

Assignment No: 01

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Lab group: A1

Course No: CSE4130

Question: A C source program with single and multiple line comments is given. As the first step towards compilation you need to remove the comments and white space (extra spaces, tabs, and newline characters). Develop a program that takes as input file the given source program and produces a filtered file as stated above. The program must also display both the files.

Code:

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
#include <string.h>
```

```
int main(void){
```

```
    FILE * P1, * P2; char C;
```

```
    int flag=0;
```

```

p1 = fopen("input 1.c", "r");
p2 = fopen("output.txt", "w");
if (p1 == NULL) {
    printf("\n File can't open");
}
else {
    while ((c = fgetc(p1)) != EOF) {
        if (c == '\n') {
            printf("%c", c);
            while ((c = fgetc(p1)) == '\n');
        }
        if (c == ' ') {
            printf(" ", c);
            fputc(' ', p2);
            while ((c = fgetc(p1)) == ' ');
        }
        if (c == '/') {
            c = fgetc(p1);
            if (c == '*') {
                while ((c = fgetc(p1)) != '/');
                c = fgetc(p1);
                flag = 1;
            }
        }
    }
}

```

```

    else if(c == '/') {
        while ((c = fgetc(p1)) != '\n');
        flag = 1;
    }
}
if (flag == 1) {
    while ((c = fgetc(p1)) != '\n');
}
fputc(c, p2);
printf(" %.c", c);
flag = 0;
}
}

fclose(p1);
fclose(p2);

p2 = fopen("output.txt", "r");

printf("\n\n");

while ((c = fgetc(p2)) != EOF) {
    printf(" %.c", c);
}
}

```

```
printf("\n\n");
```

```
fclose(p2);
```

```
return 0;
```

```
}
```