

TEST SCREENSHOTS

LOADING DATA FROM API:

```
127.0.0.1 - - [24/Dec/2020 00:09:02] GET /search/province=Punjab HTTP/1.1 200 -
PS D:\KarachiAi\Data Acquisition and Orchestration\Week2 (apis and flask)\Assignment\code> python .\script_to_compile_data.py
Loaded data for 2008
Loaded data for 2013
Loaded data for 2018
PS D:\KarachiAi\Data Acquisition and Orchestration\Week2 (apis and flask)\Assignment\code>
```

DATA SAVED IN CSV FORMAT:

```
flask_api.py  compile_data.csv X
compile_data.csv > data
1 province,district,constituency_name,pop,no_of_polling_stations,male,female,total,na_name,obtained_votes,candidate_name,party_affilation,party,year
2 Punjab,Attock,Attock-II,496142,266,165266,150821,316087,NA-58,70743,Ch Pervaiz Ellahi,PML,PML-Q,2008
3 Punjab,Mianwali,Mianwali-II,638480,291,168959,138835,307794,NA-72,49294,Humair Hayat Rokhari,IND,IND,2008
4 Punjab,Rawalpindi,Rawalpindi-VI,570886,250,180922,152097,333019,NA-55,76980,Makhdoom Muhammad Javed Hashmi,PMLN,PMLN,2008
5 Punjab,Lahore,Lahore-I,556480,244,206869,54716,261585,NA-118,55900,Muhammad Riaz,PMLN,PMLN,2008
6 Punjab,Attock,Attock-I,531585,236,157917,120004,277921,NA-57,38755,Sheikh Aftab Ahmad,PMLN,PMLN,2008
7 Punjab,Mandi Bahauddin,Mandi Bahauddin-II,653319,228,180921,128920,309841,NA-109,74163,Nazar Muhammad Gondal,PPP,PPP,2008
8 Punjab,Sargodha,Sargodha-I,633546,334,234881,194185,429066,NA-64,65628,Nadeem Afzal Gondal,PPP,PPP,2008
9 Punjab,Faisalabad,Faisalabad-X,547513,243,138255,109894,248149,NA-84,59616,Abid Ali,PMLN,PMLN,2008
10 Punjab,Multan,Multan-VI,613220,235,189346,160290,349636,NA-153,69246,Dewan Ashiq Hussain Bukhari,PML,PML-Q,2008
11 Punjab,Kasur,Kasur-IV,557751,259,135366,608518,743884,NA-141,58807,Rana Muhammad Ishaq Khan,PMLN,PMLN,2008
12 Punjab,Gujrat,Gujrat-IV,608426,255,167451,154936,323287,NA-107,75205,Muhammad Jamil Malik,PMLN,PMLN,2008
13 Punjab,Sargodha,Sargodha-V,627659,308,208595,174456,383051,NA-68,80174,Syed Javed Hassnain Shah,PMLN,PMLN,2008
14 Punjab,Hafizabad,Hafizabad-I,492716,218,112492,85597,198889,NA-102,56313,Saira Afzal Tarar,PMLN,PMLN,2008
15 Punjab,Sialkot,Sialkot-I,578955,78,227,144213,130334,274547,NA-110,73007,Khwaja Muhammad Asif,PMLN,PMLN,2008
16 Punjab,Rajanpur,Rajanpur-II,652057,224,174640,110401,285041,NA-175,78427,Meer Dost Muhammad Mazari,PPP,PPP,2008
17 Punjab,Gujranwala,Gujranwala-V,578545,231,190106,591934,782040,NA-99,60219,Rana Nazir Ahmad Khan,PMLN,PMLN,2008
18 Punjab,Mianwali,Mianwali-I,597766,282,180267,148960,329227,NA-71,83098,Nawabzada Malik Amad Khan,IND,IND,2008
19 Punjab,Sahiwal,Sahiwal-III,547710,281,134868,109098,243966,NA-162,70634,Ch Zahid Iqbal,PPP,PPP,2008
20 Punjab,Rawalpindi,Rawalpindi -V,543273,201,143658,127834,271492,NA-54,58228,Malik Abrar Ahmad,PMLN,PMLN,2008
21 Punjab,Attock,Attock-III,463947,253,142401,120576,262977,NA-59,71400,Sardar Saleen Haider Khan,PPP,PPP,2008
22 Punjab,Muzaffargarh,Muzaffargarh-I,621469,241,159880,109543,269423,NA-176,50826,Muhammad Mohsin Ali Qureshi,PPP,PPP,2008
23 Punjab,Lahore,Lahore-XII,471077,192,124869,81390,206259,NA-129,36604,Tariq Shabbir Advocate,PPP,PPP,2008
24 Punjab,Muzaffargarh,Muzaffargarh-III,618171,252,163900,120486,284386,NA-178,57946,Jamshed Ahmad Dasti,PPP,PPP,2008
25 Punjab,Lahore,Lahore-IX,626761,267,195856,163086,358942,NA-126,69718,Omer Sohail Zia Butt,PMLN,PMLN,2008
26 Punjab,Pakpattan,Pakpattan-III,508205,225,120588,100070,220658,NA-166,66418,Rana Zahid Hussain Khan,PMLN,PMLN,2008
27 Punjab,Layyah,Layyah-II,691519,262,163309,130790,294099,NA-182,75910,Syed Muhammad Saqlain Bukhari,PMLN,PMLN,2008
28 Punjab,Chakwal,Chakwal-II,608793,363,205314,193830,399144,NA-61,92201,Muhammad Faiz Tamman,PMLN,PMLN,2008
29 Punjab,Rahimyar Khan,Rahimyar Khan-VI,633299,219,200691,151399,352090,NA-197,82565,Sardar Muhammad Arshad Khan Laghari,PMLN,PMLN,2008
```

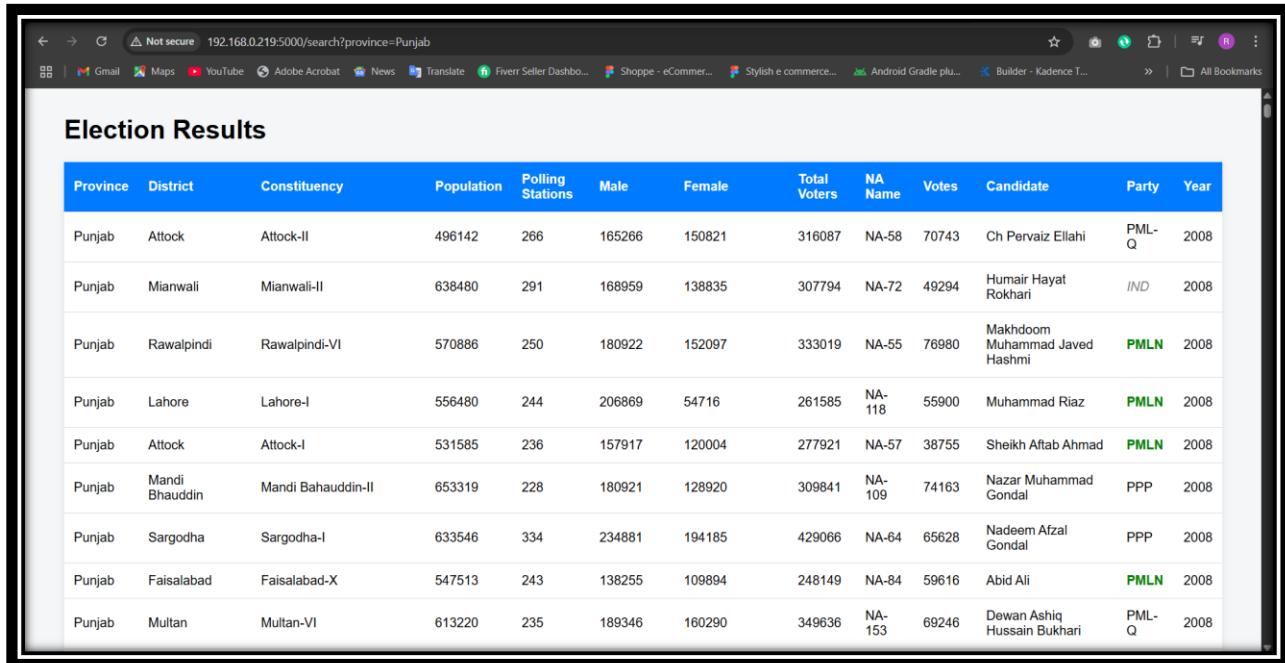
DATA SAVED IN JSON FROMAT:

```
flask_api.py  compile_data.json X
compile_data.json > ...
1  [
2  {
3      "province": "Punjab",
4      "district": "Attock",
5      "constituency_name": "Attock-II",
6      "pop": "496142",
7      "no_of_polling_stations": "266",
8      "male": "165266",
9      "female": "150821",
10     "total": "316087",
11     "na_name": "NA-58",
12     "obtained_votes": "70743",
13     "candidate_name": "Ch Pervaiz Ellahi",
14     "party_affiliation": "PML",
15     "party": "PML-Q",
16     "year": "2008"
17 },
18 {
19     "province": "Punjab",
20     "district": "Mianwali",
21     "constituency_name": "Mianwali-II",
22     "pop": "638480",
23     "no_of_polling_stations": "291",
24     "male": "168959",
25     "female": "138835",
26     "total": "307794",
27     "na_name": "NA-72",
28     "obtained_votes": "49294",
29     "candidate_name": "Humair Hayat Rokhari",
```

ENDPOINTS

1) PROVINCE ENDPOINT:

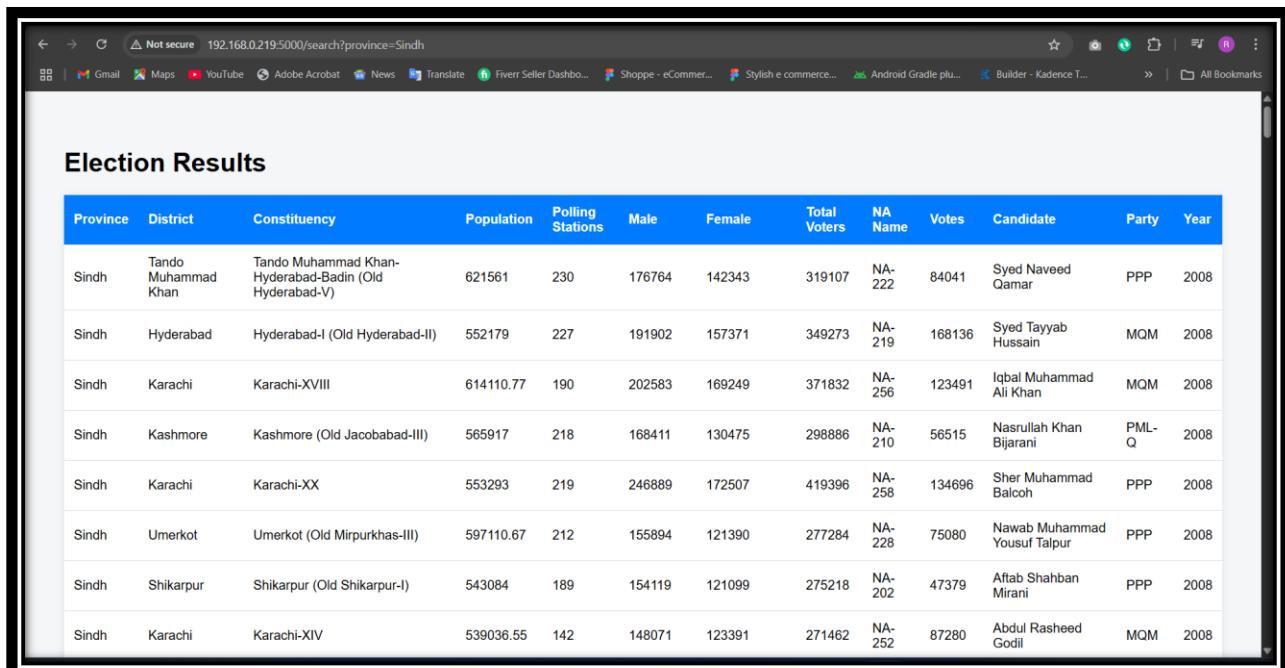
For Punjab:



The screenshot shows a table titled "Election Results" for the province of Punjab. The table includes columns for Province, District, Constituency, Population, Polling Stations, Male, Female, Total Voters, NA Name, Votes, Candidate, Party, and Year. The data is as follows:

Province	District	Constituency	Population	Polling Stations	Male	Female	Total Voters	NA Name	Votes	Candidate	Party	Year
Punjab	Attock	Attock-II	496142	266	165266	150821	316087	NA-58	70743	Ch Pervaiz Ellahi	PML-Q	2008
Punjab	Mianwali	Mianwali-II	638480	291	168959	138835	307794	NA-72	49294	Humair Hayat Rokhari	IND	2008
Punjab	Rawalpindi	Rawalpindi-VI	570886	250	180922	152097	333019	NA-55	76980	Makhdoom Muhammad Javed Hashmi	PMLN	2008
Punjab	Lahore	Lahore-I	556480	244	206869	54716	261585	NA-118	55900	Muhammad Riaz	PMLN	2008
Punjab	Attock	Attock-I	531585	236	157917	120004	277921	NA-57	38755	Sheikh Aftab Ahmad	PMLN	2008
Punjab	Mandi Bahauddin	Mandi Bahauddin-II	653319	228	180921	128920	309841	NA-109	74163	Nazar Muhammad Gondal	PPP	2008
Punjab	Sargodha	Sargodha-I	633546	334	234881	194185	429066	NA-64	65628	Nadeem Afzal Gondal	PPP	2008
Punjab	Faisalabad	Faisalabad-X	547513	243	138255	109894	248149	NA-84	59616	Abid Ali	PMLN	2008
Punjab	Multan	Multan-VI	613220	235	189346	160290	349636	NA-153	69246	Dewan Ashiq Hussain Bukhari	PML-Q	2008

For Sindh:



The screenshot shows a table titled "Election Results" for the province of Sindh. The table includes columns for Province, District, Constituency, Population, Polling Stations, Male, Female, Total Voters, NA Name, Votes, Candidate, Party, and Year. The data is as follows:

Province	District	Constituency	Population	Polling Stations	Male	Female	Total Voters	NA Name	Votes	Candidate	Party	Year
Sindh	Tando Muhammad Khan	Tando Muhammad Khan-Hyderabad-Badin (Old Hyderabad-V)	621561	230	176764	142343	319107	NA-222	84041	Syed Naveed Qamar	PPP	2008
Sindh	Hyderabad	Hyderabad-I (Old Hyderabad-II)	552179	227	191902	157371	349273	NA-219	168136	Syed Tayyab Hussain	MQM	2008
Sindh	Karachi	Karachi-XVIII	614110.77	190	202583	169249	371832	NA-256	123491	Iqbal Muhammad Ali Khan	MQM	2008
Sindh	Kashmore	Kashmore (Old Jacobabad-III)	565917	218	168411	130475	298886	NA-210	56515	Nasrullah Khan Bijarani	PML-Q	2008
Sindh	Karachi	Karachi-XX	553293	219	246889	172507	419396	NA-258	134696	Sher Muhammad Baloch	PPP	2008
Sindh	Umerkot	Umerkot (Old Mirpurkhas-III)	597110.67	212	155894	121390	277284	NA-228	75080	Nawab Muhammad Yousuf Talpur	PPP	2008
Sindh	Shikarpur	Shikarpur (Old Shikarpur-I)	543084	189	154119	121099	275218	NA-202	47379	Aftab Shahban Mirani	PPP	2008
Sindh	Karachi	Karachi-XIV	539036.55	142	148071	123391	271462	NA-252	87280	Abdul Rasheed Godil	MQM	2008

2) YEAR ENDPOINT:

For 2008:

Province	District	Constituency	Population	Polling Stations	Male	Female	Total Voters	NA Name	Votes	Candidate	Party	Year
Punjab	Attock	Attock-II	496142	266	165266	150821	316087	NA-58	70743	Ch Pervaiz Ellahi	PML-Q	2008
Punjab	Mianwali	Mianwali-II	638480	291	168959	138835	307794	NA-72	49294	Humair Hayat Rokhari	IND	2008
Punjab	Rawalpindi	Rawalpindi-VI	570886	250	180922	152097	333019	NA-55	76980	Makhdoom Muhammad Javed Hashmi	PMLN	2008
Punjab	Lahore	Lahore-I	556480	244	206869	54716	261585	NA-118	55900	Muhammad Riaz	PMLN	2008
Punjab	Attock	Attock-I	531585	236	157917	120004	277921	NA-57	38755	Sheikh Attab Ahmad	PMLN	2008
Punjab	Mandi Bahauddin	Mandi Bahauddin-II	653319	228	180921	128920	309841	NA-109	74163	Nazar Muhammad Gondal	PPP	2008
Punjab	Sargodha	Sargodha-I	633546	334	234881	194185	429066	NA-64	65628	Nadeem Afzal Gondal	PPP	2008
Punjab	Faisalabad	Faisalabad-X	547513	243	138255	109894	248149	NA-84	59616	Abid Ali	PMLN	2008

For 2018:

Province	District	Constituency	Population	Polling Stations	Male	Female	Total Voters	NA Name	Votes	Candidate	Party	Year
Punjab	Gujranwala	Lahore	792786	297	230950	174633	405583	NA-123	97205	Muhammad Malik Riaz	PMLN	2018
Punjab	Rawalpindi	Rawalpindi-VII	706780	317	195073	175894	370967	NA-63	102632	Ghulam Sarwer Khan	PTI	2018
Punjab	Sialkot	Sialkot-IV	823323	361	254085	199019	453104	NA-75	101769	Syed Iftikhar Ul Hassan	PMLN	2018
Punjab	Gujranwala	Bhawalpur	750566	286	228407	176416	404823	NA-171	99306	Mian Riaz Hussain Pirzada	PMLN	2018
Punjab	Gujranwala	Khushab -I	658748	352	226108	202628	428736	NA-93	100626	Malik Umer Aslam Awan	PTI	2018
Punjab	Narowal	Narowal-II	854759	377	291358	224891	516249	NA-78	160020	Ahsan Iqbal	PMLN	2018
Khyber Pakhtunkhwa	Upper and Lower Chitral	Chitral	447362	294	151219	118360	269579	NA-1	49035	Maulana Abdul Akbar Chitrali	MMA	2018
Sindh	Gujranwala	Karachi West	785158	231	182524	120734	303258	NA-248	35076	Abdul Qadir Patel	PPP	2018
								NA-		Dr. Khalid	MQM	

3) YEAR AND PROVINCE ENDPOINT:

For Balochistan in 2018:

Province	District	Constituency	Population	Polling Stations	Male	Female	Total Voters	NA Name	Votes	Candidate	Party	Year
Balochistan	Gujranwala	Chagai/Nushki/Kharan	560956	252	134678	99613	234291	NA-268	36147	Muhammad Hashim	BNP	2018
Balochistan	Gujranwala	Khuzdar	802207	269	132337	96210	228547	NA-269	53183	Mohammad Akhtar Mengal	BNP	2018
Balochistan	Gujranwala	Kech	909116	236	125995	96636	222631	NA-271	33462	Zubaida Jalal	BAP	2018
Balochistan	Gujranwala	Quetta	728296	156	107146	68819	175965	NA-264	14888	Molvı Asmatullah	MMA	2018
Balochistan	Gujranwala	Quetta	797994	330	181583	139348	320931	NA-265	25979	Qasim Khan Suri	PTI	2018
Balochistan	Gujranwala	Killa Abdullah	757578	222	148751	83272	232023	NA-263	38097	Sallah Uddin	MMA	2018
Balochistan	Gujranwala	Panjur/Washuk/Awaran	614602	251	132004	99581	231585	NA-270	18728	Ehsan Ullah Riki	BAP	2018
Balochistan	Gujranwala	Killa Saifullah/Zhab/Sherani	806474	324	153977	114667	268644	NA-257	44505	Moulana Abdul Wasay	MMA	2018
Balochistan	Gujranwala	Loralai/musakhail/Ziarat/Dukki/Harnai	821856	393	313727	133900	447627	NA-258	43164	Sardar Muhammad Israr Tareen	BAP	2018
Balochistan	Gujranwala	Dera Bugti/Kohlu/Sibi/Lehri	950056	366	214625	142119	356744	NA-259	22787	Nawabzada Shahzain Bugti	JWP	2018

For Sindh in 2013:

Province	District	Constituency	Population	Polling Stations	Male	Female	Total Voters	NA Name	Votes	Candidate	Party	Year
Sindh	Tando Muhammad Khan	Tando Muhammad Khan-Hyderabad-Badin (Old Hyderabad-V)	636958.53	242	141775	118285	260060	NA-222	100095	Syed Naveed Qamar Shah	PPP	2013
Sindh	Hyderabad	Hyderabad-I (Old Hyderabad-II)	552179.16	262	168501	133710	302211	NA-219	141035	Khalid Maqbool Siddiqui	MQM	2013
Sindh	Karachi	Karachi-XVIII	614110.77	227	238142	221043	459185	NA-256	151788	Iqbal Muhammad Ali Khan	MQM	2013
Sindh	Kashmore	Kashmore (Old Jacobabad-III)	565917.3	190	141523	110472	251995	NA-210	55808	Ihsan ur Rahman Mazari	PPP	2013
Sindh	Karachi	Karachi-XX	581257.17	287	232513	161280	393793	NA-258	52751	Abdul Hakeem Baloch	PMLN	2013
Sindh	Umerkot	Umerkot (Old Mirpurkhas-III)	608784.93	286	155631	139434	295065	NA-228	99700	Nawab Muhammad Yousif Talpur	PPP	2013
Sindh	Shikarpur	Shikarpur (Old Shikarpur-I)	543083.58	216	137933	122422	260355	NA-202	54633	Muhammad Ibrahim Jatoi	NPP	2013
Sindh	Karachi	Karachi-XIV	539036.55	175	172608	148583	321191	NA-252	91339	Abdul Rashid Godil	MQM	2013