

```
ls -lRa > test | << EOF wc >test2| echo 'hello "$USER"'
```

# LEXING

Passage de la chaîne de caractères en chaîne de struct de la forme :

```
typedef struct s_tok {  
    char *val;  
    int type;  
} t_tok;
```

## TRI ET REGROUPEMENT DES CARACTÈRES

ls -lRa > test | << EOF wc >test2| echo "'hello "\$USER"'"

■ LITERAL ■ OUTREDIR ■ PIPE ■ DOUBLEQUOTE  
■ SPACE ■ INREDIR ■ SIMPLEQUOTE

## REGROUPEMENT LOGIQUE ET NETTOYAGE

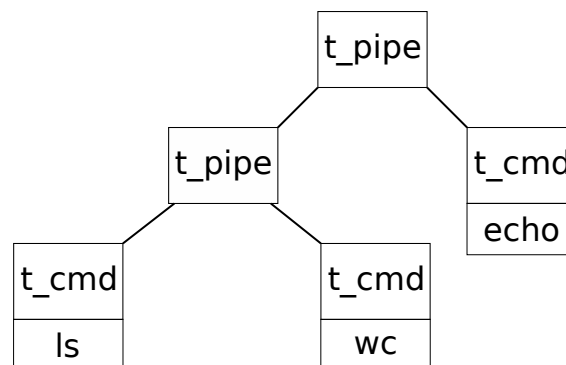
{"ls", "-lRa", ">", "test", "|", "<<", "EOF", "wc", ">", "test2", "|", "echo", "'\"'hello\"'\$USER'\"'"}"

# PARSING

Passage de la chaîne de caractères en tokens de structs de la forme :

```
typedef struct s_cmd {  
    char **argv;  
    t_tok *redir;  
} t_cmd;
```

```
typedef struct s_pipe {  
    t_cmd *left;  
    t_cmd *right;  
} t_pipe;
```



# EXPANDING

