







prime.l valididentifier.l lengthoflongeststring.l counting.l countlines.l evenodd.l

compilerLab > countlines.l

```
1  %{\n2      #include<stdio.h>\n3      int line;\n4  %} // counting lines\n5  line=0;\n6  %%\n7  \\n {line++;}\n8  . ;\n9  %%\n10 void main()\n11 {\n12     yylex();\n13     printf("Total Lines : %d\\n",line);\n14 }\n15 int yywrap(){return(1);}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
raghav@DESKTOP-42P1AH3:/mnt/c/Users/dell/Desktop/cbnst/compilerLab$ lex countlines.l\nraghav@DESKTOP-42P1AH3:/mnt/c/Users/dell/Desktop/cbnst/compilerLab$ gcc lex.yy.c\nraghav@DESKTOP-42P1AH3:/mnt/c/Users/dell/Desktop/cbnst/compilerLab$ ./a.out\njai\nanand\nok\ngood\nTotal Lines : 4\nraghav@DESKTOP-42P1AH3:/mnt/c/Users/dell/Desktop/cbnst/compilerLab$
```

FileEditSelectionViewGoRunTerminalHelp

prime.lvalididentifier.llengthoflongeststring.lcounting.lcountlines.levenodd.l

compilerLab>lengthoflongeststring.l

```
1 %{\n2     #include<stdio.h>\n3     int length =0;\n4     int maxxy =-1;\n5 %} // lenght of the lonesgt string in the datastream\n6 %%\n7 .* {length = yylen;\n8 \\n {if(maxxy<length)maxxy=length;\n9 }\n10 %%\n11\n12 void main()\n13 {\n14     yylex();\n15     printf("B Bye");\n16     printf("length of the longest string in data stream %d \\n",maxxy);\n17 }\n18 int yywrap()
```

PROBLEMSOUTPUTDEBUG CONSOLETERMINAL

```
raghav@DESKTOP-42P1AH3:/mnt/c/Users/dell/Desktop/cbnst/compilerLab$ lex lengthoflongeststring.l\nraghav@DESKTOP-42P1AH3:/mnt/c/Users/dell/Desktop/cbnst/compilerLab$ gcc lex.yy.c\nraghav@DESKTOP-42P1AH3:/mnt/c/Users/dell/Desktop/cbnst/compilerLab$ ./a.out\njai is a good boy\nis he actually a good boy\nB Byelength of the longest string in data stream 25\nraghav@DESKTOP-42P1AH3:/mnt/c/Users/dell/Desktop/cbnst/compilerLab$
```

Ln 5, Col 54Spaces: 4UTF-8CRLFLex/FlexGo Livegpg (GnuPG)GnuPG not available

69°FMostly sunny

03:20 PM12-02-2023

FileEditSelectionViewGoRunTerminalHelp

cbnst

prime.lvalididentifier.llengthoflongeststring.lcounting.lcountlines.levenodd.l

compilerLab > counting.l

```
#include <cs50.h>
int lines=0;
int chars=0;
int spchars=0;
int words=0;
int tempchars=0;

// counting words lines and chars

//
[a-zA-Z]* {tempchars+=yyleng;}
[ ] {words++;chars+=tempchars;}
\n {lines++;words++;chars+=tempchars;}
. {spchars++;}

int main()
{
    yylex();
    printf("Words %d\nLines %d\nChars %d\nSp_Chars %d\n",words,lines,chars,spchars);
    return 1;
}

int yywrap()
{
    return 1;
}
```

PROBLEMSOUTPUTDEBUG CONSOLETERMINAL

raghav@DESKTOP-42P1AH3: /mnt/c/Users/dell/Desktop/cbnst/compilerLab\$ lex counting.l
raghav@DESKTOP-42P1AH3: /mnt/c/Users/dell/Desktop/cbnst/compilerLab\$ gcc lex.yy.c
raghav@DESKTOP-42P1AH3: /mnt/c/Users/dell/Desktop/cbnst/compilerLab\$./a.out
jai is a good boy
[[[]
Words 6
Lines 2
Chars 16
Sp_Chars 4
raghav@DESKTOP-42P1AH3: /mnt/c/Users/dell/Desktop/cbnst/compilerLab\$

69°F
Mostly sunny

Search

VS Code

ENG IN

03:13 PM
12-02-2023

```
1 %{\n
2     #include<stdio.h>\n
3     #include<stdbool.h>\n
4 %} // checking if the number is prime or not\n
5 %\n
6 [0-9]* {\n
7     int a = atoi(yytext);\n
8     int i=0;\n
9     bool flag = false;\n
10    for(i=2;i<=a/2;i++)\n
11    {\n
12        if (a%i==0){flag=1;break;}\n
13    }\n
14    if (flag)printf("Composite\\n");\n
15    else printf("Prime or 1\\n");\n
16 }\n
17 . {\n
18     \\n {\n
```

 wsl + ... ^ x

```

231
Composite
1
Prime or 1
2
Prime or 1
3
Prime or 1
4
Composite
5
Prime or 1
6
Composite
7
Prime or 1
8
Composite

```