

UE20CS301 DATABASE MANAGEMENT
SYSTEM (DBMS)

MINI PROJECT REPORT

ELECTION MANAGEMENT SYSTEM

SUBMITTED BY :

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SRN: PES1UG20CS150

V SEMESTER SECTION: C

DESCRIPTION

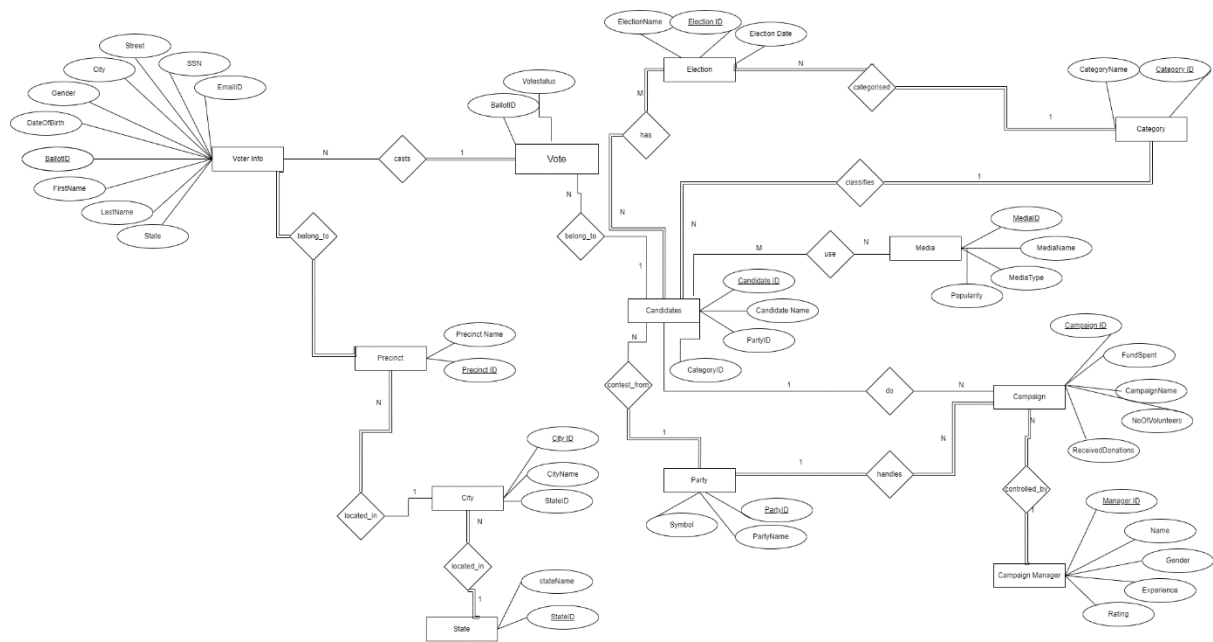
Elections are one of the most significant and an essential event a country or a locality faces. They are the true sign of democracy. It is the greatest power vested in a citizen who must exercise this fairly and compulsorily. The vote is a process through which the country stays on the path of democracy and doesn't turn into anarchy. Through elections, the citizens of the state choose a government that will work towards the welfare and development of the country. Elections also determine the world order and geopolitics.

The project is about holistic management of elections be it general, provincial local or judicial. This election management deals not only with the voters and candidates but also the constituencies, elections, donations, campaigns and their media presence like debates, appeals and more.

SCOPE

With recent headlines of EVM tampering and electoral roll scams, this project will help all the citizens to exercise their rights to democracy. There will be transparency on the results , the money that is spent by the parties on campaigns and media presence.

ER DIAGRAM



RELATIONAL SCHEMA

CAMPAIGN

CampaignID	CampaignName	FundSpent	ReceivedDonations	Managerid	NoOfVolunteers	CandidateID	PartyID
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CAMPAIGN MANAGER

ManagerID	Name	Gender	Experience	Rating
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CANDIDATES

CandidateID	CandidateName	PartyID	Categoryid
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CANDIDATES_USES_MEDIA

CandidateID	MediaID
-------------	---------

CATEGORY

CategoryID	CategoryName
------------	--------------

CITY

CityID	CityName	StateID
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ELECTION

ElectionID	ElectionName	ElectionDate	CategoryID
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ELECTION HAS CANDIDATES

ElectionID	CandidateID
------------	-------------

MEDIA

MediaID	MName	Popularity	Type
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PARTY

PartyID	PartyName	Symbol
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PRECINCT

PrecinctID	PrecinctName	CityID	StateID
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STATE

StateID	StateName
---------	-----------

VOTE

BallotID	ElectionID	CandidateID	PartyID	PrecinctID	VoteStatus
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VOTE_INFO

BallotID	FirstName	LastName	DateOfBirth	Gender	Street	City	State	SSN	PrecinctID	EmailID
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DDL

```
CREATE TABLE campaignmanager(  
    ManagerID varchar(45) NOT NULL,  
    Name varchar(45) NOT NULL,  
    Gender varchar(45) NOT NULL,  
    Experience varchar(60) NOT NULL,  
    Rating int(11) DEFAULT NULL,  
    PRIMARY KEY (ManagerID)  
);
```

```
CREATE TABLE category(  
    CategoryID varchar(60) NOT NULL,  
    CategoryName varchar(45) NOT NULL,  
    PRIMARY KEY (CategoryID)  
);
```

```
CREATE TABLE election (  
    ElectionID varchar(45) NOT NULL,  
    ElectionName varchar(45) NOT NULL,  
    ElectionDate varchar(45) NOT NULL,  
    CategoryID varchar(60) NOT NULL,  
    PRIMARY KEY (ElectionID),  
    CONSTRAINT election_FK_1 FOREIGN KEY (CategoryID) REFERENCES category (CategoryID) ON DELETE NO ACTION ON UPDATE NO ACTION  
);
```

```
CREATE TABLE media (  
    MediaID varchar(45) NOT NULL,  
    Name varchar(45) NOT NULL,  
    Type varchar(45) NOT NULL,  
    Popularity varchar(45) NOT NULL,  
    PRIMARY KEY (MediaID)  
);
```

```
CREATE TABLE party (  
    PartyID varchar(60) NOT NULL,  
    PartyName varchar(45) NOT NULL,  
    Symbol varchar(45) NOT NULL,  
    PRIMARY KEY (PartyID)  
);
```

```
CREATE TABLE state (  
    StateID int(11) NOT NULL,  
    StateName varchar(45) NOT NULL,  
    PRIMARY KEY (StateID)  
);
```

```

CREATE TABLE precinct (
    PrecinctID int(11) NOT NULL,
    PrecinctName varchar(45) NOT NULL,
    CityID int(11) NOT NULL,
    StateID int(11) NOT NULL,
    PRIMARY KEY (PrecinctID),
    CONSTRAINT precinct_FK_1 FOREIGN KEY (CityID) REFERENCES city (CityID) ON DELETE CASCADE ON UPDATE CASCADE,
    CONSTRAINT precinct_FK_2 FOREIGN KEY (StateID) REFERENCES state (StateID) ON DELETE CASCADE ON UPDATE CASCADE
);

```

```

CREATE TABLE city (
    CityID int(11) NOT NULL,
    CityName varchar(45) NOT NULL,
    StateID int(11) NOT NULL,
    PRIMARY KEY (CityID),
    CONSTRAINT city_FK FOREIGN KEY (StateID) REFERENCES state (StateID) ON DELETE CASCADE ON UPDATE CASCADE
);

```

```

CREATE TABLE precinct (
    PrecinctID int(11) NOT NULL,
    PrecinctName varchar(45) NOT NULL,
    CityID int(11) NOT NULL,
    StateID int(11) NOT NULL,
    PRIMARY KEY (PrecinctID),
    CONSTRAINT precinct_FK_1 FOREIGN KEY (CityID) REFERENCES city (CityID) ON DELETE CASCADE ON UPDATE CASCADE,
    CONSTRAINT precinct_FK_2 FOREIGN KEY (StateID) REFERENCES state (StateID) ON DELETE CASCADE ON UPDATE CASCADE
);

```

```

CREATE TABLE vote (
    BallotID varchar(60) NOT NULL,
    ElectionID varchar(45) NOT NULL,
    CandidateID int(11) DEFAULT NULL,
    PartyID varchar(60) DEFAULT NULL,
    PrecinctID int(11) NOT NULL,
    VoteStatus varchar(45) NOT NULL,
    CONSTRAINT vote_FK_1 FOREIGN KEY (ElectionID) REFERENCES election (ElectionID) ON DELETE NO ACTION ON UPDATE NO ACTION,
    CONSTRAINT vote_FK_2 FOREIGN KEY (PartyID) REFERENCES party (PartyID) ON DELETE NO ACTION ON UPDATE NO ACTION,
    CONSTRAINT vote_FK_3 FOREIGN KEY (BallotID) REFERENCES voter_info (BallotID) ON DELETE NO ACTION ON UPDATE NO ACTION,
    CONSTRAINT vote_FK_4 FOREIGN KEY (PrecinctID) REFERENCES precinct (PrecinctID) ON DELETE NO ACTION ON UPDATE NO ACTION
);

```

```

CREATE TABLE voter_info (
    BallotID varchar(60) NOT NULL,
    FirstName varchar(45) NOT NULL,
    LastName varchar(45) NOT NULL,
    DateOfBirth date NOT NULL,
    Gender varchar(45) DEFAULT NULL,
    Street varchar(45) NOT NULL,
    City varchar(45) NOT NULL,
    State varchar(45) NOT NULL,
    SSN varchar(45) NOT NULL,
    PrecinctID int(11) DEFAULT NULL,
    EmailID varchar(40) DEFAULT NULL,
    PRIMARY KEY (BallotID),
    UNIQUE KEY SSN (SSN),
    CONSTRAINT voter_info_FK_1 FOREIGN KEY (PrecinctID) REFERENCES precinct (PrecinctID) ON DELETE CASCADE ON UPDATE CASCADE
);

```

```

CREATE TABLE candidates(
    CandidateID int(11) NOT NULL,
    CandidateName varchar(45) NOT NULL,
    PartyID varchar(60) NOT NULL,
    CategoryID varchar(45) DEFAULT NULL,
    PRIMARY KEY (CandidateID),
    CONSTRAINT candidates_FK_1 FOREIGN KEY (PartyID) REFERENCES party (PartyID) ON DELETE CASCADE ON UPDATE CASCADE,
    CONSTRAINT candidates_FK_2 FOREIGN KEY (Categoryid) REFERENCES category (CategoryID)
);

CREATE TABLE candidates_uses_media(
    CandidateID int(11) NOT NULL,
    MediaID varchar(45) NOT NULL,
    CONSTRAINT candidates_uses_media_FK_1 FOREIGN KEY (CandidateID) REFERENCES candidates (CandidateID) ON DELETE CASCADE ON UPDATE CASCADE,
    CONSTRAINT candidates_uses_media_FK_2 FOREIGN KEY (MediaID) REFERENCES media (MediaID) ON DELETE CASCADE ON UPDATE CASCADE
);

CREATE TABLE election_has_candidates (
    ElectionID varchar(45) NOT NULL,
    CandidateID int(11) NOT NULL,
    CONSTRAINT election_has_candidates_FK_1 FOREIGN KEY (ElectionID) REFERENCES election (ElectionID) ON DELETE NO ACTION ON UPDATE NO ACTION,
    CONSTRAINT election_has_candidates_FK_2 FOREIGN KEY (CandidateID) REFERENCES candidates (CandidateID) ON DELETE NO ACTION ON UPDATE NO ACTION
);

CREATE TABLE campaign (
    CampaignID varchar(60) NOT NULL,
    CampaignName varchar(60) NOT NULL,
    FundSpent varchar(45) NOT NULL,
    ReceivedDonations varchar(45) NOT NULL,
    ManagerID varchar(45) NOT NULL,
    NoOfVolunteers int(11) NOT NULL,
    CandidateID int(11) NOT NULL,
    PartyID varchar(60) NOT NULL,
    PRIMARY KEY (CampaignID),
    CONSTRAINT campaign_FK_1 FOREIGN KEY (CandidateID) REFERENCES candidates (CandidateID) ON DELETE NO ACTION ON UPDATE CASCADE,
    CONSTRAINT campaign_FK_2 FOREIGN KEY (PartyID) REFERENCES candidates (PartyID) ON DELETE NO ACTION ON UPDATE CASCADE
);

```

✓	4	20:30:05	CREATE TABLE campaignmanager(ManagerID varchar(45) NOT NULL, Name varchar(45) NOT NULL, ...	0 row(s) affected	0.016 sec
✓	5	20:30:20	CREATE TABLE category(CategoryID varchar(60) NOT NULL, CategoryName varchar(45) NOT NULL, P...	0 row(s) affected	0.016 sec
✓	6	20:30:31	CREATE TABLE election (ElectionID varchar(45) NOT NULL, ElectionName varchar(45) NOT NULL, Ele...	0 row(s) affected	0.016 sec
✓	7	20:30:51	CREATE TABLE media (MediaID varchar(45) NOT NULL, Name varchar(45) NOT NULL, Type varchar(4...	0 row(s) affected	0.016 sec
✓	8	20:31:00	CREATE TABLE party (PartyID varchar(60) NOT NULL, PartyName varchar(45) NOT NULL, Symbol varc...	0 row(s) affected	0.015 sec
✓	9	20:31:23	CREATE TABLE state (StateID int(11) NOT NULL, StateName varchar(45) NOT NULL, PRIMARY KEY (...	0 row(s) affected	0.016 sec
✓	11	20:32:07	CREATE TABLE city (CityID int(11) NOT NULL, CityName varchar(45) NOT NULL, StateID int(11) NOT NU...	0 row(s) affected	0.016 sec
✓	13	20:32:32	CREATE TABLE precinct (PrecinctID int(11) NOT NULL, PrecinctName varchar(45) NOT NULL, CityID int(1...	0 row(s) affected	0.015 sec
✓	14	20:32:47	CREATE TABLE voter_info (BallotID varchar(60) NOT NULL, FirstName varchar(45) NOT NULL, LastName...	0 row(s) affected	0.015 sec
✓	15	20:32:59	CREATE TABLE vote (BallotID varchar(60) NOT NULL, ElectionID varchar(45) NOT NULL, CandidateID int...	0 row(s) affected	0.015 sec
✓	17	20:33:49	CREATE TABLE candidates(CandidateID int(11) NOT NULL, CandidateName varchar(45) NOT NULL, Part...	0 row(s) affected	0.031 sec
✓	18	20:33:58	CREATE TABLE candidates_uses_media(CandidateID int(11) NOT NULL, MediaID varchar(45) NOT NULL, ...	0 row(s) affected	0.031 sec
✓	19	20:34:13	CREATE TABLE election_has_candidates (ElectionID varchar(45) NOT NULL, CandidateID int(11) NOT NU...	0 row(s) affected	0.031 sec
✓	20	20:36:22	CREATE TABLE campaign (CampaignID varchar(60) NOT NULL, CampaignName varchar(60) NOT NULL, ...	0 row(s) affected	0.016 sec

POPULATING DATABASE

```
INSERT INTO campaignmanager VALUES ('m1','Dow Constantine','M','4',9),
('m2','Kim Ferguson','F','4',8),
('m3','Max Pollard','M','3.5',8),
('m4','Richard Miller','M','5',9),
('m5','Kate Peterson','F','2.5',7);
```

```
INSERT INTO category VALUES ('c1','Presidential'),
('c2','US Senator'),
('c3','Judge'),
('c4','State Senator'),
('c5','County Executive'),
('c6','City Council');
```

```
INSERT INTO election VALUES ('e01','General Presidential 2012','2012-01-12','c1'),
('e02','General US Senator 2012','2012-04-27','c2'),
('e03','General Judge 2012','2012-09-06','c3'),
('e04','Primary State Senator 2013','2013-01-04','c4'),
('e05','Primary County Executive 2013','2013-07-04','c5'),
('e06','Primary City Council 2013','2013-09-25','c6'),
('e07','General US Senator 2014','2014-03-26','c2'),
('e08','General Judge 2014','2014-09-11','c3'),
('e09','Primary State Senator 2015','2015-02-23','c4'),
('e10','Primary County Executive 2015','2015-07-09','c5'),
('e11','Primary City Council 2015','2015-09-23','c6'),
('e12','General Presidential 2016','2016-01-26','c1'),
('e13','General US Senator 2016','2016-04-30','c2'),
('e14','General Judge 2016','2016-10-01','c3'),
('e15','Primary State Senator 2017','2017-01-13','c4'),
('e16','Primary County Executive 2017','2017-07-04','c5'),
('e17','Primary City Council 2017','2017-10-24','c6'),
('e18','General US Senator 2018','2018-03-31','c2'),
('e19','General Judge 2018','2018-09-02','c3'),
('e20','Primary State Senator 2019','2019-01-31','c4'),
('e21','Primary County Executive 2019','2019-07-06','c5'),
('e22','Primary City Council 2019','2019-09-13','c6'),
('e23','General Presidential 2020','2020-01-12','c1'),
('e24','General US Senator 2020','2020-04-19','c2'),
('e25','General Judge 2020','2020-09-11','c3');
```



```
INSERT INTO media VALUES ('media1','BBC','TV','39.21%'),
('media2','The New York Times','Newspaper','52.65%'),
('media3','WABC','Radio','31%'),
('media4','CNN','TV','46%'),
('media5','FOX25','TV','56.2%'),
('media6','WBZ','Radio','29.3%'),
('media7','USA Today','Newspaper','56%'),
('media8','The WallStreet Journal','Newspaper','44.86%');
```

```
INSERT INTO party VALUES ('p1','Democrats','Deer'),
('p2','Republican','Elephant'),
('p3','Independents','Horse');
```

```
INSERT INTO state VALUES (2,'New York'),
(3,'New Jersey'),
(4,'California');
```

```
INSERT INTO city VALUES (21,'NewYork City',2),
(22,'Buffalo',2),
(23,'Rochester',2),
(31,'Newark',3),
(32,'Trenton',3),
(33,'Jersey City',3),
(41,'Los Angeles',4),
(42,'King County',4),
(43,'Orange County',4);
```

```

INSERT INTO precinct VALUES (211,'Bronx',21,2),
(212,'Brooklyn',21,2),
(213,'Manhattan',21,2),
(221,'Alden',22,2),
(222,'Buffalo',22,2),
(223,'Williamsville',22,2),
(231,'Brighton',23,2),
(232,'Gates',23,2),
(233,'Hamlin',23,2),
(311,'Bloomfield',31,3),
(312,'Caldwell',31,3),
(313,'Irvington',31,3),
(321,'Hamilton',32,3),
(322,'Lawrence',32,3),
(323,'Pennington',32,3),
(331,'Atlantic',33,3),
(332,'Burlington',33,3),
(333,'Cumberland',33,3),
(411,'Arcadia',41,4),
(412,'Long Beach',41,4),
(413,'Los Angeles',41,4),
(421,'Avenal',42,4),
(422,'Hanford',42,4),
(423,'Lemoore',42,4),
(431,'Tustin',43,4),
(432,'Stanton',43,4),
(433,'Irvine',43,4);

```

```

INSERT INTO voter_info VALUES ('211-00','Goldarina','Goulter','1986-08-17','Female','2 Brown Lane','NewYork City','New York','790-16-4053',211,'ggoulter4@redcross.org'),
('211-04','Darcy','Brokenshaw','1996-01-13','Female','56 Scofield Parkway','NewYork City','New York','842-89-7603',211,'dbrokenshaw@networksolutions.com'),
('211-05','Dick','Keelin','1983-12-10','Male','24 Sunnyside Road','NewYork City','New York','318-53-4884',211,'dkeelin@usatoday.com'),
('211-06','Washington','Agneau','1982-12-25','Male','98516 Bay Center','NewYork City','New York','139-04-5028',211,'wagneau@nasa.gov'),
('211-09','Winnie','Gardiner','1973-12-20','Female','1 Eagle Crest Parkway','NewYork City','New York','292-91-2197',211,'wgardiner9@nba.com'),
('211-21','Jephthah','Mandrake','1970-09-09','Male','75 Straubel Street','NewYork City','New York','459-16-9568',211,'jmandrake@networksolutions.com'),
('211-24','Jackie','Trehitt','1966-02-22','Male','9739 Declaration Avenue','NewYork City','New York','743-31-9658',211,'jtrehitt@mac.com'),
('211-34','Maribel','Fairchild','1959-10-21','Female','85 Warner Pass','NewYork City','New York','687-83-4302',211,'mfairchild2@comsenz.com'),
('211-52','Talbot','Barkaway','1965-05-01','Male','49 Vera Alley','NewYork City','New York','665-94-4207',211,'tbarkaway6@homestead.com'),
('211-53','Brew','Eskrick','1969-01-29','Male','29 Waywood Pass','NewYork City','New York','672-30-7124',211,'beskrickj@ebay.co.uk'),
('211-54','Valle','Alfonsetti','1986-07-16','Male','4 Stang Way','NewYork City','New York','221-63-7646',211,'valfonsetti@army.mil'),
('211-61','Hervey','Anetts','1976-11-02','Male','93026 Kennedy Crossing','NewYork City','New York','876-19-1613',211,'hanetts@answers.com'),
('211-62','Rudiger','Bowler','1964-02-23','Male','17 Vera Park','NewYork City','New York','113-89-2152',211,'rbowler7@goo.gl'),
('211-69','Millie','Hakonsson','1994-09-20','Female','27 Corry Point','NewYork City','New York','446-73-6387',211,'mhakonssone@xinhuanet.com'),
('211-72','Worthy','Ewbanck','1980-03-04','Male','4 Green Ridge Circle','NewYork City','New York','385-05-3672',211,'ewbancki@xile.com'),
('221-04','Georgianna','Atley','1987-07-05','Female','3565 Novick Pass','Buffalo','New York','597-25-4935',221,'gatley2@51.la'),
('221-05','Denyse','Kitcat','1993-09-13','Female','6197 Ryan Court','Buffalo','New York','125-81-3162',221,'dkitcat@nifty.com'),
('221-06','Munro','Bugs','1983-03-14','Male','40 Maple Wood Parkway','Buffalo','New York','151-18-4905',221,'mbugsg@discovery.com'),
('221-09','Gianna','Extance','1989-11-04','Female','2528 Summit Alley','Buffalo','New York','432-36-2696',221,'gextance9@ftc.gov'),
('221-18','Fidel','Bamfield','1995-04-27','Male','1 Glacier Hill Crossing','Buffalo','New York','737-80-6207',221,'fbamfieldj@xinhuanet.com'),
('221-22','Hermon','Loads','1962-05-07','Male','070 Delaware Crossing','Buffalo','New York','679-95-9902',221,'hloads4@soundcloud.com'),
('221-25','Hayyim','Yann','1980-09-10','Male','167 Scofield Way','Buffalo','New York','410-10-9830',221,'hyann6@europa.eu'),
('221-48','Granthem','Perico','1981-06-25','Male','1936 Susan Parkway','Buffalo','New York','692-24-9293',221,'gpericod@google.fr'),
('221-49','Alec','Newtown','1954-07-31','Male','0596 Heffernan Plaza','Buffalo','New York','372-83-5111',221,'anewtowna@opensource.org'),
('221-50','Tommy','Daubney','1970-02-06','Male','1488 Spenser Way','Buffalo','New York','899-49-3956',221,'tdaubneye@sbwire.com'),
('221-67','Benedick','Yegorkin','1960-09-27','Male','18790 Rigney Junction','Buffalo','New York','753-92-2571',221,'byegorkini@hao123.com'),

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('221-68','Bjorn','Juszkiewicz','1979-06-13','Male','418 Kensington Circle','Buffalo','New York','681-06-4238',221,'bjuszkiewicz@youtu.be'),
('221-69','Sig','Heintsch','1985-02-02','Male','3490 Bayside Pass','Buffalo','New York','839-56-7886',221,'sheintsch@google.com'),
('221-79','Elden','McIntosh','1956-09-11','Male','70955 Raven Court','Buffalo','New York','326-26-6463',221,'emcintosh3@tuttocitta.it'),
('221-81','Eb','Symmons','1952-11-14','Male','1 Blue Bill Park Circle','Buffalo','New York','147-22-0239',221,'esymmons@ed.gov'),
('231-19','Tally','Garken','1952-01-06','Male','11201 Dennis Terrace','Rochester','New York','606-38-4378',231,'tgarken@myspace.com'),
('231-20','Martyn','Padbery','1957-05-20','Male','5 Meadow Valley Center','Rochester','New York','607-74-8596',231,'mpadbery2@typepad.com'),
('231-30','Susan','Mallall','1982-01-24','Female','8884 Commercial Avenue','Rochester','New York','649-75-3660',231,'smallalla@jimdo.com'),
('231-33','Aldous','Bassford','1987-08-31','Male','22157 Center Drive','Rochester','New York','160-97-6429',231,'abassford@ocn.ne.jp'),
('231-37','Fara','Harrop','1990-07-07','Female','896 Bunker Hill Terrace','Rochester','New York','347-78-2950',231,'fharrop@walmart.com'),
('231-40','Maison','Harwood','1992-10-07','Male','0 Mosinee Center','Rochester','New York','503-79-9033',231,'mharwood@delicious.com'),
('231-42','Trude','Farny','1982-12-07','Female','83221 Merchant Way','Rochester','New York','855-77-5859',231,'tfarny@apple.com'),
('231-49','Isadore','Erik','1993-04-16','Male','8578 Meadow Valley Way','Rochester','New York','642-91-7593',231,'ierikb@networkadvertising.org'),
('231-50','Merry','Acock','1948-04-18','Female','9517 Petterle Avenue','Rochester','New York','524-10-5927',231,'macock8@va.gov'),
('231-51','Truda','Lopes','1959-12-09','Female','1784 Kings Point','Rochester','New York','811-75-1626',231,'tlopes5@sourceforge.net'),
('231-52','Brandtr','Zelner','1992-04-30','Male','29796 Coleman Crossing','Rochester','New York','893-40-3345',231,'bznelner@mapquest.com'),
('231-53','Hanan','Undy','1966-07-17','Male','779 6th Pass','Rochester','New York','405-97-5170',231,'hundy1@usgs.gov'),
('231-70','Tracie','Sturzaker','1957-02-21','Male','2732 Stephen Avenue','Rochester','New York','267-43-0660',231,'tsturzaker@gizmodo.com'),
('231-72','Eugine','Betteriss','1974-08-04','Female','861 Texas Road','Rochester','New York','717-96-9159',231,'ebetteriss3@gov.uk'),
('231-74','Mauricio','Knaggess','1951-01-18','Male','52 Southoff Center','Rochester','New York','362-66-1512',231,'mknaggess7@state.gov'),
('311-04','Reade','Rawson','1979-12-12','Male','096 Waywood Circle','Newark','New Jersey','681-59-3641',311,'rrawsene@homestead.com'),
('311-08','Trey','Sweett','1963-01-25','Male','7 Hagan Plaza','Newark','New Jersey','842-73-5429',311,'tsweett2@mitbeian.gov.cn'),
('311-11','Conny','Pennuzzi','1970-02-27','Female','071 Oakridge Alley','Newark','New Jersey','602-05-1945',311,'cpennuzzi8@ucox.com'),
('311-13','Bordy','Van Der Straaten','1967-02-02','Male','7 Corben Circle','Newark','New Jersey','676-05-2619',311,'bvanderstraaten6@bloglovin.com'),
('311-20','Kevin','Llewelly','1974-02-12','Male','156 Doe Crossing Parkway','Newark','New Jersey','358-73-1788',311,'kllewellya@rediff.com'),
('311-24','Ange','Petracchi','1958-05-04','Male','339 Lawn Trail','Newark','New Jersey','496-41-7118',311,'apetracchi@dyndns.org'),
('311-36','Rani','Bollen','1968-01-29','Female','415 2nd Junction','Newark','New Jersey','409-50-3766',311,'rbollend@va.gov'),
('311-43','Virge','Denial','1967-02-05','Male','26 Mosinee Hill','Newark','New Jersey','204-59-5700',311,'vdeniali@clickbank.net'),

```
INSERT INTO vote VALUES ('211-00','e01',1001,'p1',211,'Yes'),
('211-04','e02',2002,'p2',211,'Yes'),
('211-05','e03',1003,'p1',211,'Yes'),
('211-06','e04',1004,'p1',211,'Yes'),
('211-09','e05',3004,'p3',211,'Yes'),
('211-21','e06',1005,'p1',211,'Yes'),
('211-24','e07',1002,'p1',211,'Yes'),
('211-34','e08',2003,'p2',211,'Yes'),
('211-52','e09',1004,'p1',211,'Yes'),
('211-53','e10',2005,'p2',211,'Yes'),
('211-54','e11',NULL,NULL,211,'No'),
('211-61','e12',NULL,NULL,211,'No'),
('211-62','e13',1002,'p1',211,'Yes'),
('211-69','e14',2003,'p2',211,'Yes'),
('211-72','e15',1004,'p1',211,'Yes'),
('221-04','e16',2005,'p2',221,'Yes'),
('221-05','e17',1005,'p1',221,'Yes'),
('221-06','e18',1002,'p1',221,'Yes'),
('221-09','e19',1003,'p1',221,'Yes'),
('221-18','e20',1004,'p1',221,'Yes'),
('221-22','e21',2005,'p2',221,'Yes'),
('221-25','e22',1005,'p1',221,'Yes'),
('221-48','e23',NULL,NULL,221,'No'),
('221-49','e24',NULL,NULL,221,'No'),
('221-50','e25',1001,'p1',221,'Yes'),
('221-67','e01',2001,'p2',221,'Yes'),
('221-68','e02',2002,'p2',221,'Yes'),
('221-69','e03',1003,'p1',221,'Yes'),
('221-70','e04',1004,'p1',221,'Yes')
```

```
INSERT INTO candidates VALUES (1001,'Joe Biden','p1','c1'),
(1002,'Brooks Salazar','p1','c2'),
(1003,'Ryan Calkins','p1','c3'),
(1004,'John Creighton','p1','c4'),
(1005,'Lisa Espinosa','p1','c6'),
(2001,'Donald J.Trump','p2','c1'),
(2002,'Mike Pence','p2','c2'),
(2003,'Rex Tillerson','p2','c3'),
(2004,'Steve Mnuchin','p2','c4'),
(2005,'Wilbur Ross','p2','c5'),
(3001,'Ahmed Abdi','p3','c1'),
(3002,'Stephine Bowman','p3','c2'),
(3003,'Preeti Shridhar','p3','c3'),
(3004,'Sonny Perdue','p3','c5'),
(3005,'Ben Carson','p3','c6');
```



```

INSERT INTO candidates_uses_media VALUES (1005,'media4'),
(1001,'media2'),
(1005,'media7'),
(2003,'media1'),
(2003,'media2'),
(2003,'media6'),
(1001,'media5'),
(1001,'media7'),
(1003,'media5'),
(1001,'media3'),
(1001,'media4'),
(1002,'media1'),
(1002,'media8'),
(1002,'media6'),
(1003,'media2'),
(1005,'media3'),
(1003,'media5'),
(2002,'media5'),
(1004,'media1'),
(1004,'media8'),
(2001,'media2'),
(2001,'media7'),
(2001,'media5'),
(2001,'media6'),
(2001,'media8'),
(2005,'media1'),
(2003,'media2'),

```

```

INSERT INTO campaign VALUES ('a','Telling It Like It Is !','0.50','0.34','m3',620,2005,'p2'),
('b','Your Future To Believe In','1.45','1.75','m2',3400,1002,'p1'),
('c','From Hope to Higher Ground','0.95','0.92','m5',300,2003,'p2'),
('d','Forward Together','3.30','3.50','m1',6000,1001,'p1'),
('e','People Fighting Back','1.64','1.62','m1',850,3005,'p3'),
('f','Stronger Together','1.95','2.10','m4',1100,1005,'p1'),
('g','Reform, Prosperity,Peace','1.72','1.74','m5',565,3003,'p3'),
('h','Heal.Inspire.Revive','1.25','1.4','m3',874,2002,'p2'),
('i','Hillary For America','3.23','3.32','m5',1320,1001,'p1'),
('j','Fighting For Us','1.25','0.96','m5',770,1003,'p1'),
('k','A Time For Truth','1.85','1.98','m4',1250,2004,'p2'),
('l','Live Free','1.45','1.30','m2',600,1004,'p1'),
('m','Right To Rise','1.32','1.39','m4',780,3004,'p3'),
('n','It\'s never too late to do the right thing','1.72','1.81','m2',680,3002,'p3'),
('o','What Do We Have To Lose','3.17','3.15','m3',1280,2001,'p2'),
('p','Citizenship Matters','2.27','2.35','m3',1280,3001,'p3'),
('q','Ready For Change, Ready To Lead','2.84','2.83','m2',1200,1001,'p1'),
('r','Make America Great again','3.25','3.33','m4',5600,2001,'p2');

```

21	21:09:22	INSERT INTO campaignmanager VALUES (m1,'Dow Constantine','M','4','9'), (m2,'Kim Ferguson','F','4','8'), (m3'...	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0	0.000 sec
22	21:10:45	INSERT INTO category VALUES (c1,'Presidential'), (c2,'US Senator'), (c3,'Judge'), (c4,'State Senator'), (c5'...	6 row(s) affected Records: 6 Duplicates: 0 Warnings: 0	0.000 sec
23	21:11:19	INSERT INTO election VALUES (e01,'General Presidential 2012','2012-01-12','c1'), (e02,'General US Senato...	25 row(s) affected Records: 25 Duplicates: 0 Warnings: 0	0.000 sec
24	21:12:28	INSERT INTO media VALUES (media1,'BBC','TV','39.21%'), (media2,'The New York Times','Newspaper','52'...	8 row(s) affected Records: 8 Duplicates: 0 Warnings: 0	0.000 sec
26	21:13:31	INSERT INTO party VALUES (p1,'Democrats','Deer'), (p2,'Republican','Elephant'), (p3,'Independents','Horse')	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.000 sec
27	21:13:36	INSERT INTO state VALUES (2,'New York'), (3,'New Jersey'), (4,'California')	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.016 sec
28	21:14:30	INSERT INTO city VALUES (21,'New York City','2'), (22,'Buffalo','2'), (23,'Rochester','2'), (31,'Newark','3'), (32,'Tren...	9 row(s) affected Records: 9 Duplicates: 0 Warnings: 0	0.016 sec
29	21:15:23	INSERT INTO precinct VALUES (211,'Bronx','21.2'), (212,'Brooklyn','21.2'), (213,'Manhattan','21.2'), (221,'Alden',...	27 row(s) affected Records: 27 Duplicates: 0 Warnings: 0	0.000 sec
30	21:16:13	INSERT INTO voter_info VALUES (211-00,'Goldarina','Goulter','1986-08-17','Female','2 Brown Lane','New Yor...	135 row(s) affected Records: 135 Duplicates: 0 Warnings: 0	0.016 sec
31	21:17:08	INSERT INTO vote VALUES (211-00,'e01',1001,p1,'211','Yes'), (211-04,'e02,2002,p2,211','Yes'), (211-05',...	135 row(s) affected Records: 135 Duplicates: 0 Warnings: 0	0.016 sec
32	21:17:54	INSERT INTO candidates VALUES (1001,'Joe Biden','p1','c1'), (1002,'Brooks Salazar','p1','c2'), (1003,'Ryan C...	15 row(s) affected Records: 15 Duplicates: 0 Warnings: 0	0.015 sec
33	21:18:24	INSERT INTO candidates_uses_media VALUES (1005,media4), (1001,media2), (1005,media7), (2003,medi...	49 row(s) affected Records: 49 Duplicates: 0 Warnings: 0	0.016 sec
34	21:19:07	INSERT INTO election_has_candidates VALUES (e01',1001), (e01',2001), (e01',3001), (e02',1002), (e02',20...	63 row(s) affected Records: 63 Duplicates: 0 Warnings: 0	0.000 sec
35	21:19:40	INSERT INTO campaign VALUES (a','Telling It Like It Is','0.50','0.34','m3',620,2005,p2'), (b','Your Future To ...	18 row(s) affected Records: 18 Duplicates: 0 Warnings: 0	0.000 sec

JOINS

Query to retrieve only the ballot numbers of the voters who have voted

```
#retrieve only the ballot nos of the voters who have voted
SELECT V.BALLOTID,V.ELECTIONID,E.ELECTIONNAME,V.CANDIDATEID,C.CANDIDATENAME,V.PARTYID,P.PARTYNAME
FROM VOTE V INNER JOIN ELECTION E INNER JOIN CANDIDATES C INNER JOIN PARTY P
ON V.ELECTIONID=E.ELECTIONID AND V.CANDIDATEID=C.CANDIDATEID AND V.PARTYID=P.PARTYID
WHERE V.VOTESTATUS='YES'
order by electionid;
```

	BALLOTID	ELECTIONID	ELECTIONNAME	CANDIDATEID	CANDIDATENAME	PARTYID	PARTYNAME
▶	211-00	e01	General Presidential 2012	1001	Joe Biden	p1	Democrats
	411-44	e01	General Presidential 2012	1001	Joe Biden	p1	Democrats
	311-24	e01	General Presidential 2012	1001	Joe Biden	p1	Democrats
	331-00	e01	General Presidential 2012	2001	Donald J.Trump	p2	Republican
	431-41	e01	General Presidential 2012	3001	Ahmed Abdi	p3	Independents
	221-67	e01	General Presidential 2012	2001	Donald J.Trump	p2	Republican
	331-04	e02	General US Senator 2012	1002	Brooks Salazar	p1	Democrats
	211-04	e02	General US Senator 2012	2002	Mike Pence	p2	Republican
	221-68	e02	General US Senator 2012	2002	Mike Pence	p2	Republican
	411-54	e02	General US Senator 2012	2002	Mike Pence	p2	Republican
	431-45	e02	General US Senator 2012	1002	Brooks Salazar	p1	Democrats
	311-36	e02	General US Senator 2012	2002	Mike Pence	p2	Republican
	431-52	e03	General Judge 2012	2003	Rex Tillerson	p2	Republican
	331-05	e03	General Judge 2012	3003	Preeti Shridhar	p3	Independents
	411-69	e03	General Judge 2012	2003	Rex Tillerson	p2	Republican
	221-69	e03	General Judge 2012	1003	Ryan Calkins	p1	Democrats
	311-43	e03	General Judge 2012	2003	Rex Tillerson	p2	Republican
	211-05	e03	General Judge 2012	1003	Ryan Calkins	p1	Democrats
	331-08	e04	Primary State Senator 2...	1004	John Creighton	p1	Democrats
	411-75	e04	Primary State Senator 2...	2004	Steve Mnuchin	p2	Republican
	221-79	e04	Primary State Senator 2...	1004	John Creighton	p1	Democrats
	311-53	e04	Primary State Senator 2...	1004	John Creighton	p1	Democrats

Query to get total no. of votes received by each candidate in each election

```
#get total no. of votes received by each candidate in each election
select v.electionid,e.electionname, v.candidateid, c.candidatename, p.partyname, count(v.candidateid) AS Total_Votes
from vote v INNER JOIN Candidates c INNER JOIN Election e INNER JOIN Party p
ON v.ElectionID=e.electionid AND v.CandidateID=c.candidateid AND v.partyid=p.partyid
where v.candidateid is NOT NULL AND v.VoteStatus='yes'
group by v.electionid, v.CandidateID
order by v.electionID asc, total_votes desc;
```

	electionid	electionname	candidateid	candidatename	partyname	Total_Votes
►	e01	General Presidential 2012	1001	Joe Biden	Democrats	3
	e01	General Presidential 2012	2001	Donald J.Trump	Republican	2
	e01	General Presidential 2012	3001	Ahmed Abdi	Independents	1
	e02	General US Senator 2012	2002	Mike Pence	Republican	4
	e02	General US Senator 2012	1002	Brooks Salazar	Democrats	2
	e03	General Judge 2012	2003	Rex Tillerson	Republican	3
	e03	General Judge 2012	1003	Ryan Calkins	Democrats	2
	e03	General Judge 2012	3003	Preeti Shridhar	Independents	1
	e04	Primary State Senator 2013	1004	John Creighton	Democrats	5
	e04	Primary State Senator 2013	2004	Steve Mnuchin	Republican	1
	e05	Primary County Executive ...	3004	Sonny Perdue	Independents	5
	e05	Primary County Executive ...	2005	Wilbur Ross	Republican	1
	e06	Primary City Council 2013	1005	Lisa Espinosa	Democrats	3
	e06	Primary City Council 2013	3005	Ben Carson	Independents	2
	e07	General US Senator 2014	1002	Brooks Salazar	Democrats	3
	e07	General US Senator 2014	2002	Mike Pence	Republican	1
	e08	General Judge 2014	2003	Rex Tillerson	Republican	2
	e08	General Judge 2014	1003	Ryan Calkins	Democrats	1
	e08	General Judge 2014	3003	Preeti Shridhar	Independents	1
	e09	Primary State Senator 2015	1004	John Creighton	Democrats	3
	e10	Primary County Executive ...	2005	Wilbur Ross	Republican	4
	e11	Primary City Council 2015	1005	Lisa Espinosa	Democrats	3
	e12	General Presidential 2016	1001	Joe Biden	Democrats	3
	e12	General Presidential 2016	2001	Donald J.Trump	Republican	1
	e13	General US Senator 2016	1002	Brooks Salazar	Democrats	3

FUNCTIONS

FUNCTION TO DETERMINE THE INCOME GENERATED BY A CAMPAIGN.

```
DELIMITER ;;  
CREATE FUNCTION Income(  
  a VARCHAR(100),  
  b VARCHAR(100))  
  RETURNS varchar(100) CHARSET utf8  
  BEGIN  
    DECLARE ans VARCHAR(100);  
    SET ans=0;  
    SET ans=a-b;  
    RETURN ans;  
  END ;;  
DELIMITER ;
```

```
SELECT c.campaignid, c.campaignname, a.candidatename, TRUNCATE(Income(c.FundSpent, c.ReceivedDonations), 2) AS INCOME_Million  
FROM Campaign c  
INNER JOIN candidates a  
ON c.candidateid=a.candidateid  
order by income_million desc;
```

	campaignid	campaignname	candidatename	INCOME_Million
▶	j	Fighting For Us	Ryan Calkins	0.29
	a	Telling It Like It Is !	Wilbur Ross	0.15
	l	Live Free	John Creighton	0.14
	o	What Do We Have To Lose	Donald J.Trump	0.02
	c	From Hope to Higher Ground	Rex Tillerson	0.02
	e	People Fighting Back	Ben Carson	0.01
	q	Ready For Change, Ready To Lead	Joe Biden	0.00
	g	Reform, Prosperity, Peace	Preeti Shridhar	-0.02
	m	Right To Rise	Sonny Perdue	-0.06
	p	Citizenship Matters	Ahmed Abdi	-0.08
	r	Make America Great again	Donald J.Trump	-0.08
	i	Hillary For America	Joe Biden	-0.08
	n	It's never too late to do the right t...	Stephine Bow...	-0.09
	k	A Time For Truth	Steve Mnuchin	-0.12
	h	Heal.Inspire.Revive	Mike Pence	-0.14
	f	Stronger Together	Lisa Espinosa	-0.15
	d	Forward Together	Joe Biden	-0.20
	b	Your Future To Believe In	Brooks Salazar	-0.30

PROCEDURES

PROCEDURE TO FIND THE CAMPAIGN DETAILS OF A CANDIDATE

```
DELIMITER $$
CREATE PROCEDURE campaigndetails(IN v varchar(60))
BEGIN
SELECT c.campaignid, c.campaignname,cm.mediaid,mm.name,c.fundspent,c.receiveddonations,
TRUNCATE(Income(c.FundSpent,c.ReceivedDonations),2)
AS INCOME_Million,c.managerid,m.name as Manager_Name,c.noofvolunteers,c.CandidateID,a.candidatename
FROM Campaign c
INNER JOIN candidates_uses_media cm
INNER JOIN candidates a
INNER JOIN campaignManager m
INNER JOIN media mm
ON c.candidateid=a.candidateid AND m.managerid=c.managerid AND mm.MediaID=cm.MediaID AND cm.candidateid=a.CandidateID
where c.candidateid=v
order by campaignid;
END $$
DELIMITER ;
```

```
call campaigndetails(1002);
```

	campaignid	campaignname	mediaid	name	fundspent	receiveddonations	INCOME_Million	managerid	Manager_Name	noofvolunteers	CandidateID	candidatename
▶	b	Your Future To Believe In	media1	BBC	1.45	1.75	-0.30	m2	Kim Ferguson	3400	1002	Brooks Salazar
	b	Your Future To Believe In	media8	The WallStreet Journal	1.45	1.75	-0.30	m2	Kim Ferguson	3400	1002	Brooks Salazar
	b	Your Future To Believe In	media6	WBZ	1.45	1.75	-0.30	m2	Kim Ferguson	3400	1002	Brooks Salazar

PROCEDURE TO FIND THE REVENUE OF THE CAMPAIGN

```
DELIMITER $$
CREATE PROCEDURE campaignrevenue(IN b varchar(60))
BEGIN
SELECT c.campaignid, c.campaignname, a.candidatename,p.partyname,TRUNCATE(Income(c.FundSpent,c.ReceivedDonations),2) AS INCOME_Million
FROM Campaign c
INNER JOIN candidates a
INNER JOIN Party p
ON c.candidateid=a.candidateid AND p.partyid=a.PartyID
WHERE Campaignid= b
order by income_million desc;
END $$
DELIMITER ;
```

```
CALL campaignrevenue('g');
```

	campaignid	campaignname	candidatename	partyname	INCOME_Million
▶	g	Reform, Prosperity,Peace	Preeti Shridhar	Independents	-0.02

PROCEDURE TO FIND THE RESULTS FOR A PARTICULAR ELECTION

```
DELIMITER $$
CREATE PROCEDURE electionresult(IN a varchar(60))
BEGIN
SELECT t.electionid, t.electionname, t.candidateid,t.candidatename,max(t.total)as totalVote, t.candidateid
FROM (SELECT electionid, electionname, candidateid, candidatename, max(total_votes) AS Total
FROM Winner GROUP BY candidateid, electionid) t
WHERE electionid = a
GROUP BY t.electionid;
END $$
DELIMITER ;
```

```
47 • CALL electionresult('e02');
```

```
48
```

Result Grid Filter Rows: <input type="text"/> Export: Wrap Cell Content:						
	electionid	electionname	candidateid	candidatename	totalVote	candidateid
▶	e02	General US Senator 2012	1002	Brooks Salazar	4	1002

TRIGGER

TRIGGER TO CHECK THE PRECINCT ENTERED IS RIGHT OR WRONG

```
#Trigger to check the precinct entered is right
```

```
DELIMITER $$
```

```
CREATE TRIGGER triggervoter
```

```
BEFORE
```

```
INSERT ON Voter_Info
```

```
FOR EACH ROW BEGIN
```

```
IF (NEW.precinctid NOT IN (select precinctid from precinct)) THEN
```

```
SIGNAL SQLSTATE '02000' SET MESSAGE_TEXT = 'Warning: NO SUCH PRECIENT EXISTS';
```

```
END IF;
```

```
END$$
```

```
DELIMITER ;
```

Election Management System

Enter Voter Details:

BallotID:	LastName:	Gender	SSN:
<input type="text" value="211-07"/>	<input type="text" value="Mccarty"/>	<input type="text" value="Male"/>	<input type="text" value="335-69-7543"/>
FirstName:	DateOfBirth:	Street:	PrecinctID:
<input type="text" value="George"/>	<input type="text" value="2001-11-22"/>	<input type="text" value="Church"/>	<input type="text" value="566"/>
	City:	EmailID:	
	<input type="text" value="New York"/>	<input type="text" value="gft@tdy.com"/>	
	State:		
	<input type="text" value="New York"/>		

Add Voter

DataError: 1643 (02000): Warning: NO SUCH PRECIENT EXISTS

VIEWS

VIEW TO DISPLAY VOTES RECEIVED BY EVERY CANDIDATE IN RESPECTIVE ELECTIONS.

#Votes for every candidate

```
CREATE VIEW Winner AS
SELECT v.electionid,e.electionname, v.candidateid, c.candidatename, p.partyname, count(v.candidateid) AS Total_Votes
FROM vote v INNER JOIN Candidates c INNER JOIN Election e INNER JOIN Party p
ON v.ElectionID=e.electionid AND v.CandidateID=c.candidateid AND v.partyid=p.partyid
WHERE v.candidateid is NOT NULL AND v.VoteStatus='yes'
GROUP BY v.electionid, v.CandidateID
ORDER BY v.electionID;
```

```
select * from winner;
select * from winner group by electionid;
```

electionid	electionname	candidateid	candidatename	partyname	Total_Votes
e01	General Presidential 2012	1001	Joe Biden	Democrats	3
e01	General Presidential 2012	2001	Donald J.Trump	Republican	2
e01	General Presidential 2012	3001	Ahmed Abdi	Independents	1
e02	General US Senator 2012	1002	Brooks Salazar	Democrats	2
e02	General US Senator 2012	2002	Mike Pence	Republican	4
e03	General Judge 2012	1003	Ryan Calkins	Democrats	2
e03	General Judge 2012	2003	Rex Tillerson	Republican	3
e03	General Judge 2012	3003	Preeti Shridhar	Independents	1
e04	Primary State Senator 2013	1004	John Creighton	Democrats	5
e04	Primary State Senator 2013	2004	Steve Mnuchin	Republican	1
e05	Primary County Executive ...	2005	Wilbur Ross	Republican	1
e05	Primary County Executive ...	3004	Sonny Perdue	Independents	5
e06	Primary City Council 2013	1005	Lisa Espinosa	Democrats	3
e06	Primary City Council 2013	3005	Ben Carson	Independents	2
e07	General US Senator 2014	1002	Brooks Salazar	Democrats	3
e07	General US Senator 2014	2002	Mike Pence	Republican	1
e08	General Judge 2014	1003	Ryan Calkins	Democrats	1
e08	General Judge 2014	2003	Rex Tillerson	Republican	2
e08	General Judge 2014	3003	Preeti Shridhar	Independents	1
e09	Primary State Senator 2015	1004	John Creighton	Democrats	3
e10	Primary County Executive ...	2005	Wilbur Ross	Republican	4

UPON AGGREGATING BY ELECTION ID:

electionid	electionname	candidateid	candidatename	partyname	Total_Votes
e01	General Presidential 2012	1001	Joe Biden	Democrats	3
e02	General US Senator 2012	1002	Brooks Salazar	Democrats	2
e03	General Judge 2012	1003	Ryan Calkins	Democrats	2
e04	Primary State Senator 2013	1004	John Creighton	Democrats	5
e05	Primary County Executive 2013	2005	Wilbur Ross	Republican	1
e06	Primary City Council 2013	1005	Lisa Espinosa	Democrats	3
e07	General US Senator 2014	1002	Brooks Salazar	Democrats	3
e08	General Judge 2014	1003	Ryan Calkins	Democrats	1
e09	Primary State Senator 2015	1004	John Creighton	Democrats	3
e10	Primary County Executive 2015	2005	Wilbur Ross	Republican	4
e11	Primary City Council 2015	1005	Lisa Espinosa	Democrats	3
e12	General Presidential 2016	1001	Joe Biden	Democrats	3
e13	General US Senator 2016	1002	Brooks Salazar	Democrats	3
e14	General Judge 2016	1003	Ryan Calkins	Democrats	1
e15	Primary State Senator 2017	1004	John Creighton	Democrats	2
e16	Primary County Executive 2017	2004	Steve Mnuchin	Republican	1
e17	Primary City Council 2017	1005	Lisa Espinosa	Democrats	5
e18	General US Senator 2018	1002	Brooks Salazar	Democrats	4
e19	General Judge 2018	1003	Ryan Calkins	Democrats	2
e20	Primary State Senator 2019	1004	John Creighton	Democrats	2
e21	Primary County Executive 2019	2005	Wilbur Ross	Republican	2

VIEW TO DETERMINE THE TOTAL VOTERS(VOTES) IN VARIOUS ELECTIONS

#Total voters for every election

CREATE VIEW totalvoters

AS

```
select v.electionid, e.electionname, count(v.ballotid) as Total_votes |
```

```
from vote v INNER JOIN election e
```

```
ON v.electionid=e.electionid
```

```
where v.votestatus='yes'
```

```
group by v.electionid
```

```
order by v.electionid;
```

```
select * from totalvoters;
```

	electionid	electionname	Total_votes
►	e01	General Presidential 2012	6
	e02	General US Senator 2012	6
	e03	General Judge 2012	6
	e04	Primary State Senator 2013	6
	e05	Primary County Executive 2013	6
	e06	Primary City Council 2013	5
	e07	General US Senator 2014	4
	e08	General Judge 2014	4
	e09	Primary State Senator 2015	3
	e10	Primary County Executive 2015	4
	e11	Primary City Council 2015	3
	e12	General Presidential 2016	4
	e13	General US Senator 2016	5
	e14	General Judge 2016	5
	e15	Primary State Senator 2017	5
	e16	Primary County Executive 2017	5
	e17	Primary City Council 2017	5
	e18	General US Senator 2018	5
	e19	General Judge 2018	4
	e20	Primary State Senator 2019	3
	e21	Primary County Executive 2019	3
	e22	Primary City Council 2019	3
	e23	General Presidential 2020	3
	e24	General US Senator 2020	4
	e25	General Judge 2020	5

It must be noted that aggregates have been used with the views hence not shown separately.

CRUD USING GUI

Election Management System

Enter Voter Details:

BallotID:

211-07

LastName:

MCLAREN

Gender

male

SSN:

729-71-8921

FirstName:

GARY

DateOfBirth:

2001-11-22

Street:

Church St

PrecinctID:

211

City:

New York City

EmailID:

gaute@khw.ha

State:

New York

Add Voter

Successfully added Voter: GARY

211-06	Washington	Agneau	1982-12-25	Male	98516 Bay Center	NewYork City	New York	139-04-5028	211	wagneaua@nasa.gov
211-07	GARY	MCLAREN	2001-11-22	male	Church St	New York City	New York	729-71-8921	211	gaute@khw.ha
211-09	Winnie	Gardiner	1973-12-20	Female	1 Eagle Crest Parkway	NewYork City	New York	292-91-2197	211	wgardiner9@nba.com

Menu

Read

Election Management System

View created tasks

View all Voter details

	BallotID	FirstName	LastName	DateOfBirth	Gender	Street	City
0	211-00	Goldarina	Goulter	1986-08-17	F	2 Brown Lane	NewYork Ci
1	211-04	Darcy	Brokenshaw	1996-01-13	Female	56 Scofield Parkway	NewYork Ci
2	211-05	Dick	Keelin	1983-12-10	Male	24 Sunnyside Road	NewYork Ci
3	211-06	Washington	Agneau	1982-12-25	Male	98516 Bay Center	NewYork Ci
4	211-07	GARY	MCLAREN	2001-11-22	male	Church St	New York C
5	211-09	Winnie	Gardiner	1973-12-20	Female	1 Eagle Crest Parkway	NewYork Ci
6	211-21	Jephthah	Mandrake	1970-09-09	Male	75 Straubel Street	NewYork Ci
7	211-24	Jackie	Trewhitt	1966-02-22	Male	9739 Declaration Avenue	NewYork Ci
8	211-34	Maribel	Fairchild	1959-10-21	Female	85 Warner Pass	NewYork Ci
9	211-52	Talbot	Barkaway	1965-05-01	Male	49 Vera Alley	NewYork Ci

Current Voters

Voter to edit

GEORGE

Ballot ID:

211-07

LastName:

MCLAREN

Gender:

m

SSN:

729-71-8921

FirstName:

GEORGE

DateOfBirth:

2001-11-22

Street:

Church St

PrecinctID:

211

City:

New York City

EmailID:

gaute@khw.ha

State:

New York

GARY UPDATED TO GEORGE

211-00	Goldarina	Goulter	1986-08-17	F	2 Brown Lane	NewYork Ci	New York	729-71-8921	211	gaute@khw.ha
211-07	GEORGE	MCLAREN	2001-11-22	m	Church St	New York City	New York	729-71-8921	211	gaute@khw.ha
211-09	Winnie	Gardiner	1973-12-20	Female	1 Eagle Crest Parkway	NewYork Ci	New York	729-71-8921	211	gaute@khw.ha

Election Management System

Delete created tasks

Current data

Task to Delete

GEORGE

Do you want to delete ::GEORGE

Delete Voter

Voter information has been deleted successfully

Updated data

211-04	Darcy	Brokenshaw	1996-01-13	Female	36 Scottfield Parkway	New York City	New York	842-89-7603	211	dbrokershaw@networksolutions.com
211-05	Dick	Keelin	1983-12-10	Male	24 Sunnyside Road	New York City	New York	318-53-4884	211	dkeelin1@usatoday.com
211-06	Washington	Agneau	1982-12-25	Male	98516 Bay Center	New York City	New York	139-04-5028	211	wagneau@nasa.gov
211-09	Winnie	Gardiner	1973-12-20	Female	1 Eagle Crest Parkway	New York City	New York	292-91-2197	211	wgardiner9@nba.com
211-21	Jephthah	Mandrake	1970-09-09	Male	75 Straubel Street	New York City	New York	459-16-9568	211	jmandrakeh@networksolutions.com