

## P6 - Sort

Create a program that reads in a file specified with a command-line argument. The file contains the names of all of the students in our class.

The program will continually rank each student based on their number of votes. The user will vote for a student based on their rank. Initially each student has zero votes and rank is set randomly. (Rank order does not matter if the number of votes are the same).

Use a sorting method to sort the names based on the number of votes. Update the rank every time there is a vote. Comment your code appropriately. You can assume only integers will be entered as input, however you must check that the digit is in the appropriate range.

Name your file "lastname\_vote.c" and upload to Moodle.

Example output:

```
Vote for? (0 to quit) 1
Rank:1      Votes: 9   Boyle, John T.
Rank:2      Votes: 8   Dutton, Clayton W.
Rank:3      Votes: 7   Ammons, Andrew J.
Rank:4      Votes: 7   Chaityaphum, Christian
Rank:5      Votes: 6   Zak, Keysha N.
Rank:6      Votes: 4   Nicholson, Zachary M.
Rank:7      Votes: 4   Colligan, Thomas H.
Rank:8      Votes: 2   Vang, Ma
Rank:9      Votes: 1   Thibeau, Max N.
Rank:10     Votes: 1   Dunbar, Franklyn
Rank:11     Votes: 1   Donahue, Kellen A.
Rank:12     Votes: 1   Cummings, Jack C.
Rank:13     Votes: 1   Beckham, Riley C.
Rank:14     Votes: 0   Theisen, Jordan T.
Rank:15     Votes: 0   Schweitzer, Trent J.
Rank:16     Votes: 0   Schaff, Derek S.
Rank:17     Votes: 0   Sales, Darrell E.
Rank:18     Votes: 0   Rice, Sean S.
Rank:19     Votes: 0   Ormseth, Jeremiah K.
Rank:20     Votes: 0   Ogolla, Lucas J.
Rank:21     Votes: 0   Mowat, Andrew E.
Rank:22     Votes: 0   Meador, Catelyn A.
Rank:23     Votes: 0   Long, Michael E.
Rank:24     Votes: 0   LaFlesch, Jesse L.
Rank:25     Votes: 0   Kirkeby, Cyrus M.
Rank:26     Votes: 0   Khatiwada, Ashlesha
Rank:27     Votes: 0   Kelly, Matthew
Rank:28     Votes: 0   Kahn, Elena R.
Rank:29     Votes: 0   Irish, Kadin W.
Rank:30     Votes: 0   Hollenback, Hannah D.
Rank:31     Votes: 0   Heng, Andrew J.
Rank:32     Votes: 0   Harlow, Nicolas A.
```

```
Vote for? (0 to quit) 0
```