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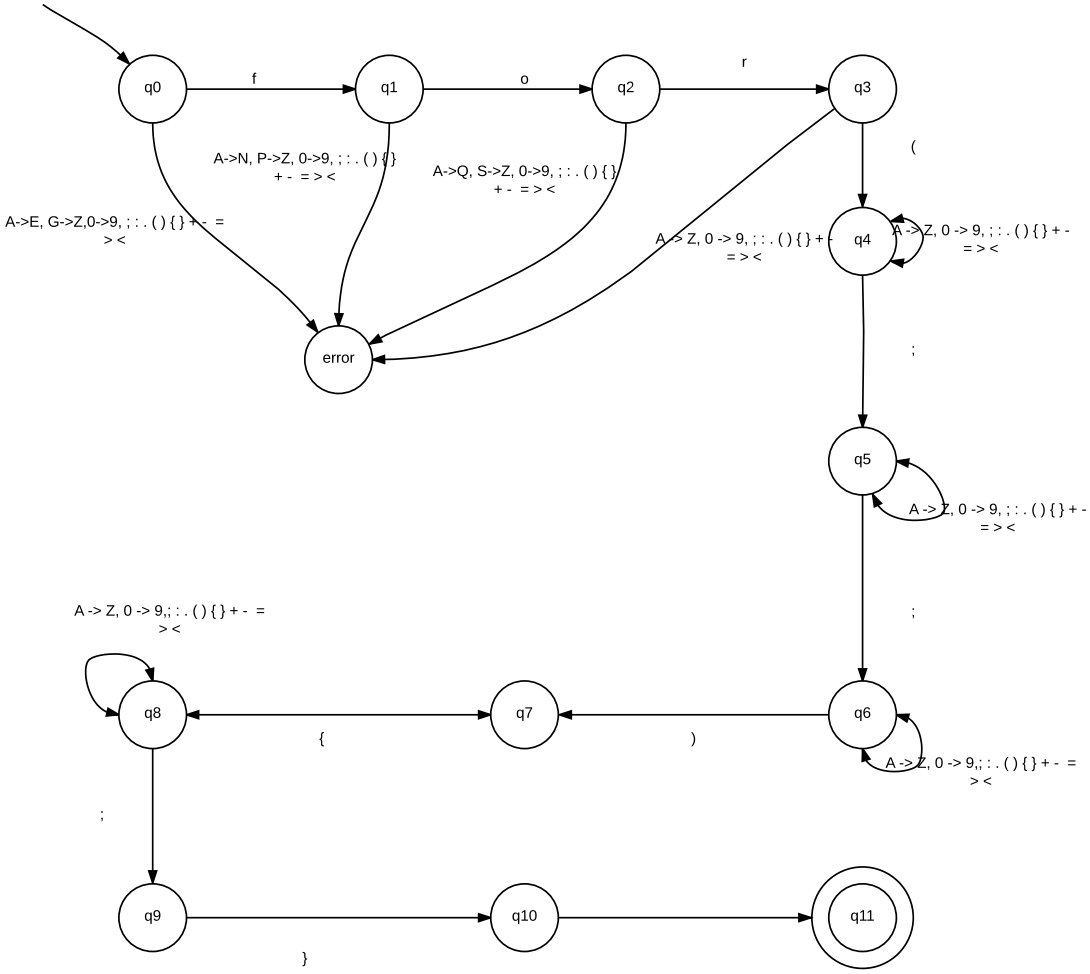
Essay1: Problems

There were minimal problems while trying to create a DFA for the Java statement provided. One of the harder tasks was trying to incorporate both for statements in the DFA. The second for loop, made the DFA have to allow for any character in the initialization, termination, increment, and statement parts of the for loop. In overcoming these problems, I learned about the process of creating a logical process for java syntax DFA. An interesting part of this problem was the error handling. I had to think about what characters are used in java. For instance, for the first character of the 'for' loop statement, 'f', all the characters in the alphabet from A to E and G to Z should break the DFA and go to an error. This applies to other characters in the word 'for' as well. Also because we were writing a programming statement, there was little back and worth between points in the DFA like the goat wolf cabbage example. For example when I type f, I can only move forward to the next letter o. In reflecting on this assignment, I have gathered a better understanding of how java syntax should be applied in a DFA diagram

Essay2: To implement a DFA in java, I would use a series of if-else statements that would check for each line input in java. Something from the system library that checks user input. Implementing this in java would be very complicated because it would constantly be throwing errors because users often type things that would not be excepted in this strict DFA. The order of these if statements would also be important. For instance the statement that checks for the first character 'f' in the for loop would have to be first or the program would not work as intended. The control flow of the DFA being implemented in Java would be very difficult to achieve and also very important to it working, Passing if statements in Java would be analogous to choosing paths in a DFA. They both work in similar ways. If the statement is met, it moves on to the next part of the DFA java function. The difference is in specificity. The DFA is very general, where the java program would take many functions to define what the DF



A would achieve.