

# US Electoral System Project Report

## DDL:

```
CREATE USER db_admin IDENTIFIED BY db_admin;  
GRANT CONNECT TO db_admin;  
GRANT CREATE SESSION TO db_admin;  
GRANT ALL PRIVILEGES TO db_admin;
```

-- Voter

```
CREATE TABLE voter (  
voter_id VARCHAR2(20) PRIMARY KEY,  
ssn INTEGER,  
license_no VARCHAR2(30),  
first_name CHAR(15),  
last_name CHAR(15),  
citizenship CHAR(1),  
zipcode INTEGER,  
registration_id VARCHAR2(20),  
S_ID VARCHAR(5)  
);
```

-- Social Media

```
CREATE TABLE Social_Media (S_ID varchar(5) PRIMARY KEY,  
username VARCHAR(50),  
platform VARCHAR(10),  
no_of_followers INT,  
count_of_comments INT,  
post_type VARCHAR(10),  
post_link VARCHAR(100),  
date_of_post DATE,  
part_or_individual VARCHAR(10));
```

-- Funds

```
CREATE TABLE Funds (fund_id VARCHAR(10) PRIMARY KEY,  
party_id VARCHAR(10),  
source_of_income VARCHAR(50),  
debited_amount INT,  
credited_amount INT,  
balance INT,  
expense_description VARCHAR(50));
```

```
-- Campaigning_Events
CREATE TABLE Campaigning_Events (event_id VARCHAR(10) PRIMARY KEY,
party_ID VARCHAR(10),
date_of_event DATE,
location VARCHAR(30),
type_of_event VARCHAR(40) ,
amount_used INT);
```

```
-- Party
Create table party
(party_id varchar(10) PRIMARY KEY,
party_name char(20),
treasurer_id VARCHAR(20)
);
```

```
-- Results
Create table results
(treasurer_id varchar(20) PRIMARY KEY,
results char(10) ,
vote_term INTEGER NOT NULL,
candidate_id varchar(10) NOT NULL,
registration_number varchar(20) NOT NULL,
bank_account varchar(20) NOT NULL,
tax_id varchar(20) NOT NULL,
event_id varchar(10) NOT NULL
);
```

```
-- Vote_detail
CREATE TABLE vote_detail (
v_detail_id    INTEGER PRIMARY KEY,
photo_id       CHAR(1),
vote_date      DATE,
vote_type      CHAR(20),
voter_id       VARCHAR2(20)
);
```

```
-- v_background_ck
CREATE TABLE v_background_ck (
registration_id VARCHAR2(20) PRIMARY KEY,
state_id        VARCHAR2(25) NOT NULL,
age INTEGER,
```

```

country_of_birth char(50) ,
address_current VARCHAR2(100) NOT NULL,
address_past VARCHAR2(100) NOT NULL,
felony_record CHAR(1)
);

```

```

-- felony_rc
CREATE TABLE felony_rc (
felony_id VARCHAR2(20) PRIMARY KEY,
currently_incarnated CHAR(1),
incarnation_period INT,
pardon_restored CHAR(1),
voter_id VARCHAR2(20)
);

```

```

-- candidate
Create table candidate
(candidate_id varchar(30) PRIMARY KEY,
fname char(20) NOT NULL,
lname char(20) NOT NULL,
gender char(5) NOT NULL,
party_id varchar(10) NOT NULL,
party char(20),
c_state char(20) ,
status char(20) NOT NULL,
dob date NOT NULL,
register_id varchar(20) NOT NULL
);

```

```

-- c_background_check
CREATE TABLE c_background_check
(
register_id VARCHAR2(10),
candidate_id VARCHAR2(10 ) NOT NULL,
country_of_birth CHAR(20 ) NOT NULL,
assets VARCHAR2(20 ),
address VARCHAR2(100 ),
terms_served NUMBER(*,0) NOT NULL,
post CHAR(90 ),
yrs_of_residence NUMBER(2,0),
c_felony CHAR(5 ) NOT NULL,
PRIMARY KEY (register_id)
);

```

```

-- house_rep
CREATE TABLE house_rep (
  rep_id VARCHAR2(20) PRIMARY KEY,
  rep_name CHAR(30),
  party_id VARCHAR2(25) NOT NULL,
  zipcode INTEGER NOT NULL,
  district CHAR(50),
  r_age INTEGER,
  r_yrs_of_ctzn INTEGER,
  r_state_add VARCHAR2(60),
  r_term INTEGER,
  state_id VARCHAR2(25),
  r_address VARCHAR2(100)
);

-- state
CREATE TABLE state (
  state_id VARCHAR2(25) PRIMARY KEY,
  state_name CHAR(30) NOT NULL,
  population INTEGER NOT NULL,
  number_of_representatives INTEGER NOT NULL
);

-- senate
CREATE TABLE senate (
  senate_id VARCHAR2(20) PRIMARY KEY,
  senate_name CHAR(20) NOT NULL,
  party_id VARCHAR2(25) NOT NULL,
  s_age INTEGER NOT NULL,
  s_yrs_of_ctzn INTEGER NOT NULL,
  resident_state VARCHAR2(30) NOT NULL
);

-- state_senate
CREATE TABLE state_senate(
  state_id VARCHAR2(25) NOT NULL,
  senate_id VARCHAR2(20) NOT NULL);

```

```

ALTER TABLE Funds
ADD FOREIGN KEY (party_id) REFERENCES party(party_id);

```

```

ALTER TABLE Campaigning_Events
ADD FOREIGN KEY (party_id) REFERENCES party(party_id);

```

```
ALTER TABLE house_rep
ADD FOREIGN KEY (state_id) REFERENCES state(state_id);
```

```
ALTER TABLE state_senate
ADD FOREIGN KEY (state_id) REFERENCES state(state_id);
```

```
ALTER TABLE state_senate
ADD FOREIGN KEY (senate_id) REFERENCES senate(senate_id);
```

```
ALTER TABLE candidate
ADD FOREIGN KEY (party_id) REFERENCES party(party_id);
```

```
ALTER TABLE candidate
ADD FOREIGN KEY (register_id) REFERENCES c_background_check(register_id);
```

```
ALTER TABLE C_BACKGROUND_CHECK
ADD FOREIGN KEY (candidate_id) REFERENCES candidate(candidate_id);
```

```
ALTER TABLE party
ADD FOREIGN KEY (treasurer_id) REFERENCES results(treasurer_id);
```

```
ALTER TABLE voter
ADD FOREIGN KEY (registration_id) REFERENCES v_background_ck(registration_id);
```

```
ALTER TABLE voter
ADD FOREIGN KEY (s_id) REFERENCES Social_media(s_id);
```

```
ALTER TABLE vote_detail
ADD FOREIGN KEY (voter_id) REFERENCES voter(voter_id);
```

```
ALTER TABLE felony_rc
ADD FOREIGN KEY (voter_id) REFERENCES voter(voter_id);
```

```
CREATE VIEW voter_view AS
SELECT * FROM voter;
```

```
CREATE VIEW democratic_party_view AS
```

```
SELECT c.candidate_id,c.fname as "First name", c.lname as "Last  
Name",c.Gender,c.Party_id,c.c_state,c.dob,c.register_id,p.party_name,ce.date_of_event,ce.loc  
ation,  
ce.amount_used,ce.type_of_event  
FROM candidate c, party p, campaigning_events ce  
where c.party_id='D_01' OR p.party_id='D_01' OR ce.party_id='D_01' ;
```

```
CREATE VIEW independent_party_view AS  
SELECT c.candidate_id,c.fname as "First name", c.lname as "Last  
Name",c.Gender,c.Party_id,c.c_state,c.dob,c.register_id,p.party_name,ce.date_of_event,ce.loc  
ation,  
ce.amount_used,ce.type_of_event  
FROM candidate c, party p, campaigning_events ce  
where c.party_id LIKE 'I%' OR p.party_id LIKE 'I%' OR ce.party_id LIKE 'I%' ;
```

```
CREATE VIEW republic_party_view AS  
SELECT c.candidate_id,c.fname as "First name", c.lname as "Last  
Name",c.Gender,c.Party_id,c.c_state,c.dob,c.register_id,p.party_name,ce.date_of_event,ce.loc  
ation,  
ce.amount_used,ce.type_of_event  
FROM candidate c, party p, campaigning_events ce  
where c.party_id='R_01' OR p.party_id='R_01' OR ce.party_id='R_01' ;
```

```
CREATE VIEW others_party_view AS  
SELECT c.candidate_id,c.fname as "First name", c.lname as "Last  
Name",c.Gender,c.Party_id,c.c_state,c.dob,c.register_id,p.party_name,ce.date_of_event,ce.loc  
ation,  
ce.amount_used,ce.type_of_event  
FROM candidate c, party p, campaigning_events ce  
where c.party_id='O_01' OR p.party_id='O_01' OR ce.party_id='O_01' ;
```

```
CREATE VIEW candidate_view AS  
SELECT c.candidate_id,c.fname as "First name", c.lname as "Last  
Name",c.Gender,c.Party_id,c.c_state,c.dob,c.register_id  
FROM candidate c;
```

```
CREATE VIEW senate_view AS  
SELECT * from senate;
```

```
CREATE VIEW representative_view AS  
SELECT * from house_rep;
```



## **DML:**

```
SELECT * FROM c_background_check;
```

REGISTER_ID	CANDIDATE_ID	COUNTRY_OF_BIRTH	ASSETS	ADDRESS	TERMS_SERVED	POST
1 NY_212110	C_00037	American	875758.0	(516) 569-7129 777 W Broadway Woodmere, New York(NY), 11598	0	Former Attorney General of the U
2 OR_768444	C_00038	American	9090909.0	247 NE Yamhill St Sheridan, Oregon(OR), 97378	0	United States Senator
3 NY_213456	C_00039	American	1345245.0	7618 69th Pl Ridgewood, New York(NY), 11385	0	United States Senator
4 DC_100000	C_00001	American	\$1.3M	13th Street Business Center, 601 13th Street,DC	2	Senator
5 IN_123456	C_00002	American	700000.0	1571 E Dutch Creek Rd Pekin, Indiana(IN), 47165	1	Mayor
6 TX_234567	C_00003	American	100000.0	7729 Lees Creek Dr. Houston, TX 77022	0	Former United States Secretary of
7 NJ_675435	C_00004	American	550000.0	4704 Fairfax Drive, Bayville, NJ-08721	2	United States Representative
8 LE_876134	C_00005	American	2000256.0	312 Alamaha St #G Kahului, Hawaii(HI), 96732	1	U.S. Representative
9 NY_735198	C_00006	American	863419.0	8 Oakland St. Bronx, NY 10460	0	United States Senator
10 CA_098156	C_00007	American	910835.0	9333 Alton Lane Los Angeles, CA 90003	2	United States Senator
11 PA_586235	C_00008	American	700001.0	3334 Wilmington Rd New Castle, Pennsylvania(PA), 16105	1	Former Governor of Colorado
12 WA_263725	C_00009	American	829027.0	One Micro Soft Way Redmond, Washington(WA), 98052	0	Governor of Washington

SELECT \* FROM campaigning\_events;

EVENT_ID	PARTY_ID	DATE_OF_EVENT	LOCATION	TYPE_OF_EVENT	AMOUNT_USED
1 E_01	D_01	10-NOV-20	California	Posters	200
2 E_02	D_01	03-SEP-20	All States	radio	150
3 E_03	I_01	20-MAY-20	All States	TV announcements	300
4 E_04	I_01	18-DEC-20	Massachusetts	Press Conferences	400
5 E_05	R_01	19-MAR-20	New York	Stunts	100
6 E_06	R_01	11-MAR-20	Vermont	Demonstrations	500
7 E_07	R_01	19-AUG-20	Maine	Rallies	200
8 E_08	D_01	31-MAY-20	Illinois	Marches	200
9 E_09	D_01	12-NOV-20	Arizona	Initiating Community Dialogues	250
10 E_10	I_01	26-MAY-20	Iowa	Organize Community Events	300
11 E_11	I_01	22-DEC-20	Washington	Private House Parties	500
12 E_12	D_01	27-MAR-20	All States	Distribution of Campaign Merchandise	600

SELECT \* FROM candidate;

CANDIDA...	FNAME	LNAME	GENDER	PARTY_ID	PARTY	C_STATE	STATUS	DOB	REGISTER_ID
1 C_00001	cory	booker	M	D_01	democrat	NJ	Running	27-APR-69	A123762098
2 C_00002	pete	buttigieg	Other	D_01	democrat	IND	Running	19-JAN-82	A123762098
3 C_00003	julian	castro	M	D_01	democrat	CA	Running	16-SEP-74	A123762098
4 C_00004	john	delaney	M	D_01	democrat	MARYLAND	Running	16-APR-63	A123762098
5 C_00005	tulsi	gabbard	F	D_01	democrat	hawaii	Running	12-APR-81	A123762098
6 C_00006	kirsten	gillibrand	F	D_01	democrat	NY	Running	09-DEC-66	A123762098
7 C_00007	kamala	harris	F	D_01	democrat	CA	Running	20-OCT-64	A123762098
8 C_00008	john	hickenlooper	M	D_01	democrat	CO	Running	07-FEB-52	A123762098
9 C_00009	jay	inslee	M	D_01	democrat	WA	Running	09-FEB-51	A123762098
10 C_00010	amy	klobuchar	F	D_01	democrat	minnesota	Running	25-MAY-60	A123762098
11 C_00011	bernie	sanders	M	D_01	democrat	vermont	Running	08-SEP-41	A123762098
12 C_00012	elizabeth	warren	F	D_01	democrat	MA	Running	08-JUL-52	A123762098
13 C_00013	Marianne	Williamson	F	D_01	democrat	TX	Running	08-JUL-52	A123762098
14 C_00014	Andrew	Yang	M	D_01	democrat	NY	Running	13-JAN-75	A123762098
15 C_00015	Donald J	Trump	M	R_01	Republican	NY	Running	14-JUN-46	As98273672
16 C_00016	William F.	Weld	M	R_01	Republican	NY	Running	31-JUL-45	As98273672

SELECT \* FROM felony\_rc;



	FELONY_ID	CURRENTLY_INCARNATED	INCARNATION_PERIOD	PARDON_RESTORED	VOTER_ID
1	B5	N	10	Y	IO88921
2	C1	Y	5 (null)		VT96102
3	C2	N	10 (null)		AZ99991

SELECT \* FROM funds;

	FUND_ID	PARTY_ID	SOURCE_OF_INCOME	DEBITED_AMOUNT	CREDITED_AMOUNT	BALANCE	EXPENSE_DESCRIPTION
1	F01	D_01	Trade unions	200	100000	99800	Posters
2	F02	D_01	Donations	150	100000	99850	radio
3	F03	I_01	Donations	300	100000	99700	TV announcements
4	F04	I_01	Donations	400	100000	99600	Press Conferences
5	F05	R_01	Wealthy individual Funds	100	100000	99900	Stunts
6	F06	R_01	Trade unions	500	100000	99500	Demonstrations
7	F07	R_01	Trade unions	200	100000	99800	Rallies
8	F08	D_01	Wealthy individual Funds	200	100000	99800	Marches
9	F09	D_01	Interest groups	250	100000	99750	Initiating Community Dialogues
10	F10	I_01	Interest groups	300	100000	99700	Organize Community Events
11	F11	I_01	Professional Organizations	500	100000	99500	Private House Parties
12	F12	D_01	Professional Organizations	600	100000	99400	Distribution of Campaign Merchandise
13	F13	D_01	Government Subsidies	950	100000	99050	Press Media
14	F14	I_01	Government Subsidies	1330	100000	98670	Press Media
15	F15	R_01	Government Subsidies	690	100000	99310	Press Media

SELECT \* FROM house\_rep;

	REP_ID	REP_NAME	PARTY_ID	ZIPCODE	DISTRICT	R_AGE	R_YRS_OF_CTZN	R_STATE_ADD	R_TERM	STATE_ID
1	3507	Michelle Pradeep	R_01	27039	North Stearmil	20	5	Oregon	0 305	1
2	3517	Archicha Pradeep	D_01	27039	North Stearmil	30	10	Oregon	0 392	1
3	9334	Ilona Doering	D_01	90019	Lower North Dis	50	30	California	0 267	7
4	6491	Peter Gonzales	R_01	90019	Lower North Dis	35	10	California	0 267	9
5	2344	Jake Jackman	R_01	66062	Plititalf Town	33	11	California	0 267	9
6	9527	Juana Bates	D_01	66062	Plititalf Town	40	20	California	0 267	1
7	7274	Vincent Gibson	R_01	92647	Degop West	51	40	California	0 267	8
8	9043	Cary Simon	D_01	92647	Degop West	30	12	California	0 267	7
9	8323	Ken Page	D_01	86015	Bayside Zot	31	19	Arizona	0 392	7
10	7672	Vera Myers	R_01	86015	Bayside Zot	60	30	Arizona	0 392	9
11	5264	Mathew Yates	R_01	32232	Fort Salmoosk	34	10	Arizona	0 392	9
12	3712	Gretchen Ruiz	D_01	32232	Fort Salmoosk	28	18	Arizona	0 392	1
13	7956	Chanelle Manz	D_01	27039	North Stearmil	34	13	Oregon	0 305	6
14	7793	Misty Precourt	R_01	27039	North Stearmil	47	38	Oregon	0 305	9
15	7301	Tim Donofrio	D_01	77009	Glannund Bazaar	55	20	Texas	0 259	3
16	4198	Nada Brier	R_01	77009	Glannund Bazaar	48	17	Texas	0 259	4

SELECT \* FROM party;

	⚡ PARTY_ID	⚡ PARTY_NAME	⚡ TREASURER_ID
1	D_01	Democratic	TRD_76234
2	R_01	Republic	TRR_87234
3	I_01	Independent1	TRI_98790
4	I_02	Independent2	TR2_98767
5	O_01	Others	TRO_8723

SELECT \* FROM results;

	⚡ TREASURER_ID	⚡ RESULTS	⚡ VOTE_TERM	⚡ CANDIDATE_ID	⚡ REGISTRATION_NUMBER	⚡ BANK_ACCOUNT	⚡ TAX_ID	⚡ EVENT_ID
1	TRD_76234	lost	2016	C_00035	A123762098	123456123452	12-3456789	E_01
2	TRR_87234	Won	2016	C_00015	As98273672	787333090823	15-64729283	E_05
3	TRD_76235	Won	2008	c_00040	A123762098	123456123452	12-3456789	E_02
4	TRR_87236	Lost	2012	C_00041	As98273672	787333090823	15-64729283	E_06
5	TRR_87237	Lost	2008	C_00042	As98273672	787333090823	15-64729283	E_07
6	TRR_87238	Won	2004	C_00043	As98273672	787333090823	15-64729283	E_05
7	TRD_76239	Lost	2000	C_00044	A123762098	123456123452	12-3456789	E_08
8	TRD_76240	Lost	2004	C_00030	A123762098	123456123452	12-3456789	E_09
9	TRD_76256	Won	2012	c_00040	A123762098	123456123452	12-3456789	E_12
10	TRR_87256	Won	2000	C_00043	As98273672	787333090823	15-64729283	E_06

SELECT \* FROM senate;

	⚡ SENATE_ID	⚡ SENATE_NAME	⚡ PARTY_ID	⚡ S_AGE	⚡ S_YRS_OF_CTZN	⚡ RESIDENT_STATE
1	29439	Wallace Davis	D_01	42	12	california
2	25735	Mercedes Richards	R_01	51	22	california
3	92657	Ed Robbins	D_01	50	32	arizona
4	86203	Edgar Ross	R_01	58	44	arizona
5	17645	Charlie Bowen	D_01	74	43	oregon
6	11859	Gerardo Lynch	R_01	47	22	oregon
7	25117	Beulah Boyd	D_01	50	11	texas
8	74986	Lance Clark	R_01	74	44	texas
9	29131	Mandy Mathis	D_01	42	33	florida
10	47199	Andrew Watson	R_01	43	21	florida
11	30119	Paula Patton	D_01	43	23	minnesota
12	71699	Bennie Lowe	R_01	44	10	minnesota
13	18484	Mattie Jefferson	D_01	50	12	kansas
14	15668	Lindsay Ballard	R_01	34	23	kansas
15	64918	Felix Neal	D_01	32	10	colorado
16	73906	Evan Hunt	R_01	49	32	colorado
17	59932	Alfred McLaughlin	D_01	73	45	iowa

SELECT \* FROM social\_media;

S_ID	USERNAME	PLATFORM	NO_OF_FOLLOWERS	COUNT_OF_COMMENTS	POST_TYPE	POST_LINK	DATE
1 S_01	johndeanley@abc.com	facebook	357000	9249	video	https://www.facebook.com/videos/1/UzpfSTE3/	19-FEB
2 S_02	johndeanley@abc.com	twitter	14400	1149	tweet	https://twitter.com/johndeanley	25-DEC
3 S_03	johndeanley@abc.com	instagram	2100	6729	image	https://www.instagram.com/p/BwBeWz6/	23-SEP
4 S_04	theindependent@abc.com	facebook	1900000	6963	video	https://www.facebook.com/videos/2/UzpfSTeqw45/	31-MAY
5 S_05	theindependent@abc.com	twitter	160000	8511	tweet	https://twitter.com/theindependent	17-JUN
6 S_06	theindependent@abc.com	instagram	230000	2417	video	https://www.instagram.com/v/afGwhsdsg8/	11-JUN
7 S_07	therepublic@abc.com	facebook	170000	4485	image	https://www.facebook.com/photo.php?fbid=123&set=pcb.13&type=3&theater	07-JUL
8 S_08	therepublic@abc.com	twitter	250943	261	tweet	https://twitter.com/therepublic	22-APR
9 S_09	therepublic@abc.com	instagram	435265	5156	image	https://www.instagram.com/photo.php?fbid=14&set=pcb.14&type=3&theater	31-MAY
10 S_10	thedemocratic@abc.com	facebook	3465736	7175	video	https://www.facebook.com/videos/3/UzpfSTE8/	31-MAY
11 S_11	thedemocratic@abc.com	twitter	1235534	9520	tweet	https://twitter.com/thedemocratic	01-MAY
12 S_12	thedemocratic@abc.com	instagram	2315787	1749	video	https://www.instagram.com/v/aDAGDhsg4/	08-MAR
13 S_13	Hale.m19@gmail.com	instagram	(null)	354	image	https://www.instagram.com/p/BwBeWz6/	27-MAR
14 S_14	Dwin@yahoo.com	instagram	(null)	5657	image	https://www.instagram.com/p/BwBsdgdf4/	08-MAR
15 S_15	just@twitter.com	facebook	(null)	45	image	https://www.facebook.com/photo.php?fbid=4&set=pcb.4&type=3&theater	19-AUG
16 S_16	a.joy96@gmail.com	instagram	(null)	45	image	https://www.instagram.com/p/BwBrtwr8/	31-MAY

SELECT \* FROM state;

STATE_ID	STATE_NAME	POPULATION	NUMBER_OF_REPRESENTATIVES
1 267	california	40017007	53
2 392	arizona	7231526	2
3 305	oregon	4256350	5
4 259	texas	29104064	36
5 309	florida	21640022	27
6 316	minnesota	5679718	8
7 276	kansas	2923907	4
8 177	colorado	5761252	7
9 433	iowa	3175395	4
10 327	north dakota	760077	1
11 280	wisconsin	5840615	2
12 231	illinois	12734617	18
13 417	vermont	626299	1
14 153	massachusetts	6932015	9
15 292	maine	1347257	2
16 148	new york	19875625	2
17 567	territory	200001	5

SELECT \* FROM state\_senate;

	STATE_ID	SENATE_ID
1	267	29439
2	267	25735
3	392	92657
4	392	86203
5	305	17645
6	305	11859
7	259	25117
8	259	74986
9	309	29131
10	309	47199
11	316	30119
12	316	71699
13	276	18484
14	276	15668
15	177	64918
16	177	73906
17	433	59932

SELECT \* FROM v\_background\_ck;

REGISTRATION_ID	STATE_ID	AGE	COUNTRY_OF_BIRTH	ADDRESS_CURRENT	ADDRESS_PAST	FELC
1	ABY859	153PRF	28 United States	34 XX Rd ,Chestnuthill, MA	34 XX Rd ,Chestnuthill, MA	N
2	9IYB69	327WEX	44 United States	422 string st,Fargo, ND	Apt 34,DF lane Fargo, ND	N
3	TE9670	327HEN	17 United States	34 East street,Grand Forks, ND	NA	N
4	T95NG1	177TBS	18 Italy	23,Babson rd, Denver,CO	31 Cortese Circle, CA	N
5	GTE598	276HHS	64 United States	plot 15 Hill ave Olathe,KS	NA	N
6	08KJ92	433ZXE	89 United States	36 st.paul street, Clio,IO	36 st.paul street, Clio,IO	Y
7	296FOD	153KDE	47 United States	3, VTR Rd,Quincy MA	Apt 67,JU Rd, Dallas,TX	N
8	OP78HT	417GBB	55 United States	552 lane, white river junction, VT	134 Hurtig Hill, Waltham, MA	Y
9	HYI685	148LJW	23 Brazil	Apt no: 45, Yonk Rd, Staten Island, NY	705 coaching lane, Albuquerque, NM	N
10	POU896	231VRO	40 United States	90 Franciso road,Oak park, IL	Apt no: 54, Robert Hill, Suffolk, NY	N
11	GS7892	267ABC	58 United States	Plot 50, Kindy Street, Long Beach, CA	Plot 50, Kindy Street, Long Beach, CA	N
12	BDU359	267OIU	79 United States	45 Cortese Circle, San Jose, CA	678, Jean Palace Road, Stockton,CA	N
13	EDPO56	392CUY	65 United States	606 Brooke Chanel,Pheonix, AZ	67, Gay Road, Atlanta, GA	Y
14	DF692F	305FCK	43 China	44 Pandos Street,Beavertown, OR	44 Pandos Street,Beavertown, OR	N
15	YK6903	259AQN	31 United States	Plot: 90, Opal Inn,Dallas, TX	34 East street,Grand Forks, ND	N
16	FR0835	292HOO	33 Mexico	356 queens road, Leeds, MN	356 queens road, Leeds, MN	N

SELECT \* FROM vote\_detail;

	V_DETA...	PHOTO_ID	VOTE_DATE	VOTE_TYPE	VOTER_ID
1	959 Y		03-NOV-20	in person	MA02116
2	159 Y		03-NOV-20	in person	ND45890
3	875 Y		03-NOV-20	in person	ND58763
4	845 N		25-OCT-20	mail	CO25493
5	5269 Y		03-NOV-20	in person	KS78925
6	879 Y		03-NOV-20	in person	IO88921
7	549 Y		15-OCT-20	absentee	MA98635
8	8791 Y		03-NOV-20	in person	VT96102
9	249 Y		03-NOV-20	in person	NY45987
10	703 Y		03-NOV-20	in person	IL88997
11	548 Y		03-NOV-20	in person	CA30829
12	8970 Y		03-NOV-20	in person	CA55836
13	4596 Y		03-NOV-20	in person	AZ99991
14	7589 Y		03-NOV-20	in person	OR55537
15	8596 Y		03-NOV-20	in person	TX59137
16	5487 Y		03-NOV-20	in person	MN22013
17	444 Y		03-NOV-20	in person	MI77660

SELECT \* FROM voter;

VOTER_ID	SSN	LICENSE_NO	FIRST_NAME	LAST_NAME	CITIZENSHIP	ZIPCODE	REGISTRATION_ID	S_ID
1 MA02116	28649875	T78560NU	Mary	Hale	y	2467 ABY859		S_13
2 ND45890	875009756	YI47530SR	Den	Winston	y	58103 9IYB69		S_14
3 ND58763	(null)	(null)	Sean	Paul	y	58201 TE9670		S_15
4 CO25493	899472364	(null)	Aislyn	Joy	y	80022 T95KG1		S_16
5 KS78925	596176798	IO94BO83	Wang	Troy	y	66062 GTE598		S_17
6 IO88921	503568871	(null)	Ester	Stanley	y	50052 O8KJ92		S_18
7 MA98635	158223679	YU75980D	Tom	Mathews	y	2269 296POD		S_19
8 VT96102	897469978	(null)	Kelly	Winston	y	5009 OP78HT		S_20
9 NY45987	102006718	9057BKSH	Sean	Paul	y	10306 HYI685		S_21
10 IL88997	455690057	IEHLOEY3	Toby	Clarkson	y	60301 POU896		S_22
11 CA30829	303995420	CEU2785	Mary	Fay	y	90832 GS7892		S_23
12 CA55836	(null)	12345DF	Tina	Moe	y	95110 BDU359		S_24
13 AZ99991	843672008	UI80P4N2	Jin	Zheng	y	85085 EDPO56		S_25
14 OR55537	876106579	JUINW45	Xuing	wou	y	97005 DF692F		S_26
15 TX59137	(null)	09VBTY61	Shiv	Patel	y	75243 YK6903		S_27
16 MN22013	329879664	JD0986NW	Cherry	Francis	y	4263 FRO835		S_28
17 MI77660	(null)	OKTRBWL1	Mathews	Rondo	y	55440 DU9381		S_29



## SQL Reports:

### 1. Listing out voters who are at least 18 years of age and eligible to vote

```
126 select * from v_background_ck where age>=18;
127
128
129
130
```

REGISTRATION_ID	STATE_ID	AGE	COUNTRY_OF_BIRTH	ADDRESS_CURRENT	ADDRESS_PAST
1 ABY859	153PRF	28	United States	34 XX Rd ,Chestnuthill, MA	34 XX Rd
2 9IYB69	327WEX	44	United States	422 string st,Fargo, ND	Apt 34,D
3 T95KG1	177TBS	18	Italy	23,Babson rd, Denver,CO	31 Corte
4 GTE598	276HHS	64	United States	plot 15 Hill ave Olathe,KS	NA
5 O8KJ92	433ZXE	89	United States	36 st.paul street, Cllo,IO	36 st.ba
6 296POD	153KDE	47	United States	3, VTR Rd,Quincv MA	Apt 67,J
7 OP78HT	417GBB	55	United States	552 lane, white river junction, VT	134 Hurt
8 HYI685	148LJW	23	Brazil	Apt no: 45, Yonk Rd, Staten Island, NY	705 coac
9 POU896	231VRO	40	United States	90 Franciso road,Oak park, IL	Apt no:
10 GS7892	267ABC	58	United States	Plot 50, Kindy Street, Long Beach, CA	Plot 50,
11 BDU359	267OIU	79	United States	45 Cortese Circle, San Jose, CA	678, Jea
12 EDP056	392CUY	65	United States	606 Brooke Chanel,Pheonix, AZ	67, Gav
13 DF692F	305FCK	43	China	44 Pandos Street,Beavertown, OR	44 Pandc
14 YK6903	259AON	31	United States	Plot: 90, Opal Inn,Dallas, TX	34 East
15 FRO835	292HOO	33	Mexico	356 queens road, Leeds, MN	356 quee
16 DU9381	316ARV	19	United States	707 Richards Street, Minneapolis,MI	NA
17 NW9419	309TAJ	39	India	Apt 20,Puppet Street,Jacksonville, FL	655 Pati
18 25P903	256ERD	56	Korea	234 Korea town, Austin, TX	Apt 23 S
19 DTJW68	177ERD	78	United States	Apt 21,Aurora,CO	Apt 21,A
20 TM0294	280DIN	55	India	345 Saint Rd, Green Bav, WI	345 Sain

### 2. Listing out the rogue voter (i.e) not a citizen of the United States

```
128
129 select b.first_name, b.last_name, a.registration_id from v_background_ck a join voter b
130 on a.registration_id=b.registration_id
131 where country_of_birth NOT IN ('United States') AND citizenship='N'
132
```

FIRST_NAME	LAST_NAME	REGISTRATION_ID
1 Juliana	Pong	25P903

### 3. Listing voter who is not satisfying the age criteria, therefore ineligible to vote

```
139
140 select * from v_background_ck where age<18;
141
```

REGISTRATION_ID	STATE_ID	AGE	COUNTRY_OF_BIRTH	ADDRESS_CURRENT	ADDRESS_PAST	FELONY_RECORD
1 TE9670	327HEN	17	United States	34 East street,Grand Forks, ND	NA	N

#### 4. Listing the felony voters

##### a. Listing Felony from the state of Vermont who are eligible to vote

14	
15	<code>select b.first_name    'is eligible to vote' from felony_rc a join voter b</code>
16	<code>on a.voter_id= b.voter_id where b.voter_id like 'VT%'</code>
17	
Query Result x	
All Rows Fetched: 1 in 0.002 seconds	
B.FIRST_NAME  'ISELIGIBLETOVOTE'	
1	Kelly is eligible to vote

##### b. Listing a felony voters who have seeked pardon and eligible to vote in the state of Iowa

```
select * from felony_rc where pardon_restored = 'Y' AND pardon_restored IS NOT NULL
UNION
select * from felony_rc where voter_id LIKE 'IO%';
```

##### c. Listing the voter from the state of Arizona who has lost his eligibility to vote due to felony

4	
5	<code>select b.first_name    'is not eligible to vote' from felony_rc a join voter b</code>
6	<code>on a.voter_id= b.voter_id where b.voter_id like 'AZ%'</code>
7	
3	
Query Result x	
All Rows Fetched: 1 in 0.002 seconds	
B.FIRST_NAME  'ISNOTELIGIBLETOVOTE'	
1	Jin is not eligible to vote

## 5. Listing voters whose country of birth is not United States but are citizens of US who are eligible to vote

```
125 |select b.first_name, b.last_name, a.registration_id from v_background_ck a join voter b
126 |on a.registration_id=b.registration_id
127 |where country_of_birth NOT IN ('United States') AND citizenship='Y' OR citizenship='y'
128 |
129 |
```

	FIRST_NAME	LAST_NAME	REGISTRATION_ID
1	Marv	Hale	ABY859
2	Den	Winston	9IYB69
3	Sean	Paul	TE9670
4	Aislvn	Jov	T95KG1
5	Wang	Trov	GTE598
6	Ester	Stanley	08KJ92
7	Tom	Mathews	296POD
8	Kelly	Winston	OP78HT
9	Sean	Paul	HYI685
10	Tobv	Clarkson	POU896
11	Marv	Fav	GS7892
12	Tina	Moe	BDU359
13	Jin	Zheng	EDPO56
14	Xuing	wou	DF692F
15	Shiv	Patel	YK6903
16	Cherry	Francis	FRO835
17	Mathews	Rondo	DU9381
18	Purnima	Rao	NW9419
19	Padma	Aniali	TM0294

## 6. Listing candidates who are not eligible to contest in the elections as their country of birth is not United States

```
164 |select * from c_background_check where country_of_birth NOT IN ('America');
165 |
```

	REGISTER_ID	CANDIDATE_ID	COUNTRY_OF_BIRTH	ASSETS	ADDRESS	TERMS_SERVED	POST
1	IL 897090	C 00035	India	100009.0	1155 Sterling Ave #107 Palatine, Illinois(IL), 60067	0	Former F
2	CA 986000	C 00036	Germanv	7698709.0	521 W Bardslev Ave Tulare, California(CA), 93274	0	Mayor of
3	NY 213456	C 00039	Italy	1345245.0	7618 69th Pl Riddewood, New York(NY), 11385	0	United S

## 7. Listing the candidates who are eligible to vote

```
164 |select * from c_background_check where country_of_birth IN ('America');|
165 |
```

	REGISTER_ID	CANDIDATE_ID	COUNTRY_OF_BIRTH	ASSETS	ADDRESS	TERMS_S
1	DC 100000	C 00001	America	\$1.3M	13th Street Business Center, 601 13th Street,DC	
2	IN 123456	C 00002	America	700000.0	1571 E Dutch Creek Rd Pekin, Indiana(IN), 47165	
3	TX 234567	C 00003	America	100000.0	7729 Lees Creek Dr. Houston, TX 77022	
4	NJ 675435	C 00004	America	550000.0	4704 Fairfax Drive, Bayville, NJ-08721	
5	LE 876134	C 00005	America	2000256.0	312 Alamaha St #G Kahului, Hawaii(HI), 96732	
6	NY 735198	C 00006	America	863419.0	8 Oakland St. Bronx, NY 10460	
7	CA 098156	C 00007	America	910835.0	9333 Alton Lane Los Angeles, CA 90003	
8	PA 586235	C 00008	America	700001.0	3334 Wilmington Rd New Castle, Pennsylvania(PA), 16105	
9	WA 263725	C 00009	America	829027.0	One Micro Soft Way Redmond, Washington(WA), 98052	
10	MN 354123	C 00010	America	7778980.0	Po Box 578 Alexandria, Minnesota(MN), 56308	
11	NY 272462	C 00011	America	739263.0	NY606 Rosewood St. Poughkeepsie, NY 12601	
12	OK 789790	C 00012	America	7890000.0	21300 Bowman Rd Luther, Oklahoma(OK), 73054	
13	TX 120000	C 00013	America	5776677.0	989 W. Clav Ave. San Antonio, TX 78210	
14	NY 670000	C 00014	America	6789091.0	20 Halifax Road Brooklwn, NY 11214	
15	NY 909099	C 00015	America	909000.0	9445 Charles Lane Rego Park, NY 11374	
16	NY 120000	C 00016	America	122909.0	61 Smith Store Ave. Fairport, NY 14450	
17	PA 200023	C 00017	America	600000.0	4591 Jasmine Dr Center Valley, Pennsylvania(PA), 18034	
18	MT 576767	C 00018	America	4000000.0	19038 Frenchtown Frontage Rd Frenchtown, Montana(MT), 59834	
19	IA 989090	C 00019	America	500000.0	3113 Wilson Ave Hartley, Iowa(IA), 51346	
20	CA 987967	C 00020	America	6708900.0	2960 Belarave Ave Huntington Park, California(CA), 90255	
21	OH 564899	C 00021	America	609011.0	802 Webster Rd #101 Loudonville, Ohio(OH), 44842	



8. Using case statement, displaying the eligibility of the candidates based on their years of residence in the country

```

159 SELECT CANDIDATE_ID, YRS_OF_RESIDENCE,
160 CASE
161     WHEN YRS_OF_RESIDENCE >=14 THEN 'Eligible to contest'
162     WHEN YRS_OF_RESIDENCE < 14 THEN 'Not Eligible to contest'
163 END AS CONDITION
164 FROM C_BACKGROUND_CHECK;

```

CANDIDATE_ID	YRS_OF_RESIDENCE	CONDITION
C 00019	34	Eligible to contest
C 00020	45	Eligible to contest
C 00021	23	Eligible to contest
C 00022	34	Eligible to contest
C 00023	23	Eligible to contest
C 00024	34	Eligible to contest
C 00025	23	Eligible to contest
C 00026	34	Eligible to contest
C 00027	23	Eligible to contest
C 00028	34	Eligible to contest
C 00029	23	Eligible to contest
C 00030	34	Eligible to contest
C 00031	12	Not Eligible to contest
C 00032	23	Eligible to contest
C 00033	34	Eligible to contest
C 00034	35	Eligible to contest
C 00035	45	Eligible to contest
C 00036	36	Eligible to contest
C 00037	35	Eligible to contest
C 00038	34	Eligible to contest
C 00039	23	Eligible to contest

9. Listing candidates who are not eligible in the election due to felony records

```

174 select a.c_felony, a.candidate_id,b.fname,b.lname from C_BACKGROUND_CHECK a join candidate b
175 on a.candidate_id=b.candidate_id
176 where c_felony='Yes'

```

C_FELONY	CANDIDATE_ID	FNAME	LNAME
Yes	C 00037	Eric H	Holder Jr
Yes	C 00039	Christopher S	Murphy

## 10. Using decode , listing the terms served by the candidates

```

178 select CANDIDATE_ID, POST as C_POST,
179 decode(terms_served,0,'Didnot serve',1,'Served once',2,'Served upto limit','na')
180 as criteria from C_BACKGROUND_CHECK;
181

```

CANDIDATE_ID	C_POST	CRITERIA
00001	Senator	Served upto limit
00002	Mayor	Served once
00003	Former United States Secretary of Housing and Urban Development	Didnot serve
00004	United States Representative	Served upto limit
00005	U.S. Representative	Served once
00006	United States Senator	Didnot serve
00007	United States Senator	Served upto limit
00008	Former Governor of Colorado	Served once
00009	Governor of Washington	Didnot serve
00010	United States Senator	Served upto limit
00011	United States Senator	Served once
00012	United States Senator	Didnot serve
00013	American author	Didnot serve
00014	American entrepreneur	Didnot serve
00015	45th U.S. President	Didnot serve
00016	Former Governor of Massachusetts	Didnot serve
00017	Former Vice President of the United States	Didnot serve
00018	Governor of Montana	Didnot serve
00019	U.S. Representative	Didnot serve

## 11. Listing the name of the party who has won in the past

```

185 select a.party_name, b.results, b.vote_term from party a join results b
186 on a.treasurer_id = b.treasurer_id where b.results = 'Won';
187
188

```

PARTY_NAME	RESULTS	VOTE_TERM
1 Republic	Won	2016

## 12. Rules for representatives:

```

60 --a representative must be atleast 25years old
61 SELECT rep_name, r_age FROM house_rep
62 WHERE r_age >=25;
63
64 --a representative is less than 25 years old

```

REP_NAME	R_AGE
1 Ilona Doering	50
2 Peter Gonzales	35
3 Jake Jackman	33
4 Juana Bates	40
5 Vincent Gibson	51

```

73 --a US citizen for atleast 7 years
74 SELECT rep_name, r_yrs_of_ctzn FROM house_rep
75 WHERE r_yrs_of_ctzn >= 7;
76


```

Script Output x Query Result x	
SQL   All Rows Fetched: 45 in 0.01 seconds	
REP_NAME	R_YRS_OF_CTZN
1 Ilona Doering	30
2 Peter Gonzales	10
3 Jake Jackman	11
4 Juana Bates	20
5 Vincent Gibson	40
6 Cary Simon	12
7 Ken Page	19
8 Vera Myers	30
9 Mathew Yates	10
10 Gretchen Ruiz	18
11 Chanelle Manz	13
12 Misty Precourt	38
13 Tim Donofrio	20

### 13. Rules for senators:

```
68  --a senator must be atleast 30 years old
69  SELECT senate_name, s_age FROM senate
70  WHERE s_age >=30;
71
72
```

Script Output x Query Result x

 | All Rows Fetched: 32 in 0.003 seconds

	SENATE_NAME	S_AGE
1	Wallace Davis	42
2	Mercedes Richards	51
3	Ed Robbins	50
4	Edgar Ross	58
5	Charlie Bowen	74
6	Gerardo Lynch	47
7	Beulah Boyd	50
8	Lance Clark	74
9	Mandy Mathis	42
10	Andrew Watson	43
11	Paula Patton	43
12	Bennie Lowe	44
13	Mattie Jefferson	50

```

80  --a US citizen for atleast 9 years
81  SELECT senate_name, s_yrs_of_ctzn FROM senate
82  WHERE s_yrs_of_ctzn >= 9;
83

```

	SENATE_NAME	S_YRS_OF_CTZN
1	Wallace Davis	12
2	Mercedes Richards	22
3	Ed Robbins	32
4	Edgar Ross	44
5	Charlie Bowen	43
6	Gerardo Lynch	22
7	Beulah Boyd	11
8	Lance Clark	44
9	Mandy Mathis	33
10	Andrew Watson	21
11	Paula Patton	23
12	Bennie Lowe	10
13	Mattie Jefferson	12

14. The number of representatives per state is proportional to the population of that state

```

141
142  -- population proportionality
143  with x as (select max (no_of_reps) as rep
144  from
145  (select count(rep_id) no_of_reps, state_id
146  from house_rep
147  group by state_id))
148  ,
149  y as (select max(number_of_representatives) as maxrep
150  from state)
151  Select *
152  from x, y
153  where rep < maxrep;

```

	REP	MAXREP
1	6	53

15. Events on same location on same day

```

265 SELECT location,event_count FROM
266 (SELECT location,count(date_of_event) as event_count
267 FROM campaigning_events
268 WHERE location NOT LIKE 'All%'
269 GROUP BY location)
270 WHERE event_count > 1;
271

```

Script Output x Query Result x	
SQL   All Rows Fetched: 1 in 0.003 seconds	
LOCATION	EVENT_COUNT
1 California	2

16. The available balance needs to be checked before planning an event

```

132 --CHECK FOR FUNDS BEFORE EVENTS
133 SELECT *
134 FROM funds f
135 FULL JOIN campaigning_events c
136 ON f.party_id = c.party_id
137 WHERE f.balance > c.amount_used;
138
139

```

Script Output x Query Result x Query Result 1 x

SQL | Fetched 50 rows in 0.02 seconds

FUND_ID	PARTY_ID	SOURCE_OF_INCOME	DEBITED_AMOUNT	CREDITED_AMOUNT	BALANCE	EXPENSE_DESCRIPTOR
1 F01	D_01	Trade unions	200	100000	99800	Posters
2 F01	D_01	Trade unions	200	100000	99800	Posters
3 F01	D_01	Trade unions	200	100000	99800	Posters
4 F01	D_01	Trade unions	200	100000	99800	Posters
5 F01	D_01	Trade unions	200	100000	99800	Posters
6 F02	D_01	Donations	150	100000	99850	radio
7 F02	D_01	Donations	150	100000	99850	radio
8 F02	D_01	Donations	150	100000	99850	radio