1) Christian McGovern, Lab1, 1/19/2018

2) I added new rule below the [a-zA-Z]+ lgths[yyleng]++; to count numbers. The new line was [0-9]+ countnums++. I also created int countnums and printed below Dr. Coopers for loop.

3)  /\* This lex routine uses a counting array to match alphabeticstrings

and make a frequency count.

The real item to notice is that yywrap() is called at EOF and then is run

to do what we need to do. yywrap() returns true when we have a successful

end to the program. We may want to return false (0) if we want to lexing process

to fail

Shaun Cooper

January 2015

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/\*

Christian McGovern

Lab1, 1/19/2018

Changes to lines: 20, 23, and 37

\*/

int lgths[100];

int countnums = 0;//int added to count numbers

%%

[a-zA-Z]+ lgths[yyleng]++;

[0-9]+ countnums++;// rule/line added to count numbers

. |

\n ;

%%

yywrap()

{

int i;

printf("Length No. words \n");

for (i=1; i<100; i++) {

if (lgths[i] > 0) {

printf("%5d%10d\n",i,lgths[i]);

}

}

printf("No. Numbers: %15d\n", countnums);//line added to print No. Numbers

return(1);

}

main()

{ yylex();

}

4)

#Christian McGovern

#Lab1

#1/19/2018

lex.yy.c: wordlengthlab1.l

lex wordlengthlab1.l

gcc -o wordlength lex.yy.c

5)  