values(601,'Disney','M');

insert into kids\_jeans values(601,'Disney','L');

insert into kids\_jeans values(701,'Gini and Jony','S');

insert into kids\_jeans values(701,'Gini and Jony','M');

insert into kids\_jeans values(701,'Gini and Jony','L');

insert into kids\_jeans values(801,'Cartoon Network','S');

insert into kids\_jeans values(801,'Cartoon Network','M');

insert into kids\_jeans values(801,'Cartoon Network','L');

insert into kids\_jeans values(901,'Angry Birds','S');

insert into kids\_jeans values(901,'Angry Birds','M');

insert into kids\_jeans values(901,'Angry Birds','L');

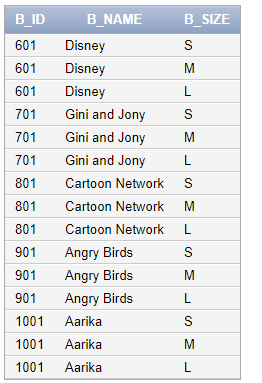
insert into kids\_jeans values(1001,'Aarika','S');

insert into kids\_jeans values(1001,'Aarika','M');

insert into kids\_jeans values(1001,'Aarika','L');

Display Table Kids\_Jeans

select \*from kids\_jeans;



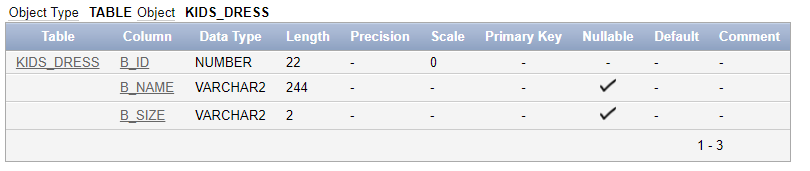
Create Table Kids\_Dress

create table kids\_dress(b\_id int not null,b\_name varchar(244),b\_size varchar(2),foreign key(b\_id) references kids(kids\_id));



Describe Table Kids\_Dress

Desc kids\_dress;



Inserting Values in Table Kids\_Dress

insert into kids\_dress values(602,'Disney','S');

insert into kids\_dress values(602,'Disney','M');

insert into kids\_dress values(602,'Disney','L');

insert into kids\_dress values(102,'Gini and Jony','S');

insert into kids\_dress values(102,'Gini and Jony','M');

insert into kids\_dress values(102,'Gini and Jony','L');

insert into kids\_dress values(802,'Cartoon Network','S');

insert into kids\_dress values(802,'Cartoon Network','M');

insert into kids\_dress values(802,'Cartoon Network','L');

insert into kids\_dress values(902,'Angry Birds','S');

insert into kids\_dress values(902,'Angry Birds','M');

insert into kids\_dress values(902,'Angry Birds','L');

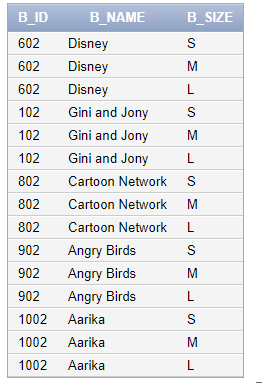
insert into kids\_dress values(1002,'Aarika','S');

insert into kids\_dress values(1002,'Aarika','M');

insert into kids\_dress values(1002,'Aarika','L');

Display Table Kids\_Dress

select \*from kids\_Dress;



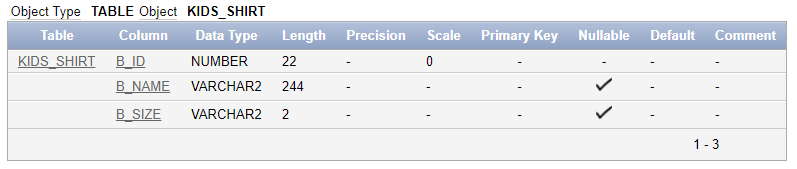
Create Table Kids\_Shirt

create table kids\_shirt(b\_id int not null,b\_name varchar(244),b\_size varchar(2),foreign key(b\_id) references kids(kids\_id));



Describe Table Kids\_Shirt

Desc kids\_shirt;



Inserting Values in Table Kids\_Shirt

insert into kids\_shirt values(602,'Disney','S');

insert into kids\_shirt values(602,'Disney','M');

insert into kids\_shirt values(602,'Disney','L');

insert into kids\_shirt values(102,'Gini and Jony','S');

insert into kids\_shirt values(102,'Gini and Jony','M');

insert into kids\_shirt values(102,'Gini and Jony','L');

insert into kids\_shirt values(802,'Cartoon Network','S');

insert into kids\_shirt values(802,'Cartoon Network','M');

insert into kids\_shirt values(802,'Cartoon Network','L');

insert into kids\_shirt values(902,'Angry Birds','S');

insert into kids\_shirt values(902,'Angry Birds','M');

insert into kids\_shirt values(902,'Angry Birds','L');

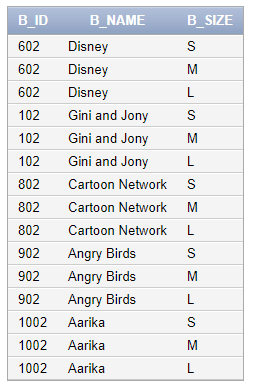
insert into kids\_shirt values(1002,'Aarika','S');

insert into kids\_shirt values(1002,'Aarika','M');

insert into kids\_shirt values(1002,'Aarika','L');

Display Table Kids\_Shirt

select \*from kids\_shirt;



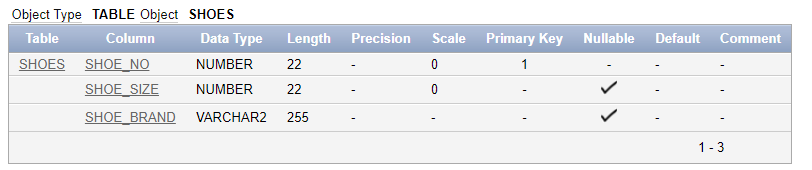
Create Table Shoes

create table shoes(shoe\_no int not null,shoe\_size int,shoe\_brand varchar(255),primary key(shoe\_no));



Describe Table Shoes

Desc shoes;



Inserting values in Shoes

insert into shoes values(1024,38,'Nike');

insert into shoes values(1025,39,'Nike');

insert into shoes values(1026,40,'Nike');

insert into shoes values(1027,41,'Nike');

insert into shoes values(1028,38,'Reebok');

insert into shoes values(1029,39,'Reebok');

insert into shoes values(1030,40,'Reebok');

insert into shoes values(1031,41,'Reebok');

insert into shoes values(1018,38,'Bata');

insert into shoes values(1019,39,'Bata');

insert into shoes values(1020,40,'Bata');

insert into shoes values(1021,41,'Bata');

insert into shoes values(128,38,'Metro');

insert into shoes values(129,39,'Metro');

insert into shoes values(130,40,'Metro');

insert into shoes values(131,41,'Metro');

insert into shoes values(1281,38,'Honey');

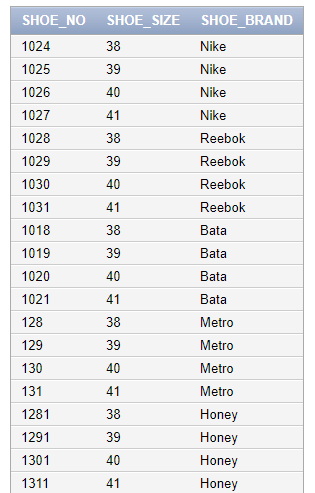
insert into shoes values(1291,39,'Honey');

insert into shoes values(1301,40,'Honey');

insert into shoes values(1311,41,'Honey');

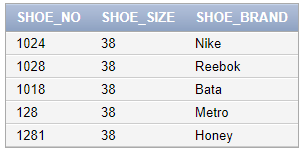
Display Table Shoes

select \*from shoes;

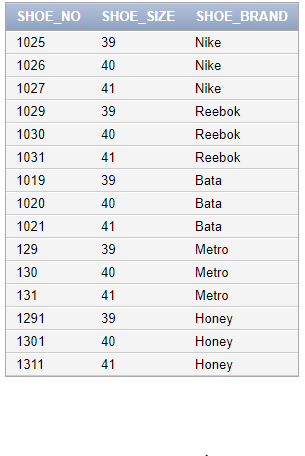


Arithmetic Operators

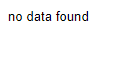
select \*from shoes where shoe\_size=38;



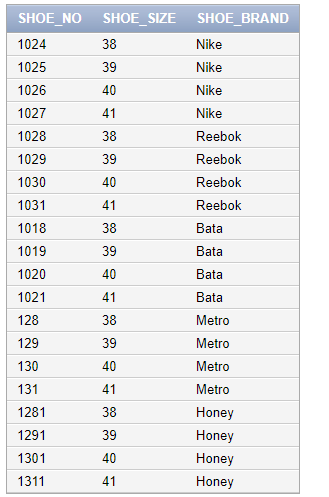
select \*from shoes where shoe\_size>38;



select \*from shoes where shoe\_size<38;



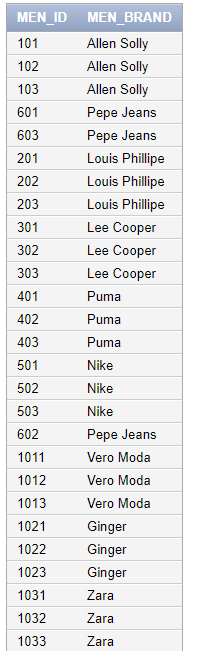
select \*from shoes where shoe\_size>=38;



Set Operator

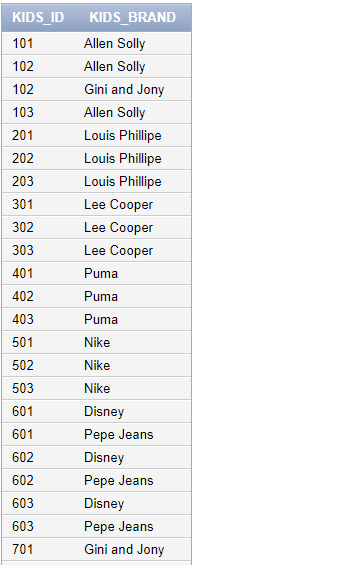
* Union All

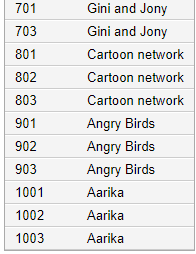
select \*from men union all select \*from women;



* Union

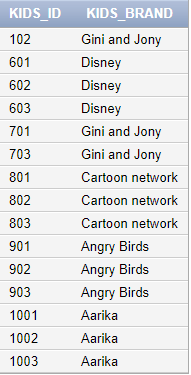
select \*from kids union select \*from men;





* Minus

select \*from kids minus select \*from men;



JOINS

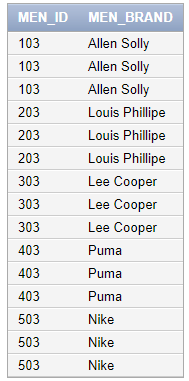
* Inner Join

select men\_id,men\_brand

from men

inner join casual\_chinos

on men.men\_id=casual\_chinos.b\_id;



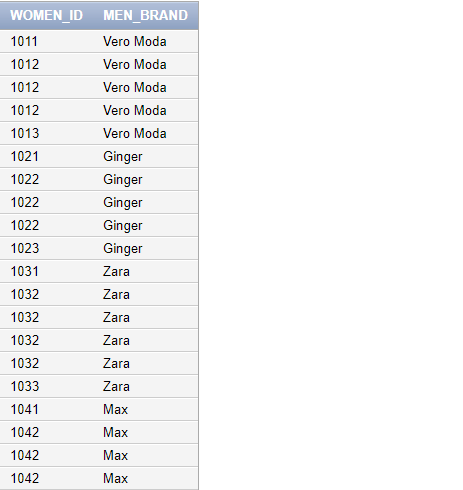
* Left Join

select women\_id,men\_brand

from women

left join women\_sweatshirt

on women.women\_id=women\_sweatshirt.b\_id;



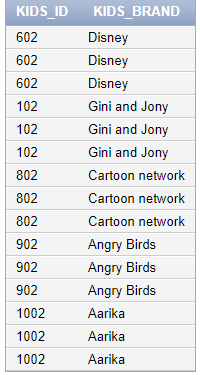
* Right Join

select kids\_id,kids\_brand

from kids

right join kids\_dress

on kids.kids\_id=kids\_dress.b\_id;



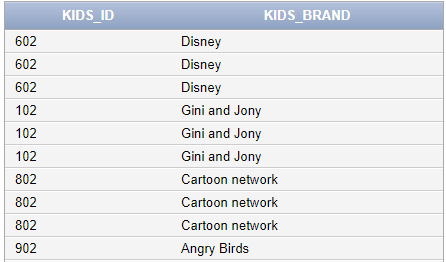
* Full Join

select kids\_id,kids\_brand

from kids

full join kids\_dress

on kids.kids\_id=kids\_dress.b\_id;



Clauses

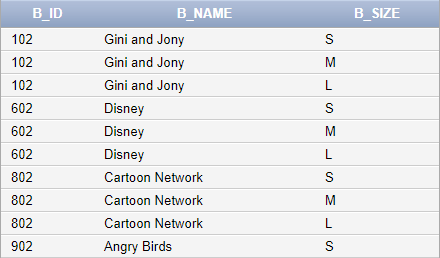
* Order by Clause

select \*from kids order by kids\_id,kids\_brand;



* Order by Clause (In Descending Order)

select \*from kids\_dress order by b\_name DESC;

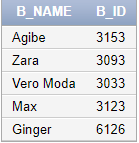


* Group by Clause

select b\_name,sum(b\_id) as b\_id

from women\_tees

group by b\_name;



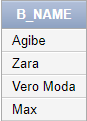
* Having Clause

select b\_name

from women\_tees

group by b\_name

having count(b\_id)=3;



VIEWS

* Create View

create view men\_v as

select men\_id,men\_brand

from men;

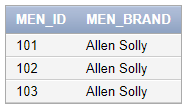


* Display View

select men\_id,men\_brand

from men\_v

where men\_brand='Allen Solly';



* Deleting Rows into a View

delete from men\_v where men\_id=104;

delete from men\_v where men\_id=105;



* Drop View

drop view men\_v;



SEQUENCE

* Create Sequence

create sequence s2

start with 801

increment by 1

maxvalue 803;



* Inserting Values Using Sequence

insert into men values(s2.nextval,'Raymond');



insert into men values(s2.nextval,'Raymond');



insert into men values(s2.nextval,'Raymond');



* Drop Sequence

drop sequence s2;



INDEXES

* Create Index

create index w\_index on women(men\_brand);



* Drop Index

drop index w\_index;

