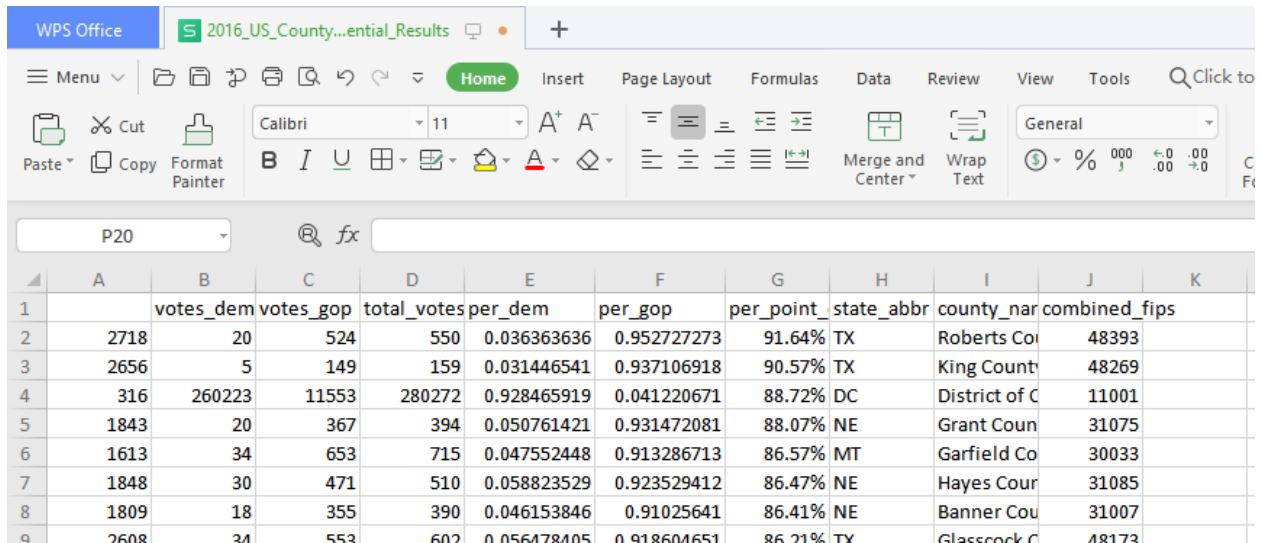


Mike Harvey

CSCI165 – Module 4 programming assignment Junit testing

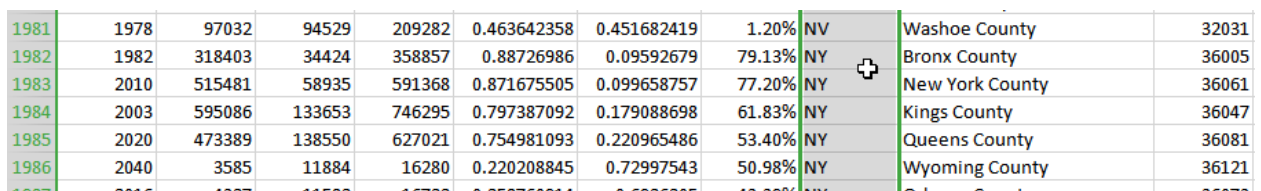
3/14/2020

When possible I tried to find the intended results using other methods than my program methods. In the case of largest margin I got the values by sorting the .csv file in excel by the margin.



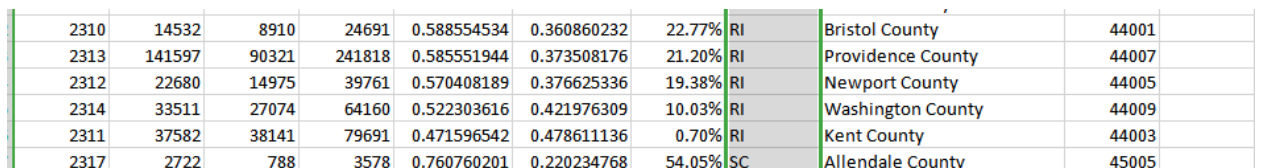
	A	B	C	D	E	F	G	H	I	J	K
1		votes_dem	votes_gop	total_votes	per_dem	per_gop	per_point	state_abbr	county_nar	combined_fips	
2	2718	20	524	550	0.036363636	0.952727273	91.64%	TX	Roberts Co	48393	
3	2656	5	149	159	0.031446541	0.937106918	90.57%	TX	King County	48269	
4	316	260223	11553	280272	0.928465919	0.041220671	88.72%	DC	District of C	11001	
5	1843	20	367	394	0.050761421	0.931472081	88.07%	NE	Grant Coun	31075	
6	1613	34	653	715	0.047552448	0.913286713	86.57%	MT	Garfield Co	30033	
7	1848	30	471	510	0.058823529	0.923529412	86.47%	NE	Hayes Cour	31085	
8	1809	18	355	390	0.046153846	0.91025641	86.41%	NE	Banner Cou	31007	
9	2608	24	552	600	0.056666667	0.918333333	86.21%	TX	Glasscock C	48173	

Here is a screenshot of the excel sheet showing the NY county with the largest margin:



1981	1978	97032	94529	209282	0.463642358	0.451682419	1.20%	NV	Washoe County	32031
1982	1982	318403	34424	358857	0.88726986	0.09592679	79.13%	NY	Bronx County	36005
1983	2010	515481	58935	591368	0.871675505	0.099658757	77.20%	NY	New York County	36061
1984	2003	595086	133653	746295	0.797387092	0.179088698	61.83%	NY	Kings County	36047
1985	2020	473389	138550	627021	0.754981093	0.220965486	53.40%	NY	Queens County	36081
1986	2040	3585	11884	16280	0.220208845	0.72997543	50.98%	NY	Wyoming County	36121

Screen shot of RI numbers which were the fewest number for easier hand totaling of desired variables and winning party:

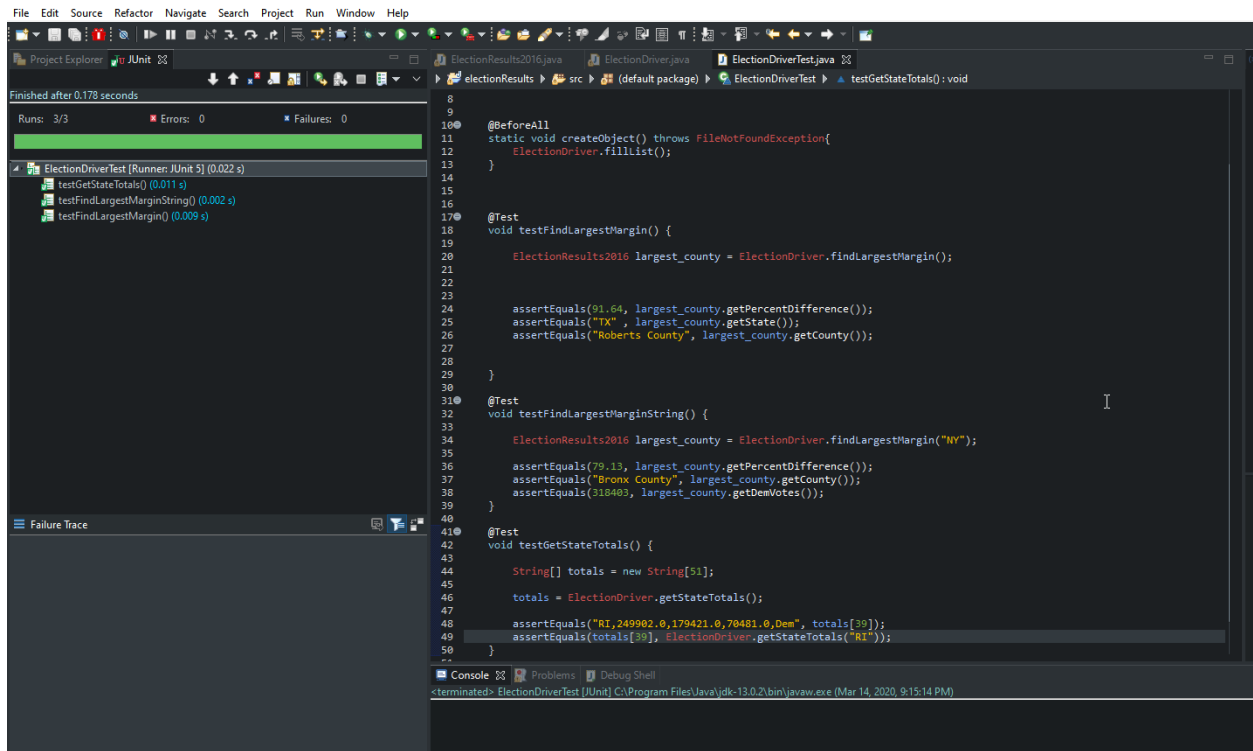


2310	14532	8910	24691	0.588554534	0.360860232	22.77%	RI	Bristol County	44001
2313	141597	90321	241818	0.585551944	0.373508176	21.20%	RI	Providence County	44007
2312	22680	14975	39761	0.570408189	0.376625336	19.38%	RI	Newport County	44005
2314	33511	27074	64160	0.522303616	0.421976309	10.03%	RI	Washington County	44009
2311	37582	38141	79691	0.471596542	0.478611136	0.70%	RI	Kent County	44003
2317	2722	788	3578	0.760760201	0.220234768	54.05%	SC	Allendale County	45005

Total Dem = 249,902 Total GOP = 179,421 Margin = 70,472 Winner = Dem

Also in this test is a further assertion showing my getStateTotals(string) approach works as well.

Screenshot of the tests passing with the code alongside:



The resulting output was put in a .csv file very similar to what was provided. I would strongly suggest opening the results with an application that formats such files such as excel.