Requirements:

You are required to implement a program that converts an NFA to a **minimized** DFA. You must implement the algorithm yourself without using any libraries.

Input format:

The input to the tool is a file containing the JSON representation of the NFA using the following format:

```
{
  "startingState": "stateA"
  "stateA": {
  isTerminatingState: false,
  "inputCharacterA": "stateB",
      "inputCharacterB": "stateA"
  },
  "stateB": {
  isTerminatingState: true,
  "inputCharacterA": "stateB",
      "inputCharacterB": "stateB"
  }
}
```

Output format:

You are required to output a JSON file representing the **minimized** DFA states and transitions using the same format.

You are also required to output an image containing the graph of the **minimized** DFA, using any graphics library of your choice. You must distinguish between accepting and nonaccepting states. Neat and non-overlapping graphs are a bonus.