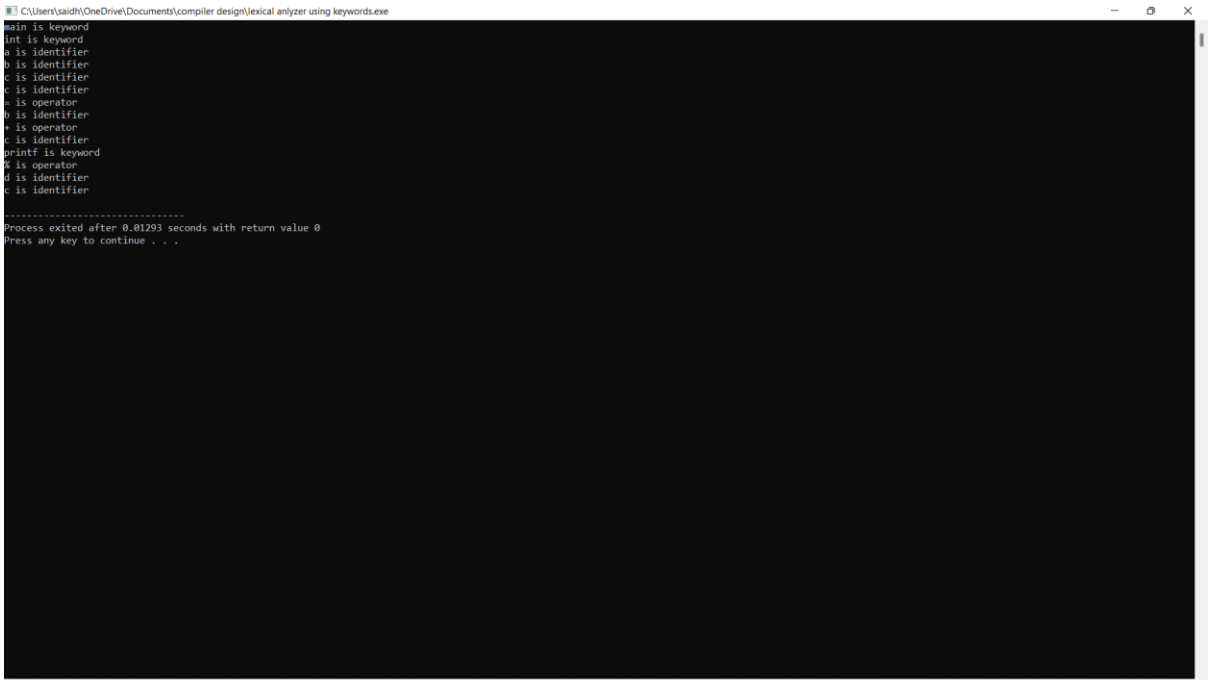
Expno.2

Design a lexical Analyzer for given language should ignore the redundant spaces, tabs and new lines and ignore comments.

```
#include<stdio.h>

#include<stdlib.h>

#include<string.h>

#include<ctype.h>


int isKeyword(char buffer[]){

char keywords[32][10] = {"main","auto","break","case","char","const","continue","default",

"do","double","else","enum","extern","float","for","goto",

"if","int","long","register","return","short","signed",

"sizeof","static","struct","switch","typedef",

"unsigned","void","printf","while"};

int i, flag = 0;

for(i = 0; i < 32; ++i){

if(strcmp(keywords[i], buffer) == 0){

flag = 1;

break;

}

}

return flag;

}


int main(){

char ch, buffer[15], operators[] = "+-*/%=";

FILE *fp;

int i,j=0;

fp = fopen("3lex_input.txt","r");

if(fp == NULL){

printf("error while opening the file\n");
```

```
exit(0);
}
while((ch = fgetc(fp)) != EOF){
  for(i = 0; i < 6; ++i){
  if(ch == operators[i])
  printf("%c is operator\n", ch);
  }

  if(isalnum(ch)){
  buffer[j++] = ch;
  }
  else if((ch == ' ' || ch == '\n') && (j != 0)){
  buffer[j] = '\0';
  j = 0;

  if(isKeyword(buffer) == 1)
  printf("%s is keyword\n", buffer);
  else
  printf("%s is identifier\n", buffer);
  }

}
fclose(fp);
return 0;
}
```


C:\Users\saidh\OneDrive\Documents\compiler design\lexical anlyzer using keywords.exe
main is keyword
int is keyword
a is identifier
b is identifier
c is identifier
c is identifier
= is operator
b is identifier
+ is operator
c is identifier
printf is keyword
% is operator
d is identifier
c is identifier

Process exited after 0.01293 seconds with return value 0
Press any key to continue . . .