

1. Write a Program to design Lexical Analyzer in C/C++/Java/python language(to recognize any five keywords,identifiers,numbers,operators and punctuation)

```
kwd=['int','float','char','if','else']
oper=['+','-','*','/','%']
punct=['.','(',')','!']

def func():
    txt=input("Enter text")
    txt=txt.split()
    for token in txt:
        if token in kwd:
            print(token + "is keyword")
        elif (token in oper):
            print(token + "is operator")
        elif(token in punct):
            print(token + "is punctuator")
        elif(token.isnumeric()):
            print(token + "is number")
        elif(not token[0].isnumeric()):
            print(token + "is identifier")
        else:
            print(token + "is not valid identifier")

func()
```

```
Enter textHello int 123 . +
Hellois identifier
intis keyword
123is number
.is punctuator
+is operator
```

2. Write a Lex Program that copies a file,replacing each nonempty sequence of white spaces by a single blank.

```
%{
#include<stdio.h>
%}

%%

[\t" "]+ fprintf(yyout," ");

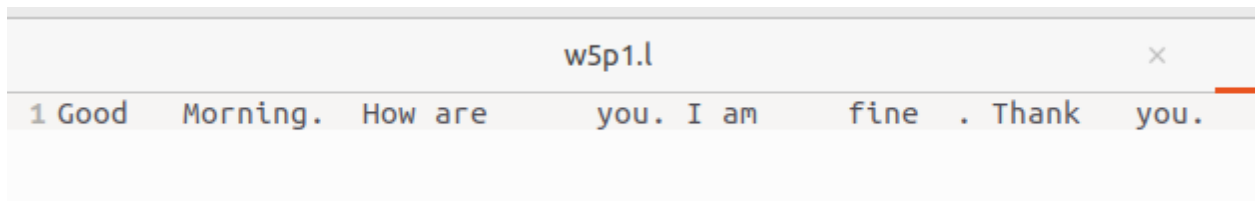
.\n fprintf(yyout,"%s",yytext);
%%

int yywrap()
{
return 1;
}

int main(void)
{
yyin=fopen("input1.txt","r");
yyout=fopen("output.txt","w");

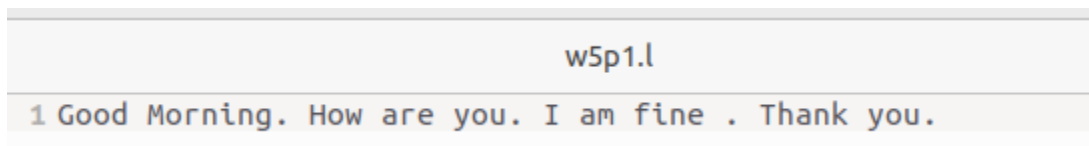
yylex();
return 0;
}
```

Input.txt



```
w5p1.l
1 Good Morning. How are you. I am fine . Thank you.
```

Output.txt



```
w5p1.l
1 Good Morning. How are you. I am fine . Thank you.
```