



Ahsanullah University of Science and Technology (AUST)
Department of Computer Science and Engineering

Assignment 1

Course No.: CSE4130

Course Title: Formal Languages and Compilers Lab

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Input.c:

```
#include<stdio.h>

int main(){
    // This is comment
    /*Fardin Jaman Aranyak*/
    printf("Hellow World!!");

    return 0;
}
```

Solution Code:

```
#include<stdio.h>

int main(){

    FILE*fp,*fw,*fr;
    char pre_ch='\0',ch;
    int isComment=0;

    fp=fopen("input.c","r");
    fw=fopen("output.c","w");
    fr=fopen("output.c","r");

    if(fp==NULL){
```

```

printf("Something went wrong!!\n");
return 1;
}

while((ch=fgetc(fp))!=EOF){

    if(isComment){
        if(ch=='/'&& pre_ch=='*'){
            isComment=0;
        }
    }
    else if(ch=='*'&& pre_ch=='/'){
        isComment=1;
    }
    else if(ch=='/' && pre_ch=='/'){
        while((ch=fgetc(fp))!=EOF && ch!='\n'); // Trap if single line comment
    }
    else if(ch==' ' && pre_ch==' '){

        // empty
    }
    else if(ch=='\n' || ch=='/'){

        //Ignore new line
    }
    else{
        fputc(ch,fw); // save filtered code in output.c
    }
}

```

```
    pre_ch=ch;
}
fclose(fp);
fclose(fw);

//read output.c file
while((ch=fgetc(fr))!=EOF){
    printf("%c",ch);
}
printf("\n");
fclose(fw);

return 0;
}
```