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| LEX PROGRAM FOR CAPITAL WORDS | LEX PROGRAM FOR EMAIL VALID OR NOT | LEX PROGRAM FOR MOBILE NUMBER VALID OR NOT |
| %{  %}  %%  [A-Z]+[\t\n ] { printf("%s",yytext); }  . ;  %%  Int yywrap()  {}  int main( )  {  printf("Enter the input string:\n");  yylex();  } | %{  %}  %%  [a-z.0-9\_][+@[a-z]+".com"|".in](mailto:+@[a-z]+%22.com%22|%22.in)" { printf(“it is valid”);}  .+ { printf(“it is not valid”);}  %%  int yywrap()  {}  int main()  {  printf("enter the mail:");  yylex();  } | %{  %}  %%  [0-9][0-9]{9} {printf("\n mobile number valid\n");}  .+ {printf("\n mobile number invalid\n");}  %%  int yywrap()  {}  int main()  {  printf("\n enter the mobile number:");  yylex();  } |

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| LEX PROGRAM FOR COUNT COMMENT LINES | LEX PROGRAM FOR COUNT OF POSITIVE NUMBER AND NEGATIVE NUMBER | LEX PROGRAM FOR HTML |
| %{  int nc=0;  %}  %%  "/\*"[a-zA-Z0-9\n\t ]\*"\*/" {nc++;}  "//"[a-zA-Z0-9\t ]\*"\n" {nc++;}  %%  int yywrap( )  {}  int main(int argc ,char\* argv[])  {  yyin=fopen(argv[1],"r");  yyout=fopen("output.c","w");  yylex( );  printf("The number of comment lines=%d\n",nc);  } | %{  int positive\_no = 0, negative\_no = 0;  %}  %%  ^[-][0-9]+ {negative\_no++;  printf("negative number = %s\n",yytext);}  [0-9]+ {positive\_no++;  printf("positive number = %s\n",yytext);}  %%  int yywrap()  {}  int main()  {  yylex();  printf ("number of positive numbers = %d,"  "number of negative numbers = %d\n",  positive\_no, negative\_no);  } | %{  #include<stdio.h>  %}  %%  \<[^>]\*\> fprintf(yyout,"%s\n",yytext);  .|\n;  %%  int yywrap()  {}  int main()  {  yyin=fopen("sample.html","r");  yyout=fopen("output.txt","w");  yylex();  } |

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| LEX PROGRAM FOR IDENTIFIER OR NOT | LEX PROGRAM FOR COUNT VOWELS AND CONSONENTS | LEX PROGRAM FOR ADD LINE NUMBER |
| %{  %}  %%  [a-zA-Z][a-zA-Z0-9]+ { printf("\n%s is IDENTIFIER", yytext);}  .+ { printf("\n%s is NOT AN IDENTIFIER",yytext);}  %%  int yywrap()  {}  int main()  {  printf("Enter the Input:");  yylex();  } | %{  int vow\_count=0;  int const\_count=0;  %}  %%  [aeiouAEIOU] {vow\_count++;}  [a-zA-Z] {const\_count++;}  %%  int yywrap(){}  int main()  {  printf("enter the string of vowels and consonents:");  yylex();  printf("number of vowels are:%d\n",vow\_count);  printf("number of consonents are:%d\n",const\_count);  return 0;  } | %{  int ln=0;  %}  %%  .\* {ln++; fprintf(yyout,"\n%d:%s",ln,yytext);}  %%  int yywrap(){}  int main()  {  yyin=fopen("simple.txt","r");  yyout=fopen("out.txt","w");  yylex();  } |

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| LEX PROGRAM FOR COMMENT OR NOT | LEX PROGRAM FOR DIGIT OR NOT | LEX PROGRAM FOR MACROS AND HEADER FILES |
| %{  %}  %%  [/]{2}.\* { printf("\n%s is COMMENT", yytext);}  .+ { printf("\n %s is NOT A COMMENT",yytext);}  %%  int yywrap(){}  int main()  {  yylex();  } | %{  #include<stdio.h>  %}  %%  [0-9]+|[0-9]\*\.[0-9]+ { printf("\n%s is DIGIT", yytext);}  .+ { printf("\n%s is NOT A DIGIT",yytext);}  %%  int yywrap(){}  int main()  {  yylex();  } | %{  int nmacro, nheader;  %}  %%  ^#define { nmacro++; }  ^#include { nheader++; }  %%  int yywrap() {  return 1;  }  int main() {  yylex();  printf("Number of macros defined = %d\n", nmacro);  printf("Number of header files included = %d\n", nheader);  } |

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| LEX PROGRAM FOR KEYWORDS AND IDENTIFIERS | LEX PROGRAM FOR BASIC MATHEMATICAL OPERATIONS | LEX PROGRAM FOR DOB VALID OR NOT |
| %{  %}  %%  if|else|while|int|switch|for|char { printf("its a keyword");}  [a-zA-Z0-9]+ { printf("\n%s is IDENTIFIER", yytext);}  %%  int yywrap( ){}  int main()  {  while( yylex());  } | %{  %}  %%  "="|"+"|"-"|"/"|"\*" { printf("valid");}  .+ {printf("invalid");}  %%  int yywrap(){}  int main()  {  printf("enter the input:");  yylex();  return 0;  } | %{  %}  %%  [0-9][0-9]\/[0-1][0-9]\/[1-2][0-9]{3} { printf("valid");}  .+ { printf("invalid");}  %%  int yywrap(){}  int main()  {  yylex();  } |

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| LEX PROGRAM FOR URL VALID OR NOT | LEX PROGRAM FOR COUNT NO OF TOKENS | LEX PROGRAM FOR SUBSTRING CONVERT abc to ABC |
| %{  %}  %%  ((http)|(ftp))s?:\/\/[a-zA-Z0-9]{2}(\.[a-z]{2})+(\/[a-zA-Z0-9+=?]\*)\* {printf("\nURL InValid\n");}  .+ {printf("\nURL valid\n");}  %%  int yywrap(){}  void main()  {  printf("\nEnter URL : ");  yylex();  printf("\n");  } | %{  int n = 0 ;  %}  %%  "while"|"if"|"else"|"int"|"float" {n++;printf("\t keywords : %s", yytext);}  [a-zA-Z\_][a-zA-Z0-9\_]\* {n++;printf("\t identifier : %s", yytext);}  "<="|"=="|"="|"++"|"-"|"\*"|"+" {n++;printf("\t operator : %s", yytext);}  [(){}|, ;] {n++;printf("\t separator : %s", yytext);}  [0-9]\*"."[0-9]+ {n++;printf("\t float : %s", yytext);}  [0-9]+ {n++;printf("\t integer : %s", yytext);}  . ;  %%  int yywrap(){  return 1;  }  int main()  {  yylex();  printf("\n Total no. of token = %d\n", n);  } | %{  %}  %%  [a-z] {printf("%c",yytext[0]-32);}  . {}  %%  int yywrap(void){}  int main()  {  printf("\n Enter the string : ");  yylex();  } |

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| LEX PROGRAM FOR NO.OF CHARS,LINES,WORDS | LEX PROGRAM FOR ALL CONSTANTS | LEX PROGRAM TO COUNT WORDS |
| %{  int nlines,nwords,nchars;  %}  %%  \n { nchars++;nlines++;  }  [^ \n\t]+ {nwords++, nchars=nchars+yyleng;}  . {nchars++;}  %%  int yywrap(void) {}  int main()  {  yylex();  printf("Lines = %d\nChars=%d\nWords=%d",nlines,nchars,nwords);  return 0;  } | %{  %}  %%  <INITIAL>[0-9]+ {printf("Integer\n");}  <INITIAL>[0-9]+[.][0-9]+ {printf("Float\n");}  <INITIAL>[A-Za-z0-9\_]\* {printf("Identifier\n");}  <INITIAL>[^\n] {printf("Invalid\n");}  %%  int yywrap(){}  int main()  {  printf("Enter String\n");  yylex();  return 0;  } | %{  #include<stdio.h>  #include<string.h>  int i = 0;  %}    %%  ([a-zA-Z0-9])\* {i++;}    "\n" {printf("%d\n", i); i = 0;}  %%    int yywrap(){}    int main()  {  printf("Enter the Sentence :");  yylex();    return 0;  } |
| **LEX PROGRAM TO COUNT THE FREQUENCY OF THE CODE** | **Lex code to find the length of the longest word** | **Lex code to replace a word with another word in a file** |
| %{  int icount=0,factcount=0;  %}  %%  fact factcount++;  i icount++;  (.|\n) ;  %%  main()  {  yylex();  printf("Count of \"fact\"= %d \nCount of letter 'i' = %d\n",factcount,icount);  return 0;  } | %{  int counter = 0;  %}  %%  [a - zA - Z] +  {  if (yyleng > counter)  {  counter = yyleng;  }  }  %%  int main() {  yylex();  printf("largest%d",counter);  printf("\n");  } | %{  #include <stdio.h>  %}  %%  "greeks" { printf("ReplacementWord "); }  .|\n { putchar(yytext[0]); }  %%  int yywrap(){  return 1;  }  int main() {  yylex();  return 0;  } |