

Lab 4 – Majority Voting

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Activities Terminal
melissa@ubuntu:~/Operating_Systems/lab4$ make
make: Nothing to be done for 'all'.
melissa@ubuntu:~/Operating_Systems/lab4$ ./maj_vote
Enter an amount of voters (max=100): 4
YES: 3 NO: 1
Judge decides on YES.
Vote again? (Y/N) (1 for yes, anything else for no): 1
YES: 0 NO: 4
Judge decides on NO.
Vote again? (Y/N) (1 for yes, anything else for no): 1
YES: 2 NO: 2
Judge decides on a draw.
Vote again? (Y/N) (1 for yes, anything else for no): 3
Voting has ended.
melissa@ubuntu:~/Operating_Systems/lab4$ ./maj_vote
Enter an amount of voters (max=100): 80
YES: 42 NO: 38
Judge decides on YES.
Vote again? (Y/N) (1 for yes, anything else for no): 1
YES: 43 NO: 37
Judge decides on YES.
Vote again? (Y/N) (1 for yes, anything else for no): 1
YES: 49 NO: 31
Judge decides on YES.
Vote again? (Y/N) (1 for yes, anything else for no): 4
Voting has ended.
melissa@ubuntu:~/Operating_Systems/lab4$ ./maj_vote
Enter an amount of voters (max=100): -10
Enter an amount of voters (max=100): -70
Enter an amount of voters (max=100): 60000
Enter an amount of voters (max=100): 25
YES: 13 NO: 12
Judge decides on YES.
Vote again? (Y/N) (1 for yes, anything else for no): 1
YES: 10 NO: 15
Judge decides on NO.
Vote again? (Y/N) (1 for yes, anything else for no): 1
YES: 10 NO: 15
Judge decides on NO.
Vote again? (Y/N) (1 for yes, anything else for no): 4
Voting has ended.
melissa@ubuntu:~/Operating_Systems/lab4$
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screenshot of running/working code^

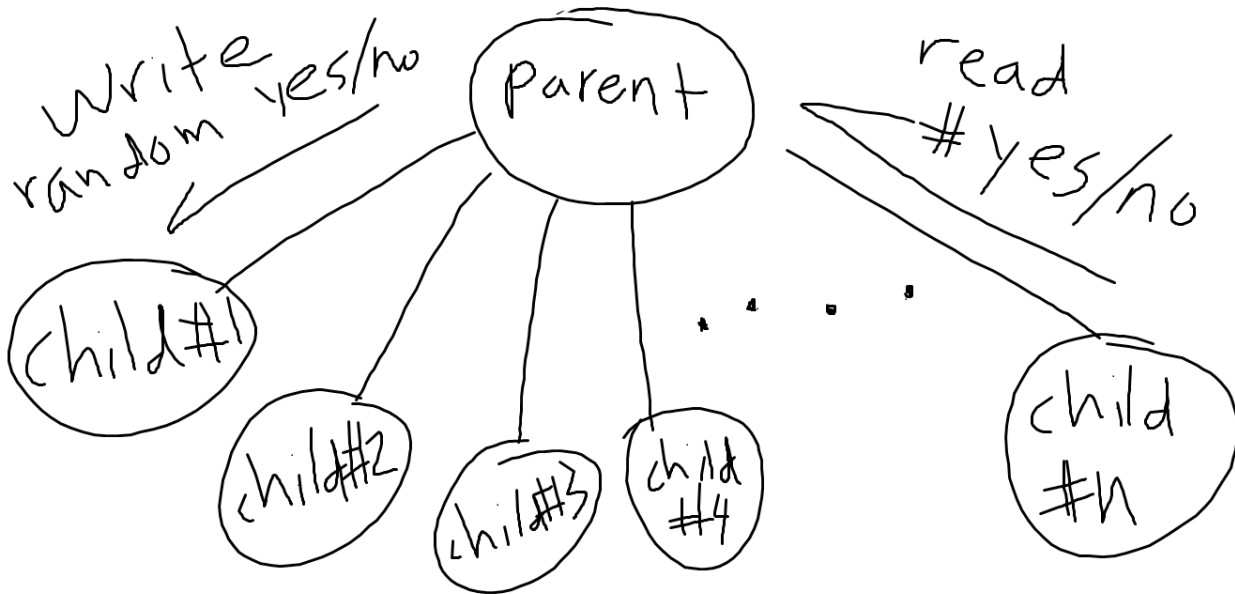


diagram of processes communicating/interacting with each other ^

In order to run my code, you must first run the “make” command to check if the linked files in the makefile have been edited. If they have been edited, then the make command will recompile the program in order to run the updated version of your code. Afterwards, run the executable file, “./maj_vote” in this instance, which will then prompt the user for n amount of voters. Once the user has input their selected number of voters, the code then creates that amount of child processes to create random numbers that corresponds with either “yes” or “no.” Once each child has a random number, the parent reads all of the numbers and counts the amount of yes’s and no’s. If there are more no’s read, then the judge ultimately decides on no, or if there are more yes’s then the judge decides on yes since the judge makes a decision based on majority vote. If there are an equal number of votes, then the judge decides on a draw.