Analyseur Lexical Java

```
%option noyywrap
CHIFFRE [0-9]

LETTRE [a-z]|[A-z]

MOTRESERVE abstract|double|int|static|boolean|else|interface|super
|break|extends|long|switchbyte|final|native|synchronized|case|finally
|new|this|catch|float|null|import|return|throw|char|for|package|throws
|class|goto|volatile|do|private|transient|const|if|protected|try|
continue|implements|public|void|default|instanceof|short|while

OPERATEUR \<|\=|\+|<=|\*
```

```
%%
(\/\*)(.)*(\*\/)        printf("\n COMMENTAIRE \n");

(\/\/)(.)*(\n)          printf(" COMMENTAIRE-LIGNE \n");

{MOTRESERVE}  {printf("MR%s ", yytext );}

{OPERATEUR} {printf(" OP%s ",yytext);}

{LETTRE}({LETTRE}|{CHIFFRE})*\(  {printf(" id-fonction-%s (",yytext);}

{LETTRE}({LETTRE}|{CHIFFRE})*  {printf( "id");}

{CHIFFRE}* { printf( "CONST-INT");}

\"(.)*\"  {printf( " CONST-STRING ");}
```

Un programme Java

```
class Factorielle {
  /* affiche la suite des factorielles  de 1 jusqu'a 20 */
  public static void main(String [] args) {

    long x = 1;
    int n = 0;
    int max = 30 ;

    while ( n < max) {
      System.out.println(n+ " --> " +x) ;
      n = n +  1; //j'incremente
      x = x * n;  //je multiplie
      }

    System.out.println(max +" --> "+ x) ;
  }
}
```

Transformation du programme

```
MRclass  id {
 COMMENTAIRE
  MRpublic  MRstatic  MRvoid   id-fonction-main( (id id id) {

    MRlong  id  OP=  CONST-INT;
    MRint  id  OP=  CONST-INT;
    MRint  id  OP=  CONST-INT ;

    MRwhile  ( id  OP<  id) {
      id.id. id-fonction-println( (id OP+   CONST-STRING   OP+ id) ;
      id  OP=  id  OP+   CONST-INT;  COMMENTAIRE-LIGNE
      id  OP=  id  OP*  id;   COMMENTAIRE-LIGNE
      }

    id.id. id-fonction-println( (id  OP+  CONST-STRING  OP+  id) ;
  }
}
```

Un programme de comptage

```
int minis = 0, majus = 0, autres = 0, lignes = 0, op_plus = 0;
%option noyywrap

%%

[a-z] minis++;
[A-Z] majus++;
\n lignes++;
\+ op_plus++;
. autres++;

%%
main() {
      yylex();
      printf("nombres de miniscules %d , nombres de majuscules %d ,
                autres %d, lignes %d, dieses %d\n",
          minis, majus, autres, lignes, op_plus);
      }
```