**TP1 DA53**

**Exercise:**

Exercise 1:

* The alphabet is A = {ASCII} (because of string)
* The lexems keyword are {PRINT, IF, GOTO, INPUT, LET, GOSUB, RETURN, END, REM}

Identifiers: Usually variable names -> Regular Expression: [A-Z][A-Z0-9]\*

Numbers: Integer constants -> Regular Expression: [0-9]+

TOKEN

|  |  |  |  |
| --- | --- | --- | --- |
| Lexem Example | Regex | Name | Attribute |
| PRINT | PRINT | PRINT |  |
| IF | IF | IF |  |
| THEN | THEN | THEN |  |
| GOTO | GOTO | GOTO |  |
| = | = | REL\_OP | EQ |
| <> | (<>) (><) | REL\_OP | DIFF |
| <= | <= | REL\_OP | LE |
| >= | >= | REL\_OP | GE |
| > | > | REL\_OP | GT |
| < | < | REL\_OP | LT |
| INPUT | INPUT | INPUT |  |
| LET | LET | LET |  |
| GOSUB | GOSUB | GOSUB |  |
| RETURN | RETURN | RETURN |  |
| END | END | END |  |
| REM | ^REM[ \t\f] .\*$ (we skip the comment) | REM |  |
| a\_name | [a-zA-Z][a-zA-Z0-9]\* | ID | Reference to the symbole table of “a\_name” |
| 10.9 | [0-9] + (. [0-9]+) ? | NUM | 10.9 |
| “HELLO” | “[^”]\*” (everything that is not a quote) | STR |  |
|  |  |  |  |
|  |  |  |  |