Design a LEX Code to count and print the number of total characters, words, white spaces in given 'Input.txt' file.

```
% {
int lines=0, words=0,spaces=0,total=0;
% }
%%
\n { lines++; words++; total++;}
[\t'] {words++;total++;}
[" "] {spaces++;total++;}
%%
yywrap(){}
main(int argc, char *argv[])
extern FILE *yyin;
       yyin = fopen("Input.txt","r");
       yylex();
       printf("LINES: %d WORDS: %d SPACES %d TOTAL: %d",lines,words,spaces,total);
       return 0;
}
INPUT
This is the worst crockery around this town.
OUTPUT
LINES: 1 WORDS: 8 SPACES 7 TOTAL: 8
```

Design a LEX Code to remove the extra spaces and empty line and write it into "Store.txt" file.

```
% {
% }
space [\t]
emptyline \ \backslash n
%%
{space}+ printf(" ");
{emptyline}+ printf("\n");
. {printf("%s\n",yytext);}
%%
yywrap(){}
main(int argc, char *argv[])
extern FILE *yyout;
        yyin = fopen("Store.txt","w");
        yylex();
        return 0;
}
INPUT
                        crockery around
This is the worst
                                                 this town.
```

OUTPUT

This is the worst crockery around this town.

Design a LEX Code to remove the comments from any C-Program given at run-time and store into "comment.txt" file.

```
% {
% }
%%
\\\.*;
\vee \wedge *(.* \wedge n)*.* \wedge * \vee ;
%%
yywrap(){}
main(int argc, char *argv[])
{
extern FILE *yyout;
        yyout = fopen("comment.txt","w");
        yylex();
        return 0;
}
INPUT
int p=1,d=0,r=4;
float m=0.0, n=200.0; // hello
while (p \le 3)
   { if(d==0)
                 //this is wrong
       \{ m = m + n * r + 4.5; d + +; \}
```

else

```
 \{ \ r++; \ m=m+r+1000.0; \ \} \ /\!/ \ haha   p++; \ \}  OUTPUT  int \ p=1,d=0,r=4;   float \ m=0.0, \ n=200.0;   while \ (p<=3)   \{ \ if(d==0)   \{ \ m=m+n*r+4.5; \ d++; \ \}   else   \{ \ r++; \ m=m+r+1000.0; \ \}   p++; \ \}
```

Design a LEX Code to extract all html tags in the given HTML file at run time and store into Text file "Tags.txt" given at run time

```
% {
% }
% %
% %
"<"[^>]*> {printf("%s\n",yytext);}
.;
% %

yywrap(){}

main(int argc, char *argv[])
{
extern FILE *yyin;
```

```
yyin = fopen("Tags.txt","r");
      yylex();
      return 0;
}
INPUT
<html> hello </html>
<html> whatever </html>
ZXXZ
zxZX
zxzX
OUTPUT
<html>
</html>
<html>
</html>
```