Assignment No:1

Course Name: Formal Languages and Compilers Lab

ID: 170104082

Group: B2

QC program with single and multiple, line comments is given. As the first step toward compilation you need to remove the comments and white spaces (extra spaces, tubs and newline character). Develop a program that newline character). Develop a program that takes a input file the given source program and produces a filtered file program and produces a filtered file of stated above. The program also display as stated above. The program also display

Ansi

include <5+dio.h>

#include < stalib. h>

include <6tring. 4>

include < stdbool.4>

int provide One space =0

void write Output File (chare, FILE * P2)

1 fpetc (C, P2);

4

```
int checkslash (FILE *PI)
  chare check = fgetc(P1);
  if (check == 1/1) = 0000
   rection 1:
 else if (check == '*')
  neturn 2;
                       - 10/14 MIGH
                  Charles Andry #
  else
               A. Mills Se Mousait
    netunn 3:
                Mules Allent
               CA hallotte on a word !
void remove Multiline Comment (FILE * PI)
        s since) shift of Orline & v
  Char e:
  abile ((e=fgete(PI))!=EOF)
   if (e== '*')
      if ((c=fgete(PI)) == 1/2) neturn;
```

```
void remove single Line Comment
    Charce:
    while (ce=fgete(PI)) != 'In')
             continue:
 4
void remove Extra Spaces Newlines (FILE *P2)
3
      if (provide One Space) == 0)
         writeOutput File (", P2);
        provide One Space =1;
void read Input File ()
     FILE API = FOPEN ("input. txt", """);
    Char C;
    if (! P1)
       printf (" file can't be opened");
    ese es
       while ((c=fgeta(PI))!=EOF)
        T preintf ("Ye",e);
```

```
felose (P1);
4
void readOutputfile (), it no
   FILE # PI = fopen ("outpetitxt", """);
   Charc o;
   f (! P1)
      printf ("File can't be opened"):
   else
      while ((c=fgetc(PI)):= EOF)
         printf("1.e",e);
    Polose(PI);
```

```
int main (void)
 FILE * P1 , * P2;
 Charce;
 P1 = Popen ("input. +x+", """);
 P2 = fopen ("output. txt": "w"):
 if ([PI ]] ! P2)
    printf ("file can't be opened"):
 eke
    while (c=fgete(PI)) != EOF)
       if (c)= ' & & c!= 'in')
           if(@ == '/')
             int check = check Slash (PI);
            if (check==1)
               remove Single Line Comment (PI);
            ese if (check=2)
              remove MultiLine Comment (P1);
```

```
provideOnespace=0;
           writeOutput file(C, P2);
                   in (xt. trafter ") (1970)
        provide One Space = 0
write Output File (c. , P2);
     Ose if ( C == ' , 11  O == ' \ \n' )
        remove ExtraSpacesNewlines(P2);
    4
felose(PI)
Felose (P2):
read Input File ();
 roeadoutput File();
              B. Thenday T.
```