CIS 251 Final Exam

Student Name **Bruce Norman**
I am using __X__ **MySQL** ____ SQL Server 2008

This is your part 1 of final examination for CIS 251 - Introduction to SQL. This week you will be creating a database using SQL statements you have learned during the last few weeks. Part 2, next week, you will be running queries against this database.   I should be able to cut and paste your statements into your selected RDBMS and create your database.

Step 1 - Create the database and insert the data. This is a campaign database. You will have to create each table and:

1. Decide on primary keys and what they should be or if you need to create a primary key. Remember your rules from CIS 250 about creating primary keys; however it is my recommendation to **not** use composite keys for any table.
2. Decide on foreign keys. Remember your rules from CIS 250 about creating foreign keys and what you have learned in this class about foreign keys. (While the data below may be redundant within the various tables, you would never keep the actual data in both places!) Be sure to create the appropriate foreign keys in the tables.
3. Decide if a field is required or optional.
4. Decide on what restrictions or checks you should have on data, constraints or checks.
5. Run your created SQL statements to create the tables and insert the data.

Turn in:

1. This word document with a single complete SQL script. This script should be able to be run in SQL Server Management Studio or MySQL / Toad (check the appropriate RDBMS above).
2. Do not forget to put your name on this document.

Insert your script here:

ASSERTIONS

A Pledge must belong to one and only one Campaign.
A Campaign may have zero and more Pledges.
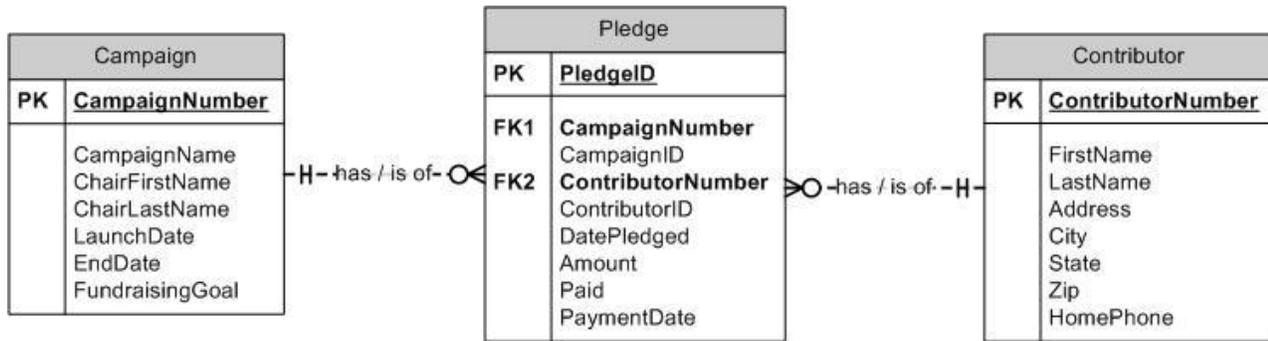
A Pledge must belong to one and only one Contributor.
A Contributor may have zero and more Pledges.

ASSUMPTIONS

There will be only one contributor listed per pledge. (No joint pledges)
There may be anonymous pledges.

CIS 251 Final Exam

ERD

STATEMENTS

```
CREATE DATABASE CAMPAIGN_DATABASE;

CREATE TABLE CAMPAIGN
(CampaignNumber    INTEGER      NOT NULL,
CampaignName       CHAR(25)     ,
ChairFirstName     CHAR(10)     ,
ChairLastName      CHAR(10)     ,
LaunchDate         DATE         ,
EndDate            DATE         ,
FundraisingGoal    INTEGER      ,
PRIMARY KEY (CampaignNumber));

CREATE TABLE CONTRIBUTOR
(ContributorNumber INTEGER      NOT NULL,
FirstName          CHAR(25)     ,
LastName           CHAR(25)     ,
Address            CHAR(50)     ,
City               CHAR(30)     ,
State              CHAR(2)      ,
Zip                CHAR(5)      ,
HomePhone          CHAR(13)     ,
PRIMARY KEY (ContributorNumber));

CREATE TABLE PLEDGE
(PledgeID           INTEGER      NOT NULL,
CampaignNumber      INTEGER      ,
CampaignID          CHAR(25)     ,
ContributorNumber   INTEGER      ,
ContributorID       CHAR(20)     ,
DatePledged         DATE         ,
Amount              INTEGER      ,
Paid                CHAR(1)      ,
PaymentDate         DATE         ,
PRIMARY KEY (PledgeID),
FOREIGN KEY (ContributorNumber)
     REFERENCES   CONTRIBUTOR (ContributorNumber),
FOREIGN KEY (CampaignNumber)
     REFERENCES   CAMPAIGN (CampaignNumber));
```

```sql
INSERT INTO campaign
  (CampaignNumber, CampaignName, ChairFirstName, ChairLastName, LaunchDate,
EndDate, FundraisingGoal)
VALUES  (1001, 'Lambert for Mayor', 'Shelley', 'Burke', '2010-01-01', '2012-11-08',
2000),
        (1002, 'Books for Schools', 'Jody', 'Forester', '2010-01-03', '2012-11-08',
4000),
        (1003, 'Send Brit Tour to Brit', 'Seaun', 'Collins', '2011-03-15', '2011-
05-30', 10000);

INSERT INTO contributor
  (ContributorNumber, FirstName, LastName, Address, City, State, Zip, HomePhone)
VALUES  (0001, 'John', 'Steel', '12 Orchestra Terrace', 'Walla Walla', 'WA', 99362,
'(204)555-6221'),
        (0002, 'Helvetius', 'Nagy', '1200 Main St.', 'Kirkland', 'WA', 98034,
'(204)555-8257'),
        (0003, 'Karl', 'Jablonski', '305-14th Ave. S.', 'Seattle', 'WA', 98128,
'(204)555-4112'),
        (0004, 'Art', 'Steel', 'P.O. Box 555', 'Walla Walla', 'WA', 99362,
'(204)555-6221'),
        (0005, 'John', 'Wilson', '1200 Main St.', 'Portland', 'OR', 97219,
'(505)555-9573'),
        (0006, 'Sandra', 'Jones', '3535 255th St SW', 'Seattle', 'WA', 98133,
'(204)555-3311');


INSERT INTO pledge
(PledgeID, CampaignNumber, CampaignID, ContributorNumber, ContributorID,
DatePledged, Amount, Paid, PaymentDate)
VALUES  (1, 1001, 'Lambert for Mayor', 0001, 'John Steel', '2010-01-10', 250, 'Y',
'2010-01-12'),
        (2, 1001, 'Lambert for Mayor', 0002, 'Helvetius Nagy', '2010-03-11', 75,
'Y', '2010-03-12'),
        (3, 1001, 'Lambert for Mayor', 0003, 'Karl Jablonski', '2010-02-01', 45,
'Y', '2010-02-01'),
        (4, 1001, 'Lambert for Mayor', 0004, 'Art Steel', '2010-05-01', 55, 'Y',
'2010-05-10'),
        (5, 1002, 'Books for School', 0004, 'Art Steel', '2010-05-22', 100, 'Y',
'2010-05-27'),
        (6, 1001, 'Lambert for Mayor', 0005, 'John Wilson', '2010-04-01', 75, 'Y',
'2010-04-01'),
        (7, 1001, 'Lambert for Mayor', 0005, 'John Wilson', '2010-06-22', 100, 'N',
NULL),
        (8, 1002, 'Books for School', 0005, 'John Wilson', '2010-06-02', 25, 'Y',
'2010-06-10'),
        (9, 1002, 'Books for School', 0003, 'Karl Jablonski', '2010-07-31', 100,
'Y', '2010-08-01');
```

Data: **CONTRIBUTOR**

FirstName	LastName	Address	City	State	Zip	HomePhone
John	Steel	12 Orchestra Terrace	Walla Walla	WA	99362	(204) 555-6221
Helvetius	Nagy	1200 Main St.	Kirkland	WA	98034	(204) 555-8257
Karl	Jablonski	305 – 14th Ave. S.	Seattle	WA	98128	(204) 555-4112
Art	Steel	P.O. Box 555	Walla Walla	WA	99362	(204) 555-6221
John	Wilson	1200 Main St.	Portland	OR	97219	(505) 555-9573
Sandra	Jones	3535 255th St SW	Seattle	WA	98133	(204) 555-3311

Data: **CAMPAIGN**

CampaignName	ChairFirstName	ChairLastName	LaunchDate	EndDate	FundraisingGoal
Lambert for Mayor	Shelley	Burke	2010-01-01	2012-11-08	$2000
Books for Schools	Jody	Forestor	2010-01-03	2012-11-08	$4000
Send Brit Tour to Brit	Seaun	Collins	2011-03-15	2011-05-30	$10,000

Data: **PLEDGE**

ContributorID	CampaignID	DatePledged	Amount	Paid	PaymentDate
John Steel	Lambert For Mayor	2010-01-10	$250	Y	2010-01-12
Helvetius Nagy	Lambert For Mayor	2010-03-11	$75	Y	2010-03-12
Karl Jablonski	Lambert For Mayor	2010-02-01	$45	Y	2010-02-01
Art Steel	Lambert For Mayor	2010-05-01	$55	Y	2010-05-10
Art Steel	Books for Schools	2010-05-22	$100	Y	2010-05-27
John Wilson	Lambert For Mayor	2010-04-01	$75	Y	2010-04-01
John Wilson	Lambert For Mayor	2010-06-22	$100	N	
John Wilson	Books For Schools	2010-06-02	$25	Y	2010-06-10
Karl Jablonski	Books For Schools	2010-07-31	$100	Y	2010-08-01

TEST QUERIES

```
SELECT *
FROM campaign;

SELECT *
FROM contributor;

SELECT *
FROM pledge;

SELECT ContributorID, HomePhone
FROM contributor, pledge
WHERE contributor.ContributorNumber = pledge.ContributorNumber
AND Paid = 'N';

SELECT DISTINCT ContributorID,Address
```

```
FROM pledge, contributor
WHERE pledge.ContributorNumber = contributor.ContributorNumber
AND Address = '1200 Main St.';

SELECT Amount, DatePledged, Paid, PaymentDate, ContributorID
FROM campaign, pledge
WHERE campaign.CampaignNumber = pledge.CampaignNumber
AND ContributorID = 'John Wilson';
```