NFA Algorithm:

1. Assuming No symbols or brackets For now.
1. Define a bool indicates whether we should insert empty state -> is Epsilon
2. Define a list which contains our states -> [] empty.
3. initialize characters idx which points to the current character of the given regular expression with -1
4. create initial state s1 (init=T, Term= F, trans = {})
5. Append it to the states list
6. iterate For each state in the states list
   6.1. apply logic (state, charIdx, isEpsilon, regex, states
   6.2. isEpsilon = ~ isEpsilon -> toggle it
   6.3. charIdx += ! isEpsilon we move the pointer in case that we are not @ Epsilon state

// we should continue the NFA algo, but lets stop here now & implement apply logic then from

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applyLogic (state, charIdx, isEpsilon, regex, states

1. create new empty state -> si
2. Append it to the states list -> states. append [si]
3. if (isEpsilon)
   3.1. state.Trans {'ε'}. append [si]
4. else
   4.1. if (regex [charIdx + 1] is alphanumeric)
      4.1.1. state. Trans [*]. append [si]
   4.2. else
      // we should think how to handle these cases.