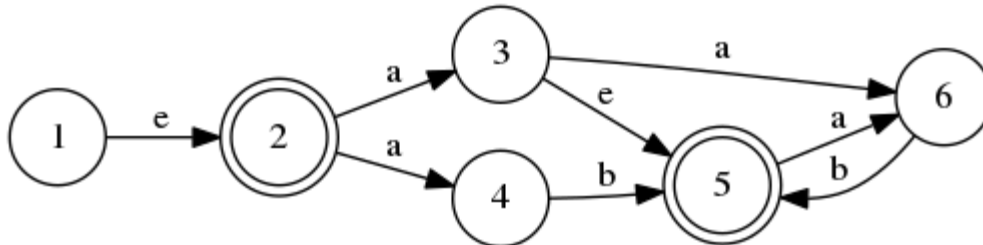


1) Consider the following NFA:



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.txt -o graph.png
```

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