

## COS120 Assignment #11

**Due: Thursday 6/17/21**

**Late: Friday 6/18/21**

**Worth: 60 points**

This program practices with a two dimensional list. Data files **votes.txt** and **votes2.txt** store vote results for 5 districts and 4 candidates. The dimensions should be set up in named constants. These dimensions remain constant but the candidate names and votes numbers will differ so code must work for any valid data file.

**votes.txt**

Aveau	Bevi	Curlew	Dronda
1260	1393	1026	991
912	1201	827	709
1376	1429	1167	1200
825	727	901	1008
1300	1285	1078	993

**votes2.txt**

Evans	Fargo	Gonzi	Hima
372	790	826	790
412	641	827	556
571	528	767	412
425	627	656	506
650	780	678	493

Below is the mental model of the data and results to use. The candidate names should be stored in a list that is parallel to the columns of the vote table. A separate list is used for the column sums (number of votes received by each candidate). The columns sum list is also parallel to the columns of the vote table.

Candidate Names

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Vote Numbers


Column Sums

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### Task 1:

Ask the user for the input file name. Read the candidate names into a string list and the vote results into a **two-dimensional** integer list. Code will not be accepted that does not use a two-dimensional list.

### Task 2:

Report a neat chart of vote totals, listing the row and columns sums (see sample output below).

### Task 3:

Report the name of the winner who received the most votes as well as the percentage of their votes to the total of all votes. Code may assume there is a winner so there is no need to check for ties.

Submit the output from both text files.

Enter data file name: votes.txt

Vote Report by your name

	Aveau	Bevi	Curlew	Dronda	Totals
District 1	1260	1393	1026	991	4670
District 2	912	1201	827	709	3649
District 3	1376	1429	1167	1200	5172
District 4	825	727	901	1008	3461
District 5	1300	1285	1078	993	4656
Totals	5673	6035	4999	4901	21608

The winner is Bevi with 27.93% of the vote

Enter data file name: votes2.txt

Vote Report by your name

	Evans	Fargo	Gonzi	Hima	Totals
District 1	372	790	826	790	2778
District 2	412	641	827	556	2436
District 3	571	528	767	412	2278
District 4	425	627	656	506	2214
District 5	650	780	678	493	2601
Totals	2430	3366	3754	2757	12307

The winner is Gonzi with 30.50% of the vote