1. Describe any implementation choices you made that you felt were important. Clearly explain any aspects of your program that aren't working. Mention anything else that we should know when evaluating your work.

The prover works but I was not able to get clause identification sorted out properly for printing out the steps. Due to that caveat I decided to print out the resolution clauses as well as the number of resolutions, so while the validator won't accept the output if you compare to the reference it matches up.

2. What can you say about the the time and space complexity of your program?

Each iteration of the resolution function, could compare all clauses meaning a quadratic space complexity as new clauses are constructed in the resolution process instead of one being overwritten and the other deleted. Time complexity should follow this quadratic complexity as well. While with the sample KB's the time difference is not discernable, in terms of resolution provers this is consistent.

3. What suggestions do you have for improving this assignment in the future?

One way to make this assignment easier, as it was tough, would be to lax the output specs by simply requiring a Boolean output and number of resolutions performed. This was also a pretty good video that showed more in-depth the architecture of one of these. It did not show any code though so just want to clarify that.

https://www.youtube.com/watch?v=J3Pm43O48Uo&t=1712s