

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); define endl'' 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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```

#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

```

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 < 32; ++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 identifier\n", buffer);
48 }
49 }
50 fclose(fp);
51 return 0;
52 }
53
54

```

Fig. 2. Assignment-02