

14/9/2020

Week 6

Thursday

1. Append the next matched string to the current value of the `yytext` rather than replacing the contents of the `yytext`. Handle it for upper and lowercases.

```
%i
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
*/
letter [a-zA-Z]
```

```
%i
{letter} { yymore(); printf("In the value of yytext is %s", yytext); }
```

```
• ;
"ln" { printf("ln"); return 0; }
```

```
%i
int main() {
    yylex();
}
```

}

OUTPUT

```
Hey!
the value of yytext is H
the value of yytext is He
the value of yytext is Hey
```

2. Match any string of one or more characters that don't include lowercase a-z

```
%i
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
```

```
int a=0;
char res[100];
```

*/

```
lower case [^a-z\n]
```

*/

```
{lower case} { res[a++] = yytext[0]; }
```

```
• { printf("Not matched\n"); return 0; }
```

OUTPUT

```
SRIHARI
SRIHARI is the matched string
```

abB

Not matched

```

"ln" {
    if(a==0) { printf("No match\n"); return 0; }
    printf("%s is the matched string\n", res);
    return 0;
}

```

```

}
/*
int main() {
    yylex();
}

```

3. Comments consisting of string surrounded by /* and */ without intervening */, unless it is inside double quotes (" ")

```

/* {
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
}
/* ([a-zA-Z_0-9\t\ ]*(\"|'|\\|\\\")*)\" */
{ printf("Comment - %s", yytext); }

```

```

;
/*
int main() {
    yyin = fopen("q3sample.txt", "r");
    yylex();
}

```

```

q3sample.txt
{ while ((c = input()) == '*') ;
if (c == '\n') break; /* found the end */
}

```

```

while (c != eof) {
    if (c == 1) return "YES"; /* Returns YES */
    else return "No"; /* Returns No */
}

```

OUTPUT

```

Comment - /* found the end */
Comment - /* Returns YES */
Comment - /* Returns No */

```

```
srihari@LAPTOP-AJMTFS87: ~/compiler_design/week6
srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$ cat q1.1
%{
#include<stdio.h>
#include<string.h>
#include<stdlib.h>
%}

letter [a-zA-Z]

%%
{letter} {yymore();printf("\nthe value of yytext is %s",yytext);}
. ;
"\n" {printf("\n");return 0;}
%%

int main(){
//    printf("Enter 0 to stop\n");
    yylex();
}

srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$ lex q1.1
srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$ cc lex.yy.c -ll
srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$ ./a.out
Hey1

the value of yytext is H
the value of yytext is He
the value of yytext is Hey
srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$
```

```
srihari@LAPTOP-AJMTFS87: ~/compiler_design/week6
srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$ cat q2.1
%%
#include<stdio.h>
#include<string.h>
#include<stdlib.h>
int a=0;
char res[100];
%}
lowerCase [^a-z\n]
%%
{lowerCase} {
    res[a++] = yytext[0];
}
. {
    printf("Not matched\n");return 0;
}
"\n" {
    if(a == 0){
        printf("No match\n");return 0;
    }
    printf("%s is the matched string\n",res);
    return 0;}
%%
int main(){
    yylex();
}
srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$ ./a.out
SRIHARI2018102601
SRIHARI2018102601 is the matched string
srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$ ./a.out
SRIHARI
Not matched
srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$
```



Type here to search



14:50
17-09-2020


```
srihari@LAPTOP-AJMTFS87: ~/compiler_design/week6
srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$ cat q3.1
%{
#include<stdio.h>
#include<string.h>
#include<stdlib.h>
%}

%%
/*
*/
"/*"([a-zA-Z_0-9 \t\n]*("\\"\\")*)**/" {printf("Comment - %s",yytext);}
.
;
%%

int main(){
    yyin = fopen("q3sample.txt","r");
    yylex();
}

srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$ cat q3sample.txt
{
while ( (c = input()) == '*' )
;
if ( c == '/' )
break; /* found the end */
}
while (c != eof)
{
if (c == '=1')
return "YES"; /* Returns YES */
else
return "NO"; /* Returns NO */
}
}

srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$ lex q3.1
srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$ cc lex.yy.c -ll
srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$ ./a.out

Comment - /* found the end */

Comment - /* Returns YES */

Comment - /* Returns NO */

srihari@LAPTOP-AJMTFS87:~/compiler_design/week6$
```