

Bug #	Bug Description	Location of Bug	Steps to Recreate Bug	Root Cause Analysis
1	Multiple Audit logs cannot be generated within the same second	Class: AuditLog	Change main to run multiple different system test csv files back to back in main. Test files used should not be the 100k vote cases	This bug is due to filenaming of the auditlog being based on current second, causes overwrite
2	Running multiple elections back-to-back, when OPL is the first test ran, causes data corruption	Classes: ElectionDataParser, OPLElectionData	Change main to run multiple different system test csv files back to back, with the first one being an OPL election	Likely due to memory mismanagement, run valgrind to being debugging process
3	Extra comma in audit file tie-breaker output on line: Randomized array produced. e.g. [2,0,1,] instead of [2,0,1]	Function: ElectionData::calculate_seats_per_party()	Run a CPL election with a tie (or a OPL election, once bug #4 fixed)	String formatting issues in/around calls to audit_log.add_line()
4	Currently unable to print tie-breaker info for candidate tie situations	OPLParty::assign_seat_winners	Run an OPL election with a tie	no access to auditlog's get_line from OPLParty