CSE 601 PROJECT 1: DATA WAREHOUSE/OLAP SYSTEM

**Create Table/ Index Script**

**Create Star Schema as given to us**

create table assay(

as\_id number,

name varchar(12),

type varchar(15),

setting varchar(30),

description varchar(50),

  primary key(as\_id)

);

select \* from assay;

create table clinical\_fact(

p\_id number,

ds\_id number(12),

sympton varchar(50),

ds\_from\_date date,

ds\_to\_date date,

dr\_id number,

dosage number,

dr\_from\_date date,

dr\_to\_date date,

tt\_id number,

result varchar(20),

tt\_date date,

s\_id number

);

select \* from CLINICAL\_FACT;

create table cluster\_tbl(

cl\_id number,

num number(12),

pattern varchar(25),

tool varchar(15),

tSetting varchar(20),

description varchar(15)

);

select \* from cluster\_tbl;

create table disease (

ds\_id number,

name varchar (20),

type varchar(30),

description varchar(50),

 primary key (ds\_id)

);

select \* from disease;

create table domain (

dm\_id number,

type varchar(30),

db varchar(20),

accession varchar(10),

title varchar(15),

length number,

description varchar(50),

 primary key (dm\_id)

);

select \* from domain;

create table drug (

dr\_id number,

name varchar(20),

type varchar (30),

description varchar (50),

 primary key (dr\_id)

);

select \* from DRUG;

create table experiment (

e\_id number,

name varchar(20),

type varchar(30)

);

Select \* from experiment;

create table experiment\_fact(

e\_id number,

nm\_id number,

pj\_id number,

pn\_id number,

pf\_id number,

pt\_id number,

pu\_id number

);

select \* from experiment\_fact;

create table gene (

UID1 number,

seqType varchar(30),

accession varchar(10),

version number,

seqDataset varchar(10),

sepciesID number,

status char,

 primary key (UID1)

);

select \* from gene;

create table gene\_fact (

UID1 number,

go\_id number,

cl\_id number,

dm\_id number,

pm\_id number,

UID2 number

);

select \* from gene\_fact;

create table go (

go\_id number,

accession varchar(15),

type varchar(20),

name varchar(10),

definition varchar(25),

Primary key (go\_id)

);

select \* from go;

create table marker (

mk\_id number,

name varchar(10),

type varchar(20),

locus varchar(25),

description varchar(25),

Primary key(mk\_id)

);

select \* from marker;

create table measure\_unit (

mu\_id number,

name varchar(5),

type varchar(20),

description varchar(20),

 primary key(mu\_id)

);

select \* from MEASURE\_UNIT;

create table microarray\_fact(

s\_id number,

e\_id number,

pb\_id number,

mu\_id number,

exp number

);

select \* from MICROARRAY\_FACT;

create table norm(

nm\_id number,

type varchar(15),

software varchar(15),

parameters varchar(40),

description varchar(30)

);

select \* from norm;

create table patient(

p\_id number,

ssn varchar(12),

name varchar(25),

gender varchar(7),

DOB date,

 primary key(p\_id)

);

select \* from patient;

create table person(

pn\_id number,

name varchar(25),

labName varchar(7),

contact varchar(30)

);

select \* from person;

create table platform(

pf\_id number,

hardware varchar(12),

software varchar(12),

settings varchar(30),

description varchar(30)

);

select \* from platform;

create table probe (

pb\_id number,

UID1 number,

name varchar(15),

description varchar(50),

isQC varchar(5),

 primary key (pb\_id)

);

Select \* from probe;

create table project(

pj\_id number,

name varchar(12),

investigator varchar(12),

description varchar(30),

 primary key(pj\_id)

);

select \* from project;

create table promoter(

pm\_id number,

type varchar(20),

sequence varchar(60),

length number,

description varchar(50),

 primary key(pm\_id)

);

select \* from promoter;

create table protocal(

pt\_id number,

name varchar(15),

text varchar(75),

createdBy varchar(20)

);

select \* from protocal;

create table publication(

pu\_id number,

pub\_med\_id number,

title varchar(30),

authors varchar(70),

abstract varchar(25),

pubDate date

);

select \* from PUBLICATION;

create table SAMPLE(

s\_id number,

source varchar(10),

amount number,

sp\_date date,

 primary key(s\_id)

);

select \* from sample;

create table sample\_fact (

s\_id number,

mk\_id number,

mk\_result varchar (30),

mk\_date date,

as\_id number,

as\_result varchar (30),

as\_date date,

tm\_id number,

tm\_description varchar (50)

);

select \* from sample\_fact;

create table term (

tm\_id number,

name varchar(15),

type varchar (30),

setting varchar (50),

 primary key (tm\_id)

);

select \* from term;

create table test (

tt\_id number,

name varchar(15),

type varchar(30),

setting varchar (50),

 primary key (tt\_id)

);

select \* from test;

create table test\_sample(

UID1 number,

test1 number,

test2 number,

test3 number,

test4 number,

test5 number

);

select \* from TEST\_SAMPLE;

**Create BioStar Schema from given Star Schema**

create table diagnosis(

p\_id number,

ds\_id number,

sympton varchar(50),

ds\_from\_date date,

ds\_to\_date date

);

create table drug\_use(

p\_id number,

dr\_id number,

dosage number,

dr\_from\_date date,

dr\_to\_date date

);

create table test\_result(

p\_id number,

tt\_id number,

result varchar(20),

tt\_date date

);

create table microarray\_sample(

p\_id number,

s\_id number

);

Insert into diagnosis

select p\_id, ds\_id, sympton, ds\_from\_date, ds\_to\_date

from clinical\_fact

where ds\_id is not null;

Select \* from diagnosis;

insert into drug\_use

select p\_id,dr\_id,dosage,dr\_from\_date,dr\_to\_date

from clinical\_fact

where dr\_id is not null;

select \* from drug\_use;

insert into test\_result

select p\_id,tt\_id,result,tt\_date

from clinical\_fact

where tt\_id is not null;

select \* from test\_result;

insert into microarray\_sample

select p\_id,s\_id

from clinical\_fact

where s\_id is not null;

select \* from microarray\_sample;

drop table clinical\_fact;

**Create Indexes**

create index go\_id on gene\_fact(go\_id);

create index cl\_id on gene\_fact(cl\_id);

create index mu\_id on microarray\_fact(mu\_id);