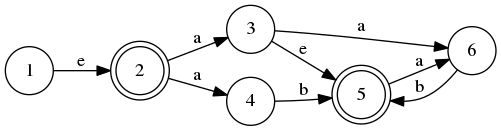
CMSC330

Lab6 – NFA's and DFA's

1) Consider the following NFA:

For each string, determine if the NFA accepts or rejects it.

1) aabab

2) a

3) aa

4) aaa

3) ab

4) “”

2) Run NFA → DFA conversion using the Powerset Construction algorithm covered in lecture. Please provide some proof of your work, i.e. a table showing the results of the intermediate steps of the algorithm.

(Note: In the github repo, I've added the source for the graph as a .gv file, a human readable format for graph visualization. If you would like to create your own graph images, you can use the utility graphviz available on Linux.

You may need to run sudo apt-get install graphviz.

To create the image, you can run the command:

dot -Tpng Lab6.gv -o graph.png

Producing a graph image is not mandatory, but will be helpful to know for future 400 level courses!)