Jesse Alltop

Asg 3

jalltop

/home/ADILSTU/jalltop/Public/IT328myWork/isutech2016

**Summary:**

The concept of minimizing a DFA seemed a lot more straightforward compared to converting a NFA to a DFA, however I still had some issues with the results I obtained with my minimizations. For example, nfa4 gives me multiple errors, which include the transition table is not built correctly, while it removes the non-distinct states, it leaves the old state number in the table. It also shows duplicate and extra states for the set of accepting states. I have tried to find the cause of this problem, but I have been unable to do so. The only thing that I see has changed from the previous NFA files is that this one has more than two characters in sigma. It appears that the first 3 files work correctly, but the 4th gives the strange output, and the 5th file again gives a overflow error.

**Output:**

Minimized DFA from /Users/Jesse/Documents/Programming/Java/IT328/Asg3/Resources/nfa2.nfa:

Sigma: a b

------------------

0: 1 0

1: 1 0

------------------

S: 0

A: {1}

The following strings are accepted:

aabaa

aaaaa

aaaaaaaaaa

aaaaaaaa

aaa

aaaaaaaaaaaaaaa

bbaabba

ba

Minimized DFA from /Users/Jesse/Documents/Programming/Java/IT328/Asg3/Resources/nfa4.nfa:

Sigma: a b c d

------------------

0: 1 2 3 4

1: 1 10 8 5

2: 10 2 9 6

------------------

S: 0

A: {4,4,4,0,0,0,0,6,6,9,9,3,3,3,1,1,1,11,14,2,2,2,8,8,7,7,13,10,10,5,5,12}

The following strings are accepted:

aabaa

abbbaaababaab

aaaaa

aaaaaaaaaa

aaaaaaaa

aaa

aaaaaaaaaaaaaaa

bbaabba

ba

ababababbbbbab

abbbbbab

cbabc