

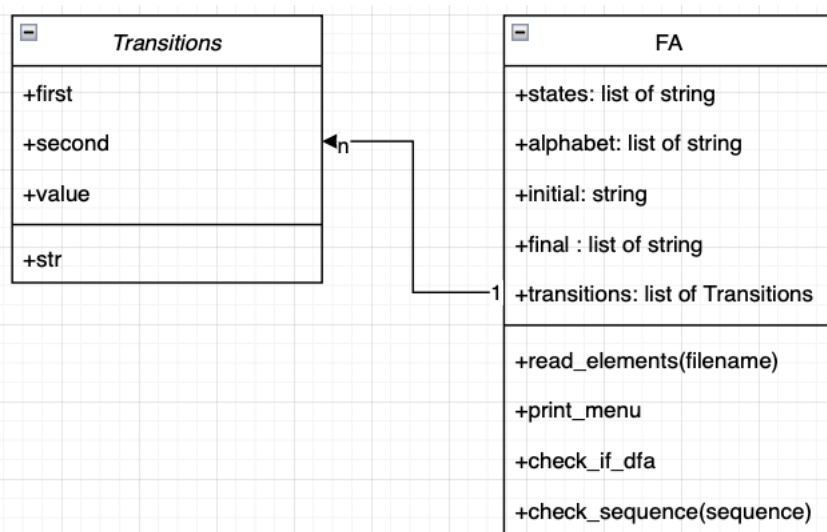
[https://github.com/tdrts/Labs\\_FLC/blob/main/Lab\\_5/main.py](https://github.com/tdrts/Labs_FLC/blob/main/Lab_5/main.py)

## Class Transitions

- Overridden **str** method used for printing

## Class FA

- **read\_elements** method used in reading a FA from a file
- **print\_menu** method is used to print a menu allowing the user to display the set of states, alphabet, initial state, final states, set of transitions and to test a sequence
- **check\_if\_dfa** method for checking if a finite automata is deterministic or not
- **check\_sequence** method is used to verify if a given sequence is accepted by the automaton



`<FA> ::= <l1> <l2> <l3> <l4> <ln>`

`<letter> ::= a|b|..|z|A|B|..|Z`

`<digit> ::= 0|1|..|9`

`<state> ::= <letter> | <letter><state>`

`<state_seq> ::= <state> | <state> " " <state_seq>`

`<digit_list> ::= <digit> | <digit> " " <digit_list>`

`<transition> ::= <state> ", " <state> ", " <digit>`

`<transition_list> ::= <transition> | <transition> "\n" <transition_list>`

`<l1> ::= <state_seq>`

`<l2> ::= <digit_list>`

`<l3> ::= <letter>`

`<l4> ::= <letter_list>`

`<ln> ::= <transition_list>`