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Lab Cycle 2 - Experiment 7

Generate a YACC specification to recognize a valid identifier which starts with a letter followed by any number of letters or digits.

Code:

valid_id.l :

```
%{
    #include "y.tab.h"
}%
%%
[a-zA-Z_][a-zA-Z_0-9]* return letter;
[0-9] return digit;
. return yytext[0];
\n return 0;
%%
int yywrap() {
    return 1;
}
```

valid_id.y :

```
%{
    #include<stdio.h>
    int valid=1;
}%
%token digit letter
%%
start : letter s
s: letter s | digit s | ;
%%
int yyerror() {
    printf("\nIts not a identifier!\n");
    valid=0;
    return 0;
}
int main() {
    printf("\nEnter a name to tested for identifier: ");
    yyparse();
    if(valid) {
        printf("\nIt is a identifier!\n");
    }
}
```

Output:

```
● gokz1119@gokz-Lenovo:/media/gokz1119/New Volume/S7/CD Lab/Valid_Identifier$ lex valid_id.l
● gokz1119@gokz-Lenovo:/media/gokz1119/New Volume/S7/CD Lab/Valid_Identifier$ yacc -d valid_id.y
● gokz1119@gokz-Lenovo:/media/gokz1119/New Volume/S7/CD Lab/Valid_Identifier$ gcc lex.yy.c y.tab.c -w
● gokz1119@gokz-Lenovo:/media/gokz1119/New Volume/S7/CD Lab/Valid_Identifier$ ./a.out

Enter a name to tested for identifier: num1

It is a identifier!
● gokz1119@gokz-Lenovo:/media/gokz1119/New Volume/S7/CD Lab/Valid_Identifier$ ./a.out

Enter a name to tested for identifier: 123num

Its not a identifier!
○ gokz1119@gokz-Lenovo:/media/gokz1119/New Volume/S7/CD Lab/Valid_Identifier$ _
```