EXPERIMENT-3
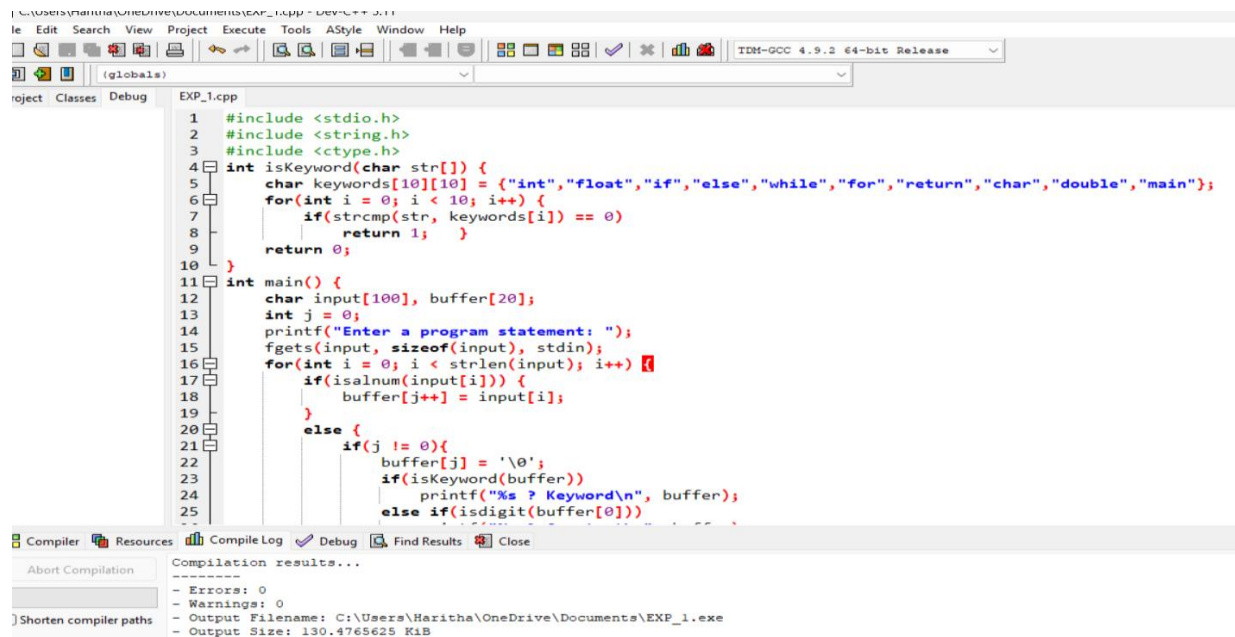
AIM:

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

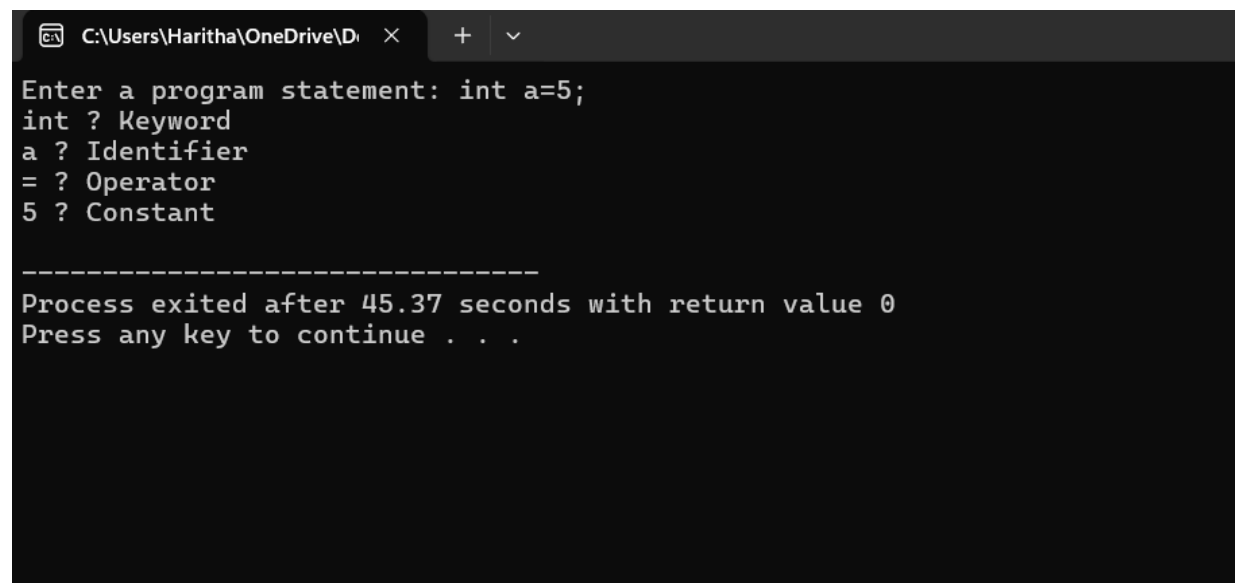## PROGRAM:

```c
#include <stdio.h>
#include <string.h>
#include <ctype.h>
int isKeyword(char str[]) {
    char keywords[10][10] = {"int","float","if","else","while","for","return","char","double","main"};
    for(int i = 0; i < 10; i++) {
        if(strcmp(str, keywords[i]) == 0)
            return 1;   }
    return 0;
}
int main() {
    char input[100], buffer[20];
    int j = 0;
    printf("Enter a program statement: ");
    fgets(input, sizeof(input), stdin);
    for(int i = 0; i < strlen(input); i++) {
        if(isalnum(input[i])) {
            buffer[j++] = input[i];
        }
        else {
            if(j != 0){
                buffer[j] = '\0';
                if(isKeyword(buffer))
                    printf("%s ? Keyword\n", buffer);
                else if(isdigit(buffer[0]))
```

Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Haritha\OneDrive\Documents\EXP_1.exe
- Output Size: 130.4765625 KiB

OUTPUT:

```
Enter a program statement: int a=5;
int ? Keyword
a ? Identifier
= ? Operator
5 ? Constant

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Process exited after 45.37 seconds with return value 0
Press any key to continue . . .
```