/\* create tables \*/

CREATE TABLE Voters (

voter\_id INT NOT NULL AUTO\_INCREMENT,

last\_name VARCHAR(50),

first\_name VARCHAR(50),

email VARCHAR(75),

password VARCHAR (25),

PRIMARY KEY (voter\_id)

);

CREATE TABLE Positions (

position\_id INT NOT NULL AUTO\_INCREMENT,

position VARCHAR(100),

open\_dt DATETIME,

close\_dt DATETIME,

PRIMARY KEY (position\_id)

);

CREATE TABLE Candidates (

candidate\_id INT NOT NULL AUTO\_INCREMENT,

position\_id INT,

last\_name VARCHAR(50),

first\_name VARCHAR(50),

statement TEXT,

img\_URL VARCHAR(200),

PRIMARY KEY (candidate\_id),

FOREIGN KEY (position\_id) REFERENCES Positions(position\_id)

);

CREATE TABLE Votes (

vote\_id INT NOT NULL AUTO\_INCREMENT,

voter\_id INT,

candidate\_id INT,

vote\_dt DATETIME,

PRIMARY KEY (vote\_id),

FOREIGN KEY (voter\_id) REFERENCES Voters(voter\_id),

FOREIGN KEY (candidate\_id) REFERENCES Candidates(candidate\_id)

);

/\* insert voter \*/

INSERT INTO Voters (last\_name, first\_name, email, password)

VALUES ("abc", "def", "abc@def.ca", "abc");

/\* insert candidate \*/

INSERT INTO Candidates (position\_id, last\_name, first\_name, img\_URL, statement)

VALUES (1, "Doe", "Jane", "images/DoeJane.jpg", "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed sit amet ligula varius, porttitor ex et, vestibulum velit. Cras tincidunt lorem id leo vulputate, ut semper elit euismod. Interdum et malesuada fames ac ante ipsum primis in faucibus. Sed laoreet convallis egestas. Suspendisse metus est, consequat sed commodo vitae, tincidunt sit amet tortor. In eu lobortis nibh. Sed quis pellentesque magna. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia curae; Nunc et lobortis diam. Praesent efficitur orci eu augue maximus, nec tincidunt nisl egestas.");

/\* insert vote \*/

INSERT INTO Votes (voter\_id, candidate\_id, vote\_dt)

VALUES (1, 3, NOW());

/\* login query \*/

SELECT voter\_id, first\_name, last\_name FROM Voters

WHERE email="test@uregina.ca" AND password="abc123\*\*";

/\* basic join \*/

SELECT \*

FROM Candidates LEFT JOIN Positions

ON (Candidates.position\_id = Positions.position\_id);

/\* specify fields \*/

SELECT Positions.position, Candidates.last\_name, Candidates.first\_name

FROM Candidates LEFT JOIN Positions

ON (Candidates.position\_id = Positions.position\_id);

/\* join on the votes \*/

SELECT Candidates.first\_name, Candidates.last\_name, Votes.vote\_dt

FROM Candidates LEFT JOIN Votes

ON (Candidates.candidate\_id = Votes.candidate\_id);

/\* count the votes, group by the candidate \*/

SELECT Candidates.first\_name, Candidates.last\_name, Count(Votes.vote\_id) as vote\_count

FROM Candidates LEFT JOIN Votes

ON (Candidates.candidate\_id = Votes.candidate\_id)

GROUP BY Candidates.candidate\_id;

/\* put it all together \*/

SELECT Positions.position, Candidates.last\_name, Candidates.first\_name, COUNT(Votes.vote\_id) as vote\_count

FROM Candidates LEFT JOIN Positions

ON (Candidates.position\_id = Positions.position\_id)

LEFT JOIN Votes

ON (Candidates.candidate\_id = Votes.candidate\_id)

GROUP BY Candidates.candidate\_id;