Assignment No: 01-02

CSE-0302 Summer 2021

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Abstract—Assignment Index Terms—code in c/c++

I. INTRODUCTION

This assignment is given by Compiler design course. The assignment is done with c and c++ code.

II. PROPOSED METHODOLOGY FOR ASSIGNMENT-01

There was given 2 assignment. 1st assignment is done by code c++ Here is the code.........

include¡bits/stdc++.h¿ using namespace std; define optimize() ios_base :: $sync_with_stdio(0); cin.tie(0); cout.tie(0); defineendl''$

int main() optimize(); FILE *input; FILE *output; string s; char p; input = fopen("input.txt","r"); output = fopen("output.txt","w");

while(!feof(input)) p = fgetc(input); s+=p; cout¡¡s; cout¡¡endl;

for(int i=0; i¡s.size(); i++) if(s[i] == '/' s[i+1] == '/') while(s[i] != ") i++;

else if(s[i] == '*') while(s[i] != '/') i++;

else if(s[i]!=32 s[i]!=9 s[i]!=" s[i]!='/' s[i]!='*') if(s[i-1] == '') continue; cout¡¡s[i]; fputc(s[i],output);

fclose(input); fclose(output); return 0;

III. PROPOSED METHODOLOGY FOR ASSIGNMENT-02

include¡stdio.h¿ include¡stdlib.h¿ include¡string.h¿ include¡ctype.h¿

int isKeyword(char buffer[]) char keywords[32][10] = "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","union", "unsigned","void","volatile","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("file.txt","r"); if(fp == NULL) printf("error while opening the file"); exit(0); while((ch = fgetc(fp)) != EOF) for(i = 0; i ¡ 6; ++i) if(ch == operators[i]) printf("

if(isalnum(ch)) buffer[j++] = ch; else if((ch == ' ' —— ch == ") (j != 0)) buffer[j] = "; j = 0;

if(isKeyword(buffer) == 1) printf("else printf("

fclose(fp); return 0;

IV. CONCLUSION AND FUTURE WORK

None.

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```cpp
#include<bits/stdc++.h>
using namespace std;
#define optimize() ios_base::sync_with_stdio(0);cin.tie(0);cout.tie(0);
#define endl '\n'

int main()
{
    optimize();
    FILE *input;
    FILE *output;
    string s;
    char p;
    input = fopen("input.txt","r");
    output = fopen("output.txt","w");

    while(!feof(input))
    {
        p = fgetc(input);
        s+=p;
    }
    cout<<s;
    cout<<endl;

    for(int i=0; i<s.size(); i++)
    {
        if(s[i] == '/' && s[i+1] == '/')
            while(s[i] != '\n') i++;

        else if(s[i] == '*')
            while(s[i] != '/') i++;

        else if(s[i]!=32 && s[i]!=9 && s[i]!='\n' && s[i]!='/' && s[i]!='*')
        {
            if(s[i-1] == '}') continue;
            cout<<s[i];
            fputc(s[i],output);
        }
    }

    fclose(input);
    fclose(output);
    return 0;
}
```

Fig. 1. Assignment-01

```c
1     #include<stdio.h>
2     #include<stdlib.h>
3     #include<string.h>
4     #include<ctype.h>
5
6     int isKeyword(char buffer[]){
7     char keywords[32][10] = {"auto","break","case","char","const","continue","default",
8     "do","double","else","enum","extern","float","for","goto",
9     "if","int","long","register","return","short","signed",
10    "sizeof","static","struct","switch","typedef","union",
11    "unsigned","void","volatile","while"};
12    int i, flag = 0;
13    for(i = 0; i < 22; ++i){
14    if(strcmp(keywords[i], buffer) == 0){
15    flag = 1;
16    break;
17    }
18    }
19    return flag;
20    }
21
22    int main(){
23    char ch, buffer[15], operators[] = "+-*/%=";
24    FILE *fp;
25    int i,j=0;
26    fp = fopen("file.txt","r");
27    if(fp == NULL){
28    printf("error while opening the file\n");
29    exit(0);
30    }
31    while((ch = fgetc(fp)) != EOF){
32        for(i = 0; i < 6; ++i){
33        if(ch == operators[i])
34        printf("%c is operator\n", ch);
35        }
36
37        if(isalnum(ch)){
38        buffer[j++] = ch;
39        }
40        else if((ch == ' ' || ch == '\n') && (j != 0)){
41        buffer[j] = '\0';
42        j = 0;
43
44        if(isKeyword(buffer) == 1)
45        printf("%s is keyword\n", buffer);
46        else
47        printf("%s is indentifier\n", buffer);
48        }
49
50    }
51    fclose(fp);
52    return 0;
53    }
54
```

Fig. 2. Assignment-02