I was in charge of implementing the keywords IF-THEN, ELSEIF, ELSE, and ENDIF. This was a very difficult task, to start there was a misunderstanding on how exactly the keywords were supposed to work. At first, we thought they worked like the bash version of the IF-THEN ELSEIF, so I started coding with this in mind, however, that line of thinking was incorrect. In actuality, the way the project had described the keywords was not only easier but made a lot more sense. In short, if the IF statement is true run the next command, if it is false and there is an ELSEIF treat it like an IF, statement, if there is not an ELSEIF, but there is an ELSE should the IF is false then jump to the ELSE. the ENDIF ends the whole statement and must be included. This caused me to restart the external comands. The new approach involved splitting the input given, then finding the commands with in the string. Substrings were used to facilitate the process. Having to account for running external commands with in the keywords some of the logic had to be readjusted in order for it to work properly. There were also some bugs that needed to be fixed, to start the ENDIF was not being reconized because we forgot to account for the space. Once that was fixed the program ran, another bug that was caught, only geting single characters form the sub string, this issues was fixed by changing the end point of the subtring. We wont list allo fo the bugs that were found just the ones, that were the most difficult.