TD2bis de compilation
Lexer and NDLR0

February 3, 2025

Exercice 1 : Lexer

1. Write regexps and a lexer for the following lexems:
   - `FORM`: formated strings *bash* with escaped characters; those begin and end with '`"`', they contain at least a non-escaped '`$`', they can also contain escaped characters of the form '`\any_char`', in particular '`\"`'.
   - `STRING`: strings with escaped characters; idem but may not contain '`$`'.
   - (optional) `STRING` (same action): strings with simple quotes; start and end by those, without possible escaped character.
   - `FLOAT`: simples floats,
   - `FLOAT` (same action): accept nans of the form `NaN42`, starting by `NaN` with eventual integer after.
   - (optional) uniline comments as separators (no action).
2. (optional) Minimise it,
3. Execute on one of (optional) more input.

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Exercice 2 : Non-deterministic parser

Write a non-deterministic parser for the following grammar

$$\mathtt{S} ::= \mathtt{aAS} \mid \mathtt{bS} \mid \epsilon$$
$$\mathtt{A} ::= \mathtt{aba}$$

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