TP3

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ING1G12

EX1:

```
1 art1 le|la
2 art2 un|une
3 mots [^ \t\n]+
4 %%
5 {art1} printf("les");
6 {art2} printf("des");
7 {mots}s printf("%s",yytext);
8 {mots}au printf("%sx",yytext);
9 {mots}al { for(int i=0;i<strlen(yytext)-1;i++) printf("%c",yytext[i]); printf("ux");}
10 {mots} printf("%ss",yytext);
11 %%
```

```
ilyes@DESKTOP-KJ77094:~$ ./a.out
le petit chien
les petits chiens
un gentil professeur
des gentils professeurs
une blague géniale
des blagues géniales
le super cours
les supers cours
sun cheval gris
des chevaux gris
```

EX2 :

```
%{
#include <stdio.h>
#include <stdlib.h>
%}

%%

"//"[^\n]*     {  }
"/*"([^*]|\*+[^*/])*\*+"/"  {  }
.|\n           { ECHO; }

%%

int main(int argc, char **argv)
{
    if (argc != 2) {
        fprintf(stderr, "Usage: %s <inputfile>\n", argv[0]);
        return EXIT_FAILURE;
    }

    yyin = fopen(argv[1], "r");
    if (!yyin) {
        perror("Error opening file");
        return EXIT_FAILURE;
    }

    yylex();
    fclose(yyin);
    return 0;
}
```

```
int main()
{ /****** c'est un comm ******/
int a ; // c'est un entier
float x=0 ; //c'est u réel
/***
** Le reste****du pgme****
******/
/*************
**/ char c; /********
*/
return 0 ;}
```

```
ilyes@DESKTOP-KJ77094:~$ ./a.out source.c
int main()
{
int a ;
float x=0 ;

 char c;
return 0 ;}
ilyes@DESKTOP-KJ77094:~$
```

EX3:

```
#include <stdio.h>
#include <stdlib.h>
%}

IDENT      _*[a-zA-Z][a-zA-Z0-9_]*
AFFECT     "="
OPERAT     [*+/%-]
INTEGER    [0-9]+
REAL       [0-9]+\.[0-9]*
TYPE   "Char"|"int"|"float"
UNKNOWN    .
NEW_LINE   \n
WS         [ \t]

%%
{TYPE}      {printf("TYPE [%s] \n",yytext);}
{IDENT}     { printf("IDENT [%s]\n", yytext); }
{AFFECT}    { printf("AFFECT [%s]\n", yytext); }
{OPERAT}    { printf("OPERAT [%s]\n", yytext); }
{INTEGER}   { printf("INTEGER [%s]\n", yytext); }
{REAL}      { printf("REAL [%s]\n", yytext); }
{UNKNOWN}   { printf("UNKNOWN [%s]\n", yytext); }
{NEW_LINE}  { printf("NEW_LINE [ ]\n"); }
{WS}        { /* ignorer les espaces */ }
<<EOF>>    { printf("END_OF_FILE\n"); return 0; }

%%

int main(int argc, char **argv) {
    if (argc != 2) {
        fprintf(stderr, "Usage: %s <file.txt>\n", argv[0]);
        return 1;
    }

    yyin = fopen(argv[1], "r");
    if (!yyin) {
        perror("Error opening file");
        return 1;
    }

    yylex();
    fclose(yyin);
    return 0;
}
```

```
var1=123*45.67;
_attr+=var1;
_165165 =5*2;
int
 char
 float
X=5
```

```
ilyes@DESKTOP-KJ77094:~$ gcc lex.yy.c -ll
ilyes@DESKTOP-KJ77094:~$ ./a.out file.txt
IDENT [var1]
AFFECT [=]
INTEGER [123]
OPERAT [*]
REAL [45.67]
UNKNOWN [;]
NEW_LINE [ ]
IDENT [_attr]
OPERAT [+]
AFFECT [=]
IDENT [var1]
UNKNOWN [;]
NEW_LINE [ ]
UNKNOWN [_]
INTEGER [165165]
UNKNOWN [ ]
AFFECT [=]
INTEGER [5]
OPERAT [*]
INTEGER [2]
UNKNOWN [;]
NEW_LINE [ ]
TYPE [int]
```