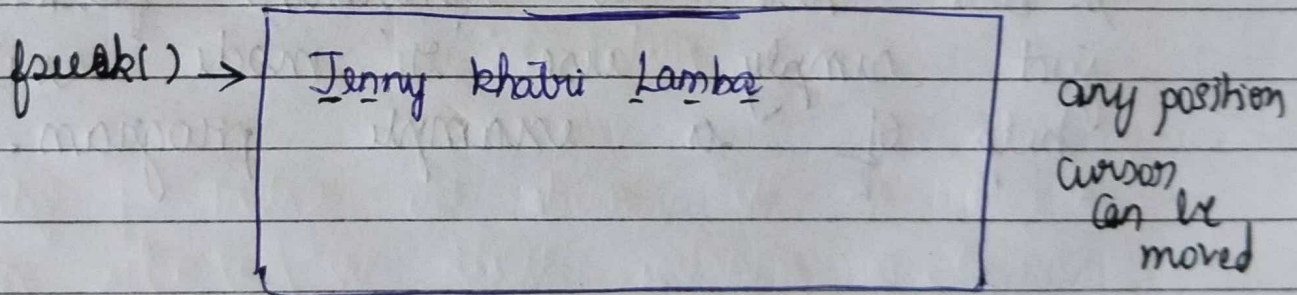


C-127 \Rightarrow fseek() in C

* fseek() function is going to move the cursor of the specific file in a specific position.

* rewind() will move the cursor from any position to beginning.



* Not only to move the cursor fseek() will also update the content.

Syntax:

```

FILE      longint      int
↑ variable  ↑          ↑ origin
int fseek(filepointer, offset, position)
  
```

→ Return type of `fseek()` is `int`; it will return 0 if it will create file pointer successfully.

→ `filepointer` is ^{variable name of} the data type `FILE`

→ `offset` means we specify at how many position we want to move the cursor [if left side (-); if right side (+)]

→ `position` means from which position we want to move the cursor e.g. from beginning or end or any other position.

↳ It has 3 values which are predefined functions inside `stdio.h`

↳ `SEEK_SET` (beginning)

↳ `SEEK_CUR` (current position)

↳ `SEEK_END` (end)

NOTE:

* We can use this `fseek()` in any mode like, `r/w/a/r+/w+/a+`.

* But here to understand `fseek()` we just simply use 'r' mode with a help of an example program.

① → set cursor by moving forward

beginning

Date _____
Page _____

abc.txt

0 1 2 3 4 5 6 7 8 9 10 11 12 13
Jenny khatri is awesome
↑

```
int main()
{
```

```
FILE *fp = NULL;
```

Then ch;

```
fp = fopen("abc.txt", "r");
```

```
if (fp == NULL)
```

```
{
    printf("can't open file"); exit(1);
}
```

```
fseek(fp, 6, SEEK_SET);
```

0 + 6 ⇒ 6

↓

Now cursor
is at 6th
position in
a file

```
ch = fgetc(fp);
printf("%c", ch);
```

```
}
```

after reading
file pointer moved to 6

NOTE:-

* If we want to modify the content after moving the cursor then we can try with w+/r+/w+/a+/a mode

② → set cursor by moving backward from current position

```
fseek(fp, -3, SEEK_CUR);
```

0 1 2 3 4 5 6 7 8 9 10 11 12 13
Jenny khatri is awesome
- ↑ ↑ ↑
2 3 4
faculty

```
ch = fgetc(fp);
```

```
printf("%c", ch);
```

* after printing 'y' new cursor is moved to 5th position

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Date _____
Page _____

② set cursor by moving from end

```
fseek(fp, -3, SEEK-END);
```

```
ch = fgetc(fp);
```

```
printf("%c", ch);
```

* New 'o' will be printed and cursor moved to next position 'm'

NOTE:

* After moving the cursor; we can also update using any mode.

* In r^+ mode we can do but in w^+ mode the previous content is erased and here is problem; so try it in system.

④ →

```
fp = fopen("abc.txt", "r+");
```

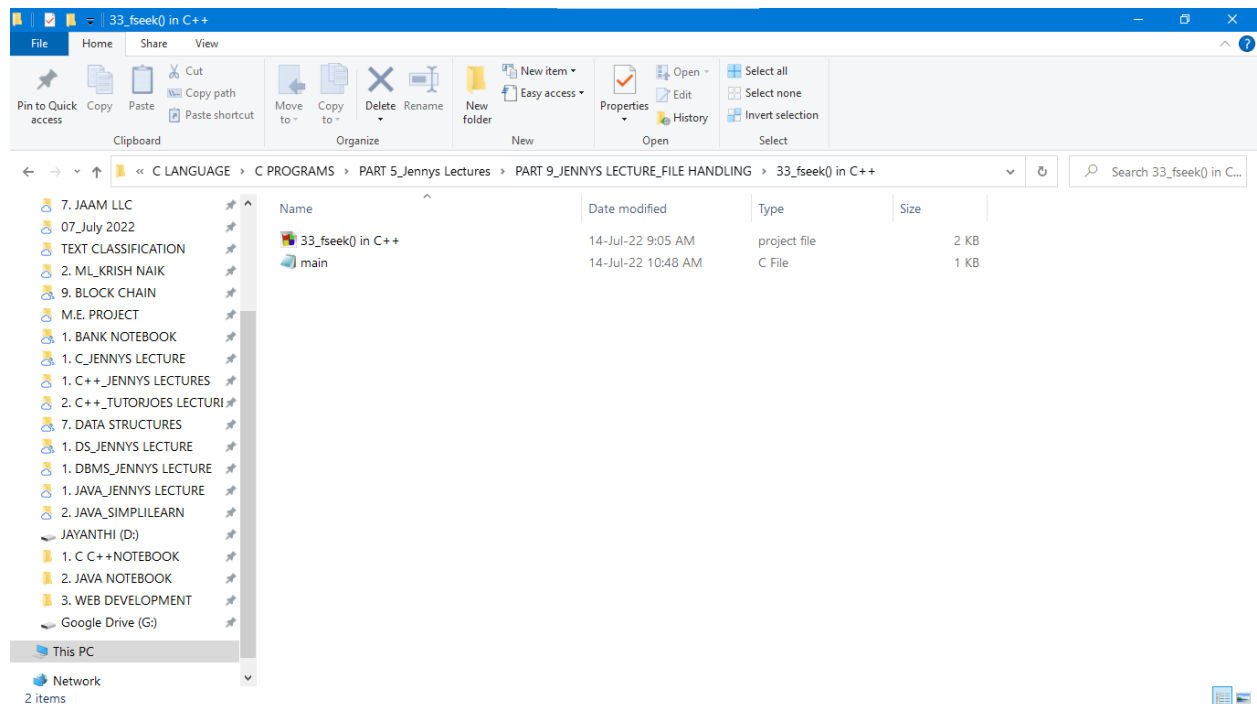
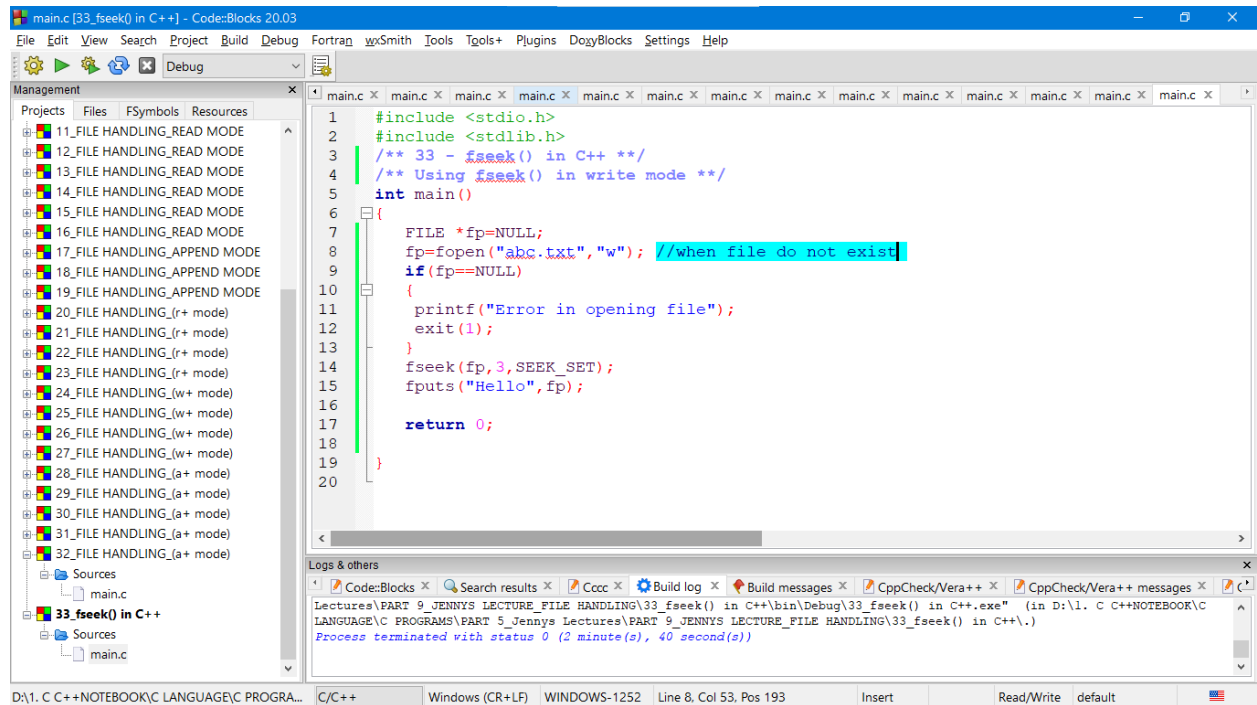
```
fseek(fp, 6, SEEK-SET);
```

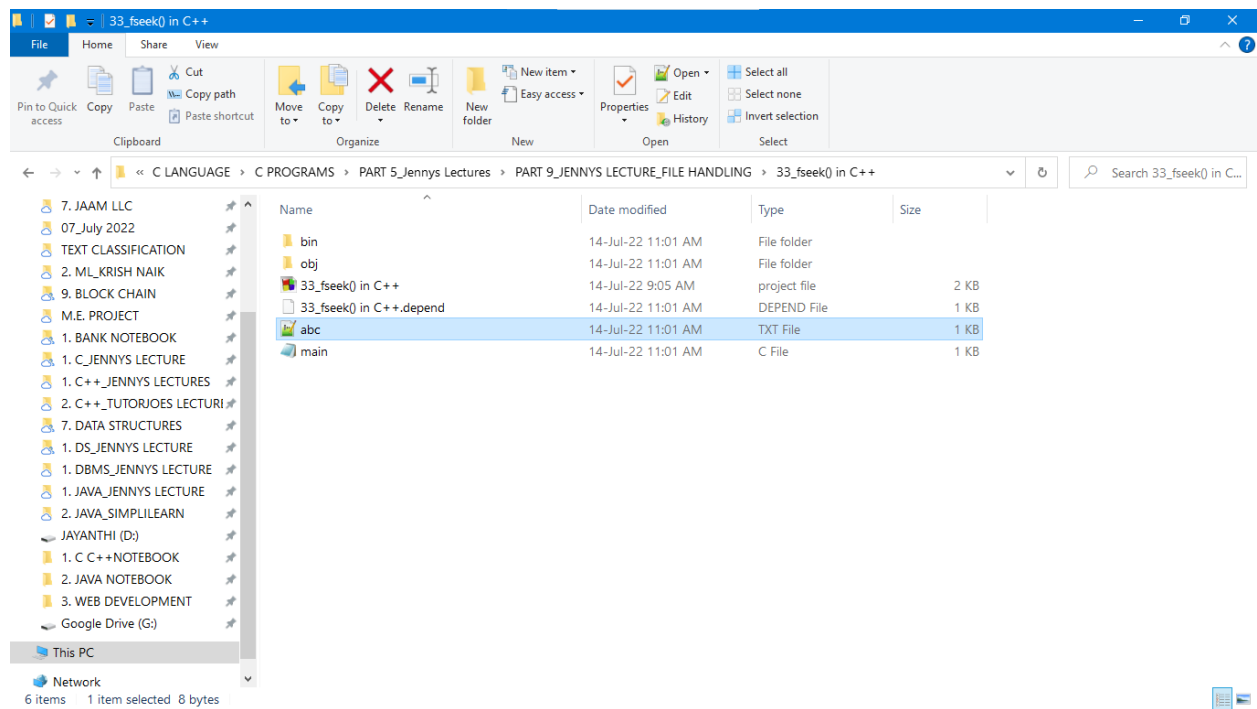
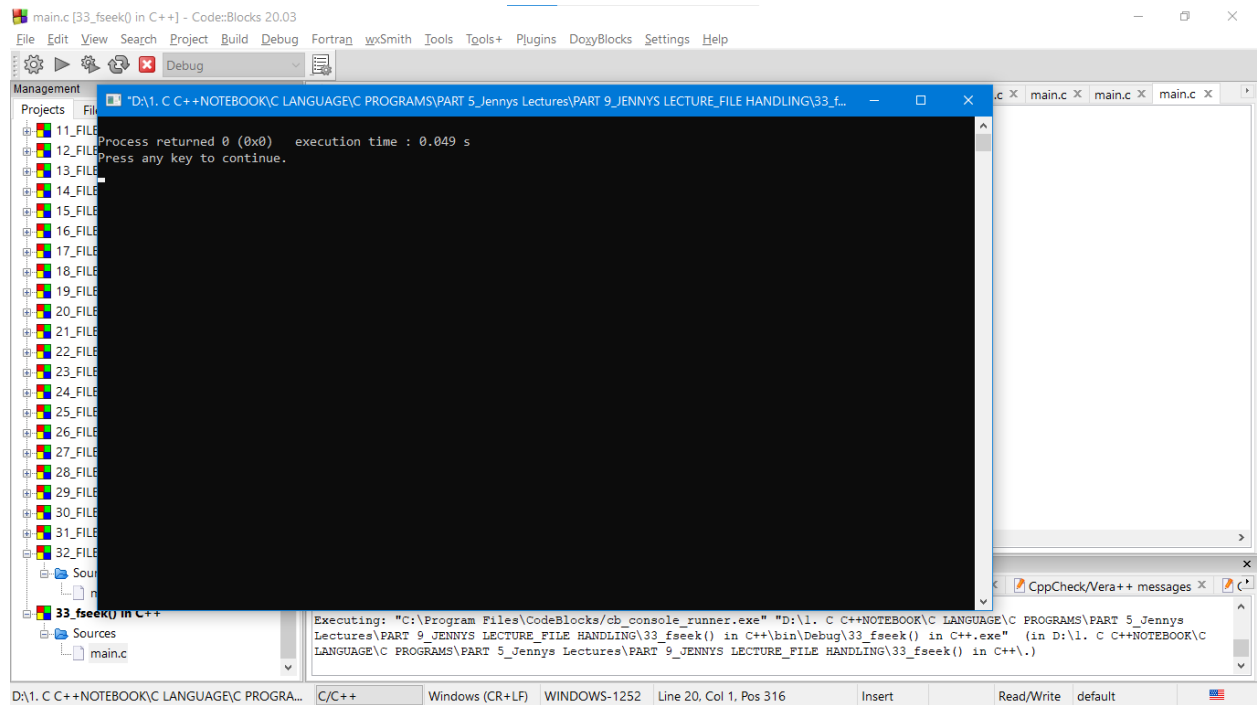
0 1 2 3 4 5 6 7 8 9 10 11
Jenny khatri is awesome
family

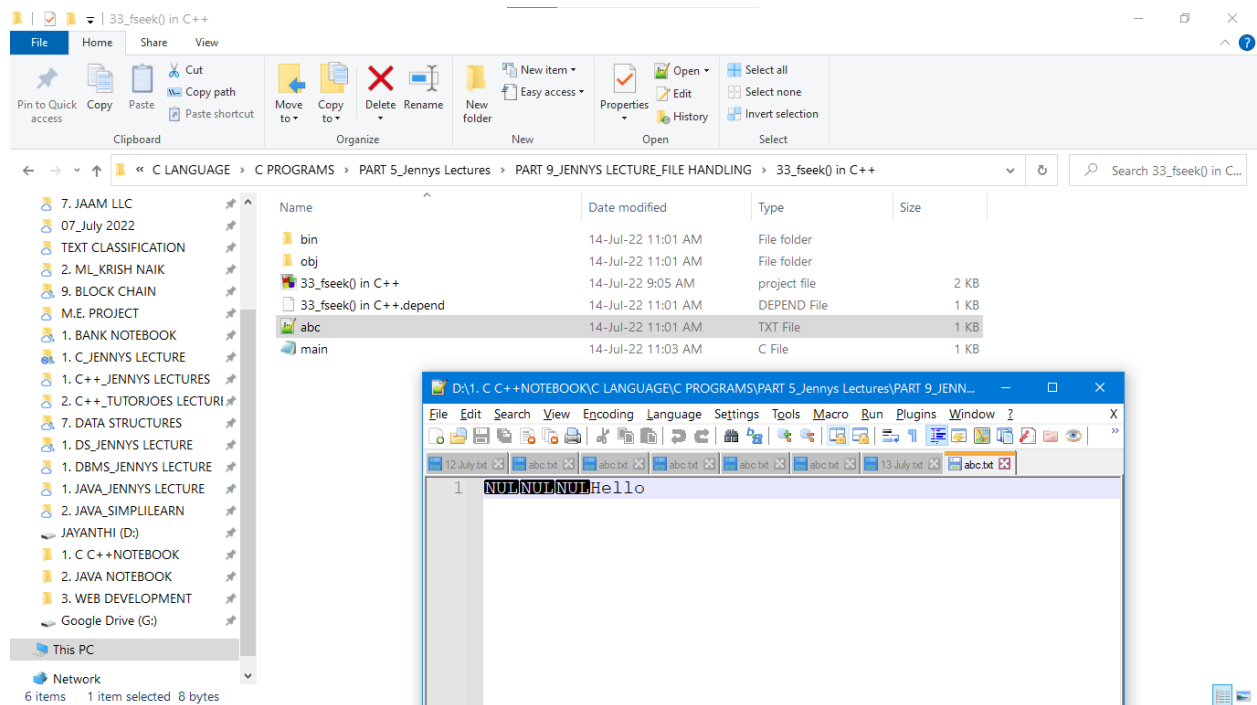
```
fputc('h', fp);
```

* But in w^+ mode the content of file is erased, so practice with $w^+/a/a^+/w$ mode.

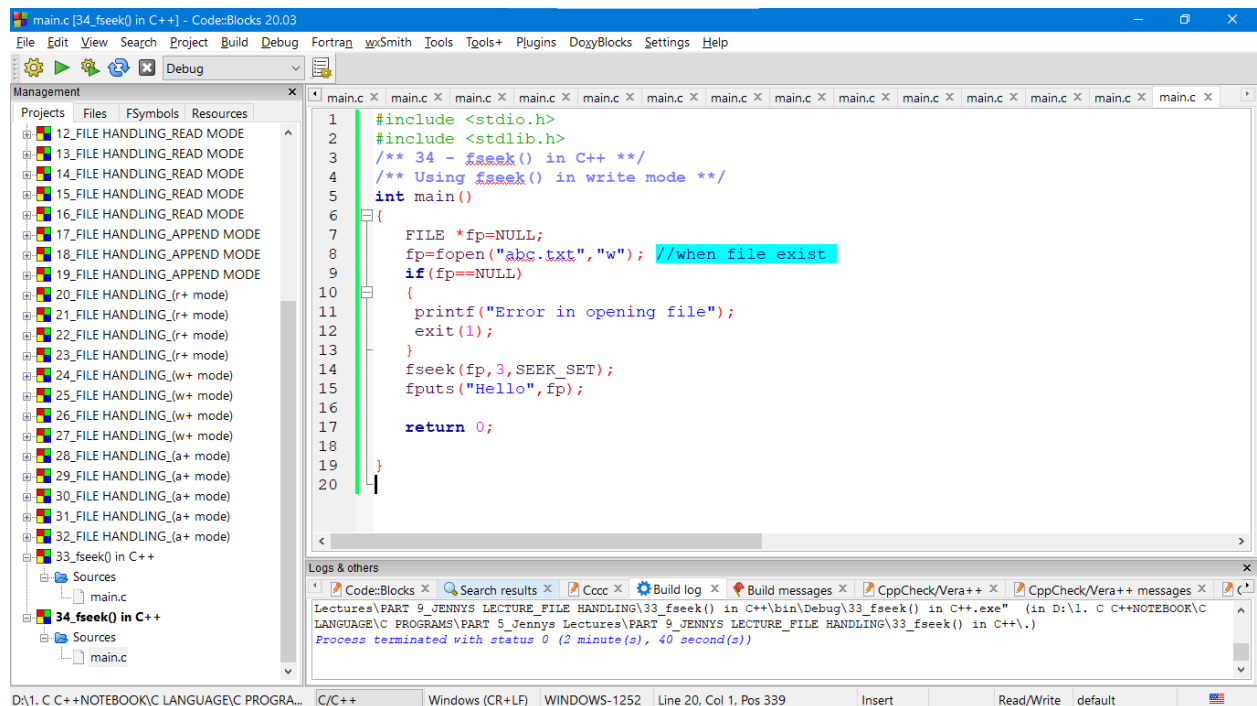
PROGRAM 1:

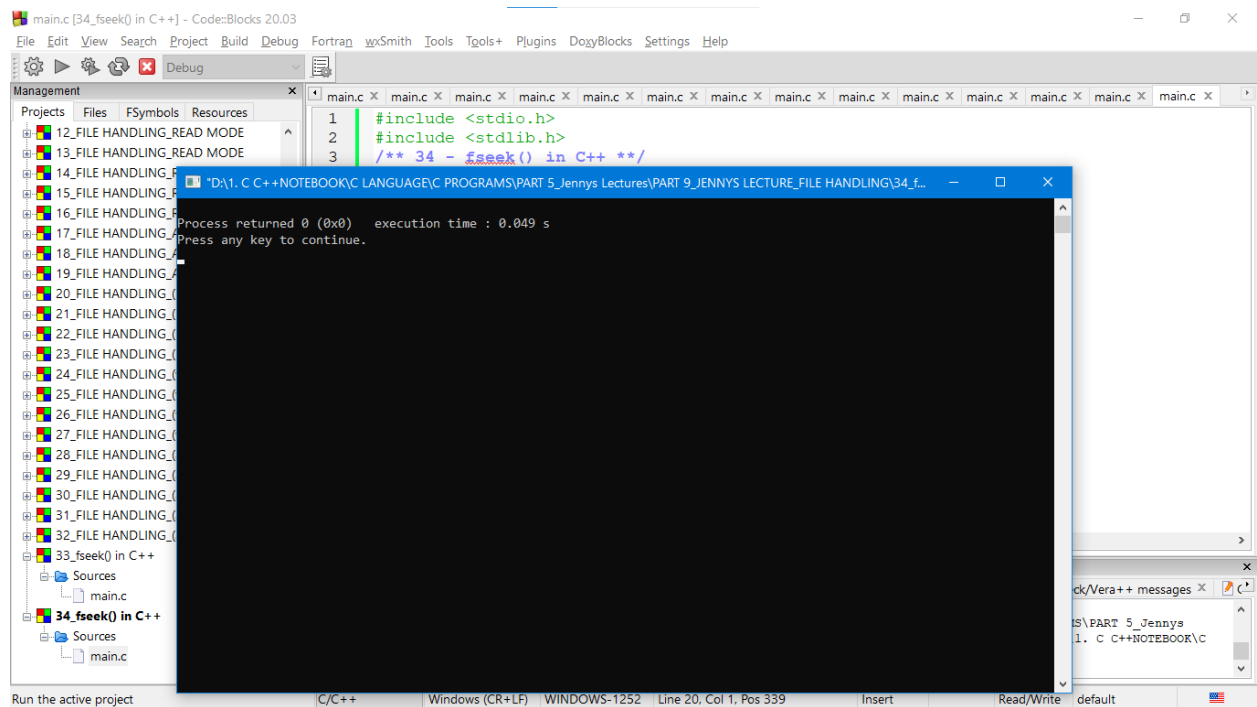
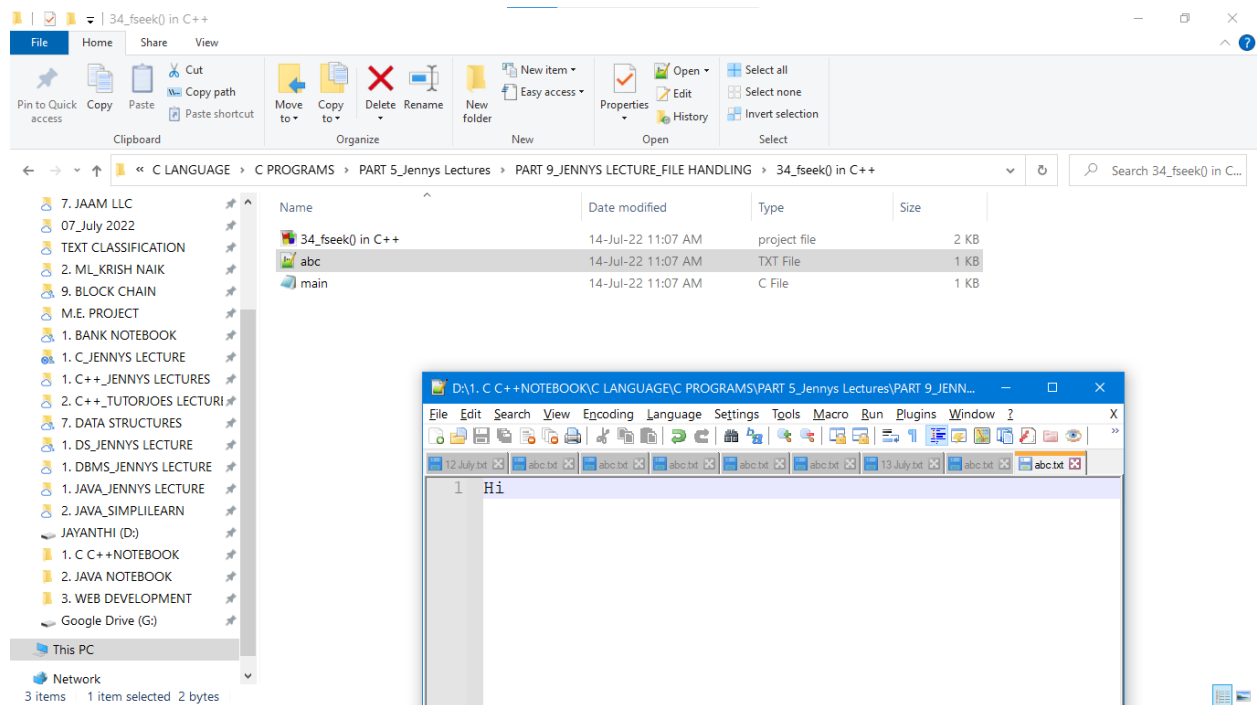


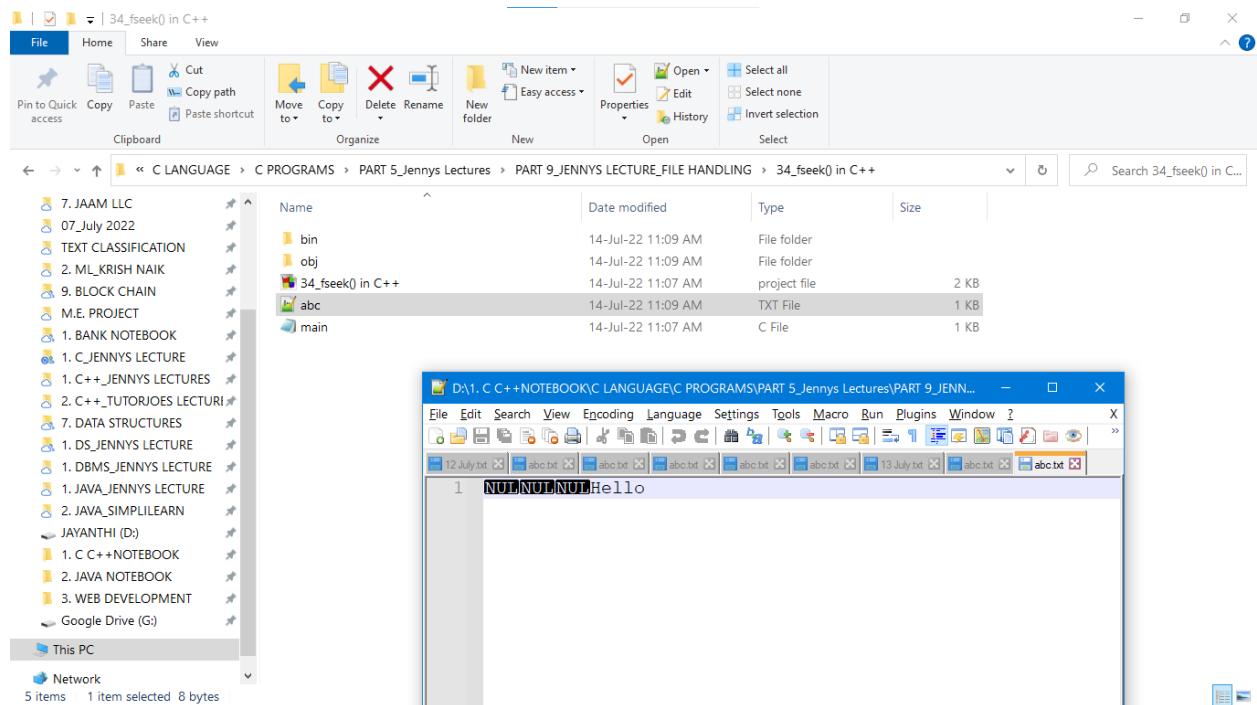




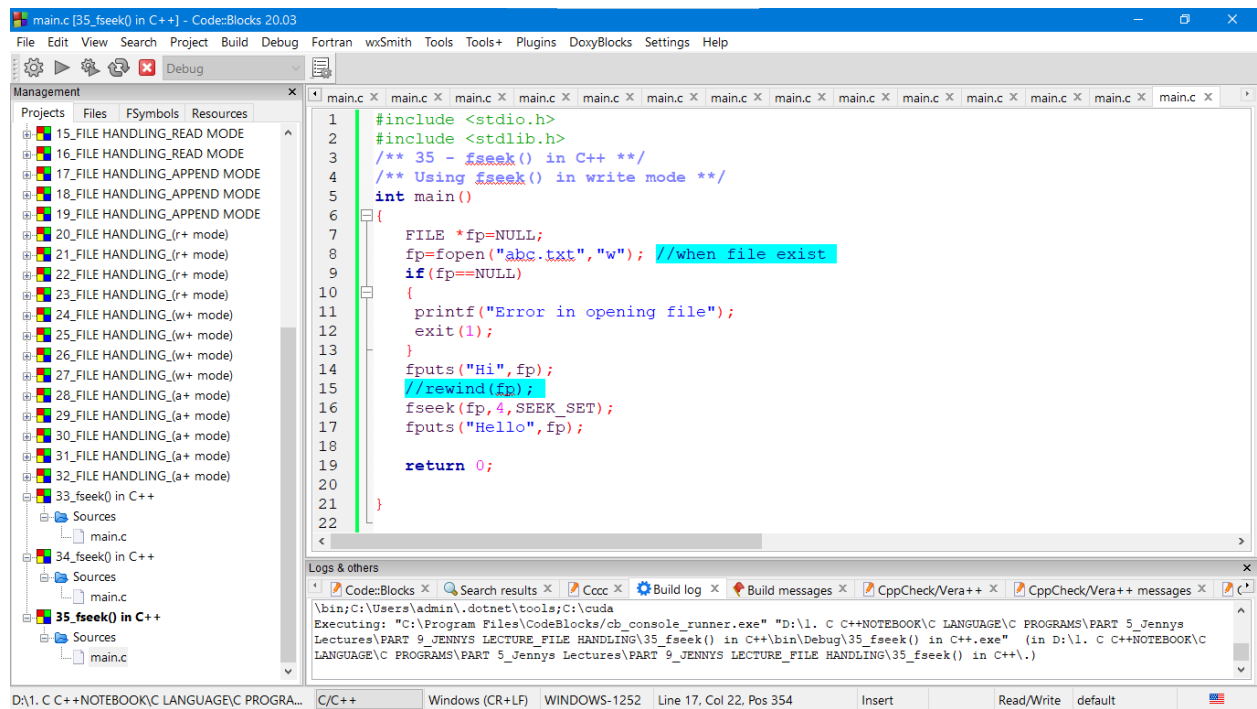
PROGRAM 2:

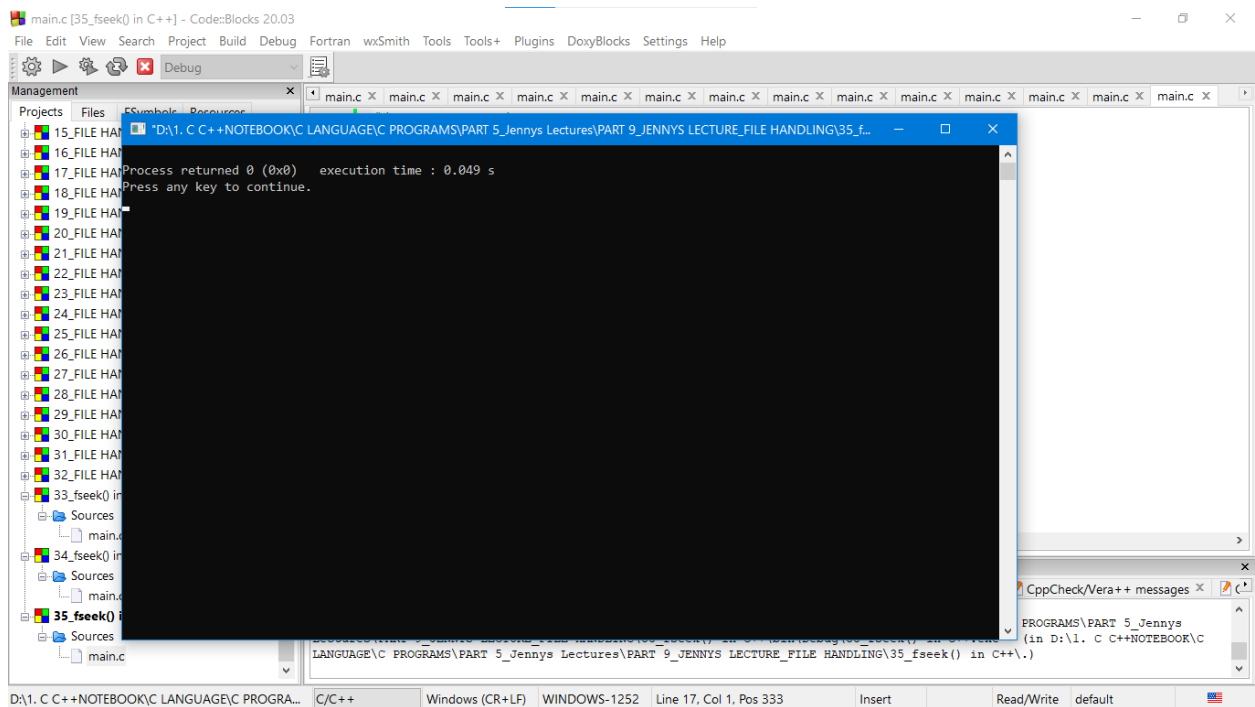
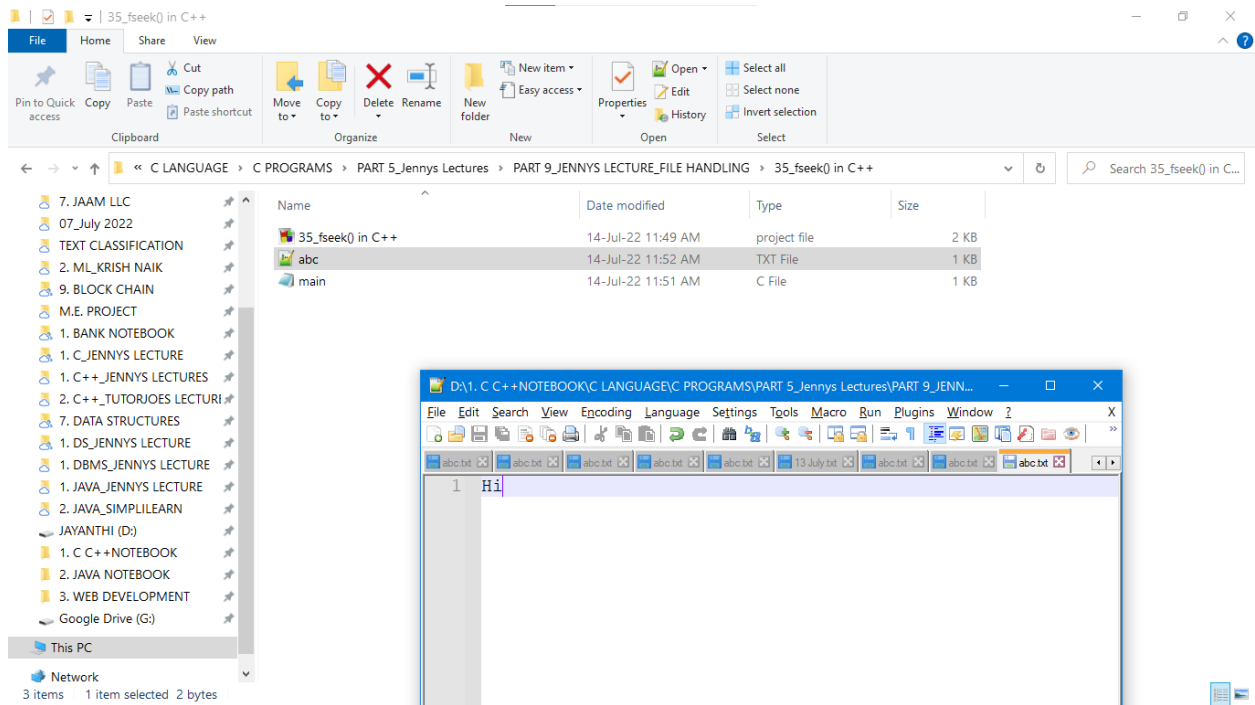


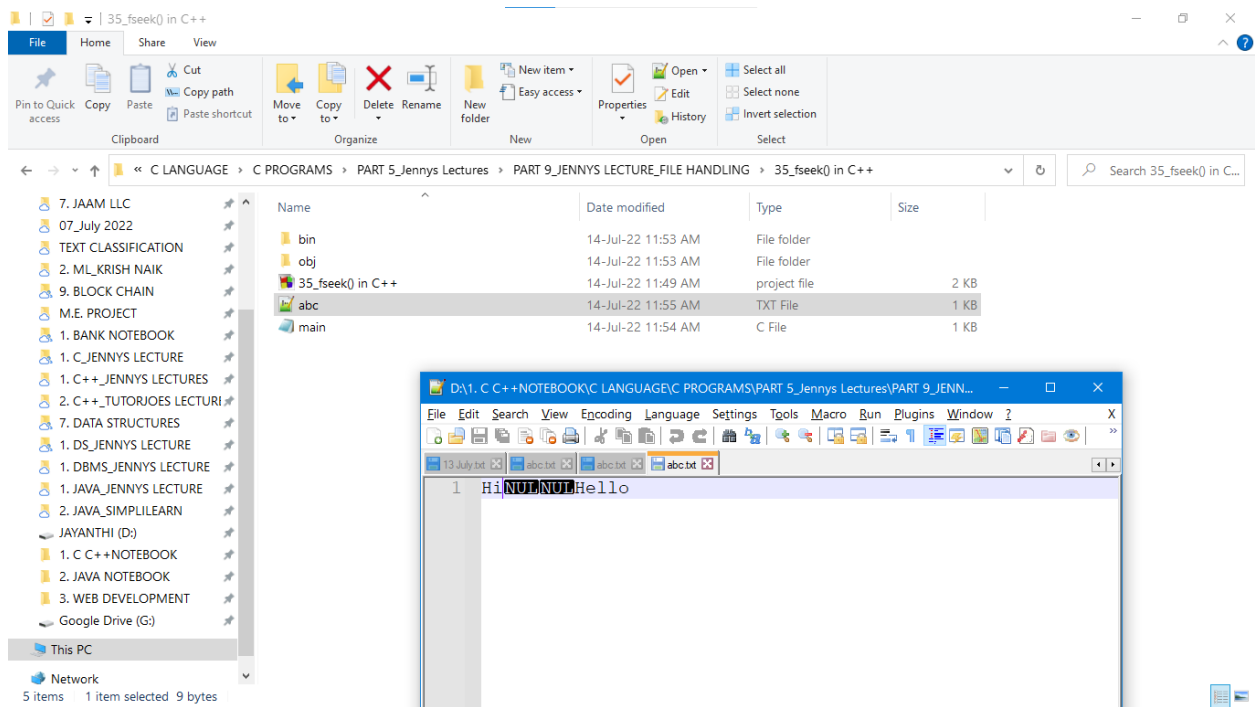




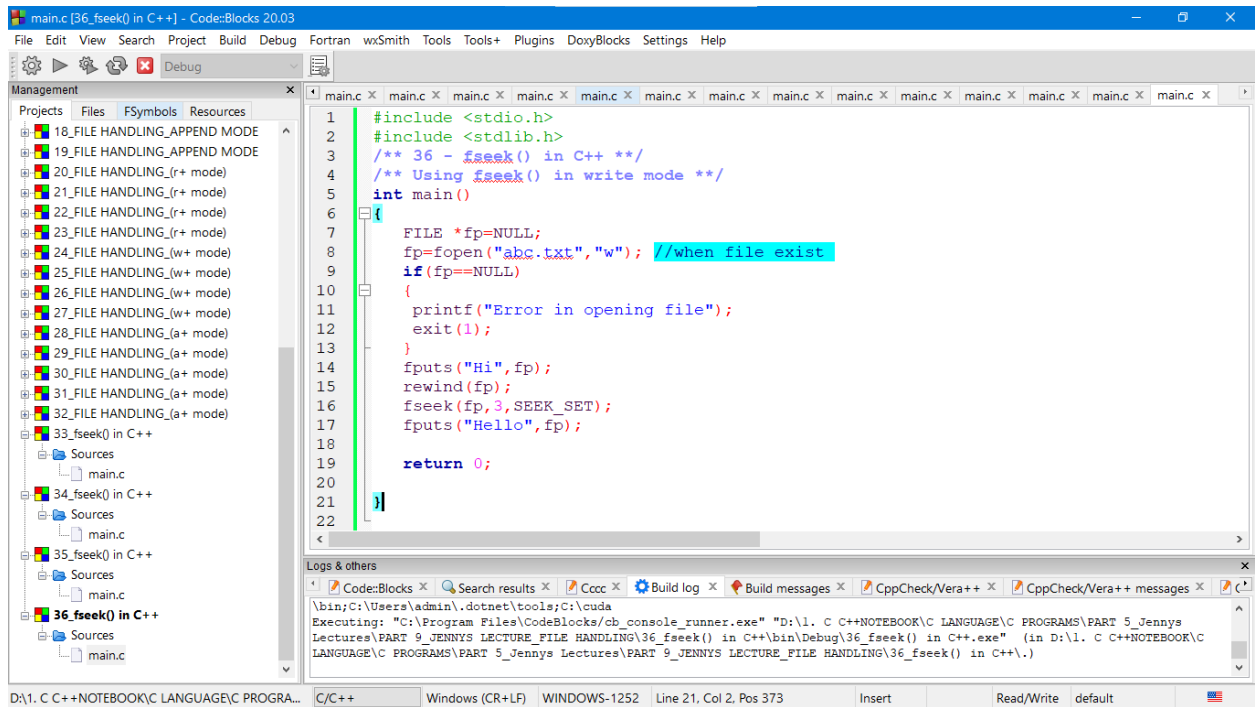
PROGRAM 3:

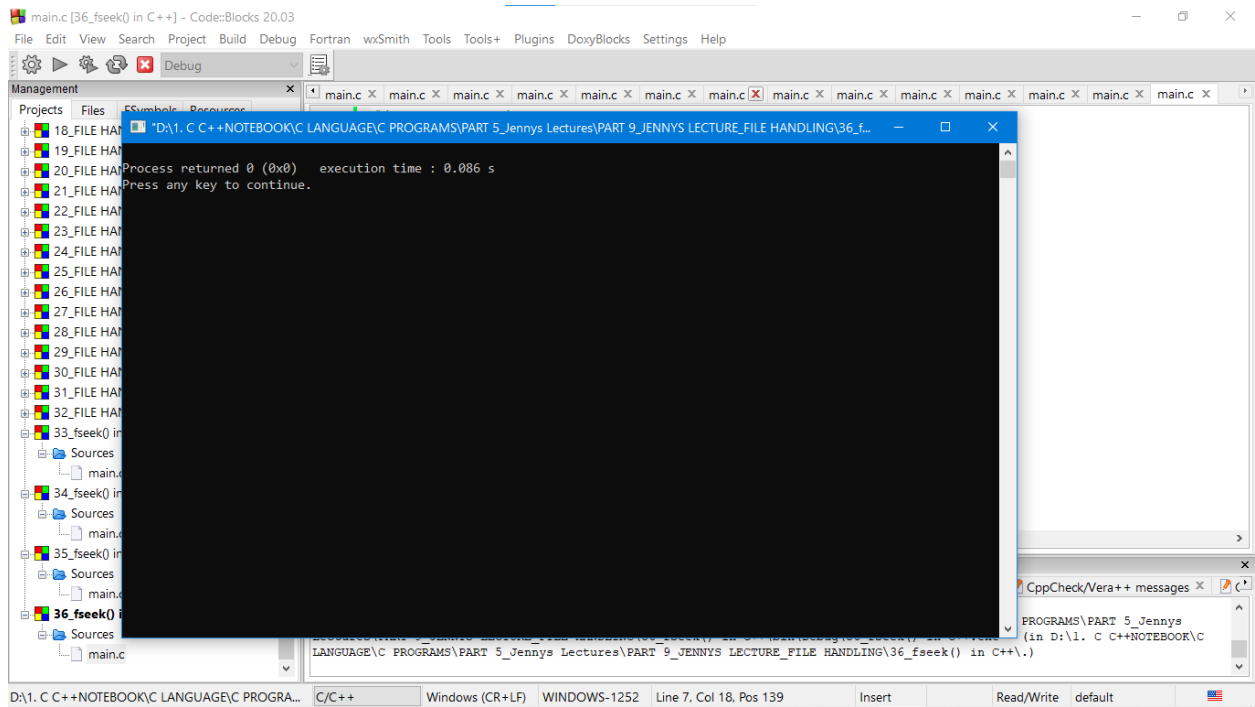
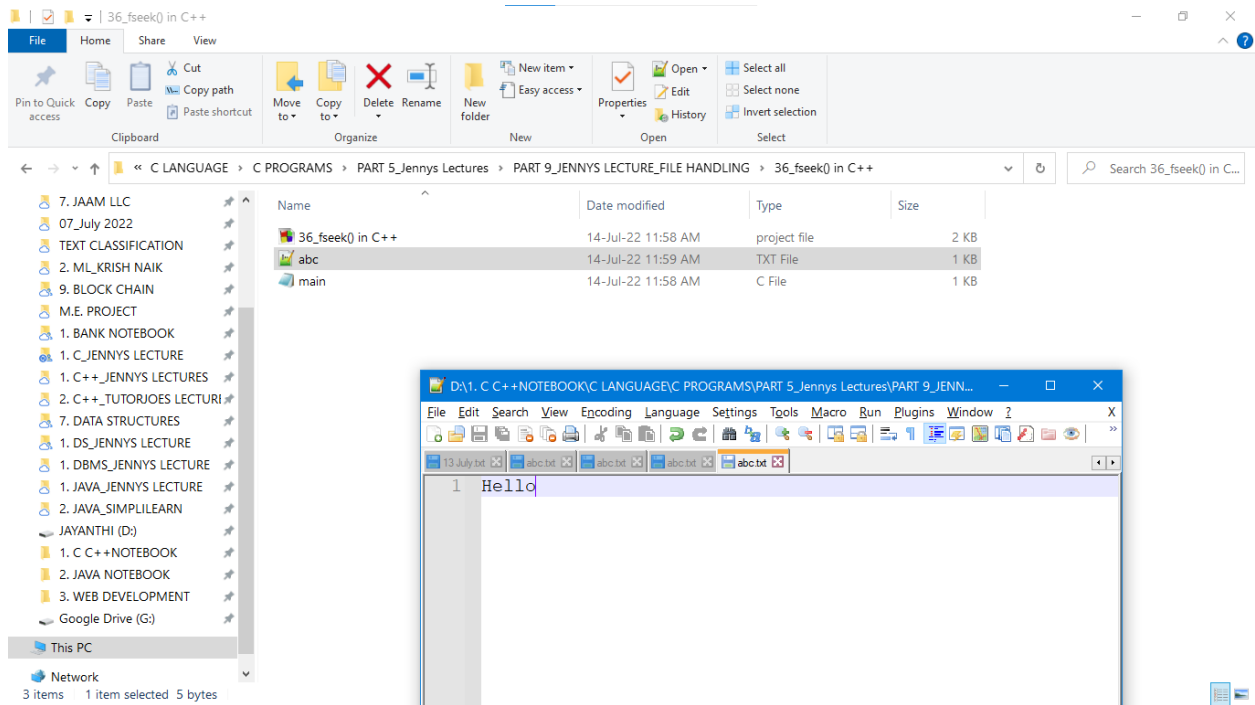


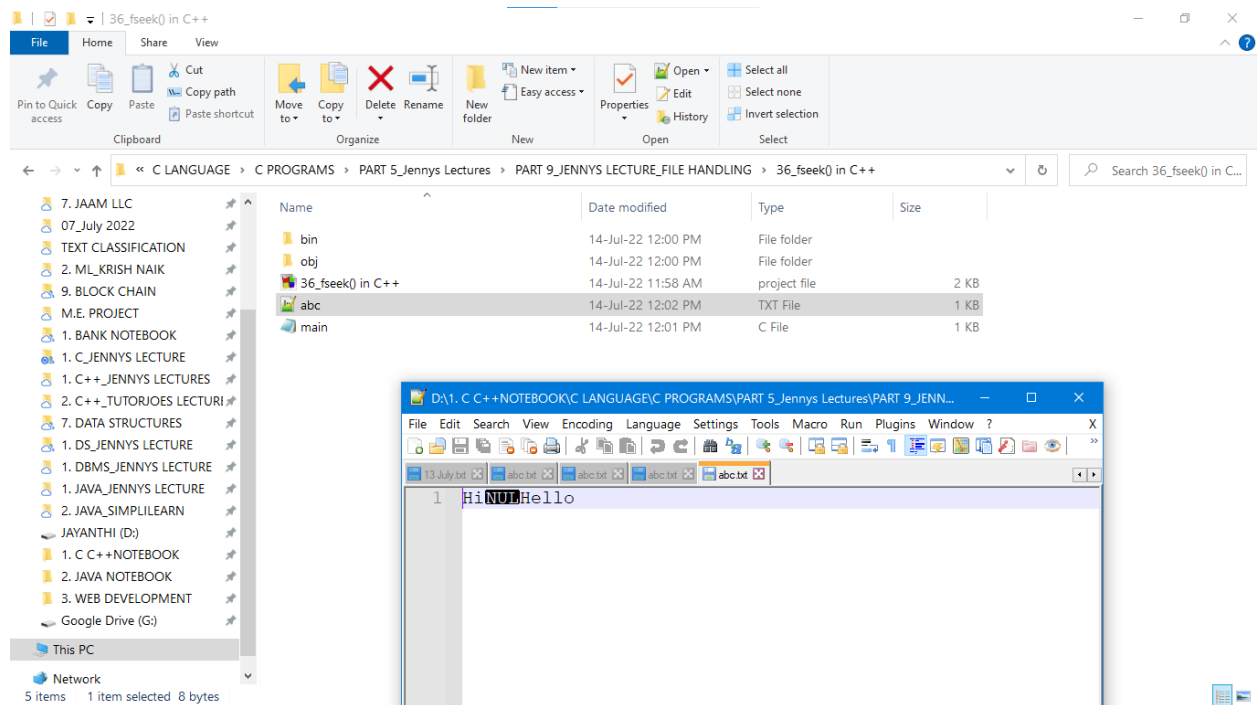




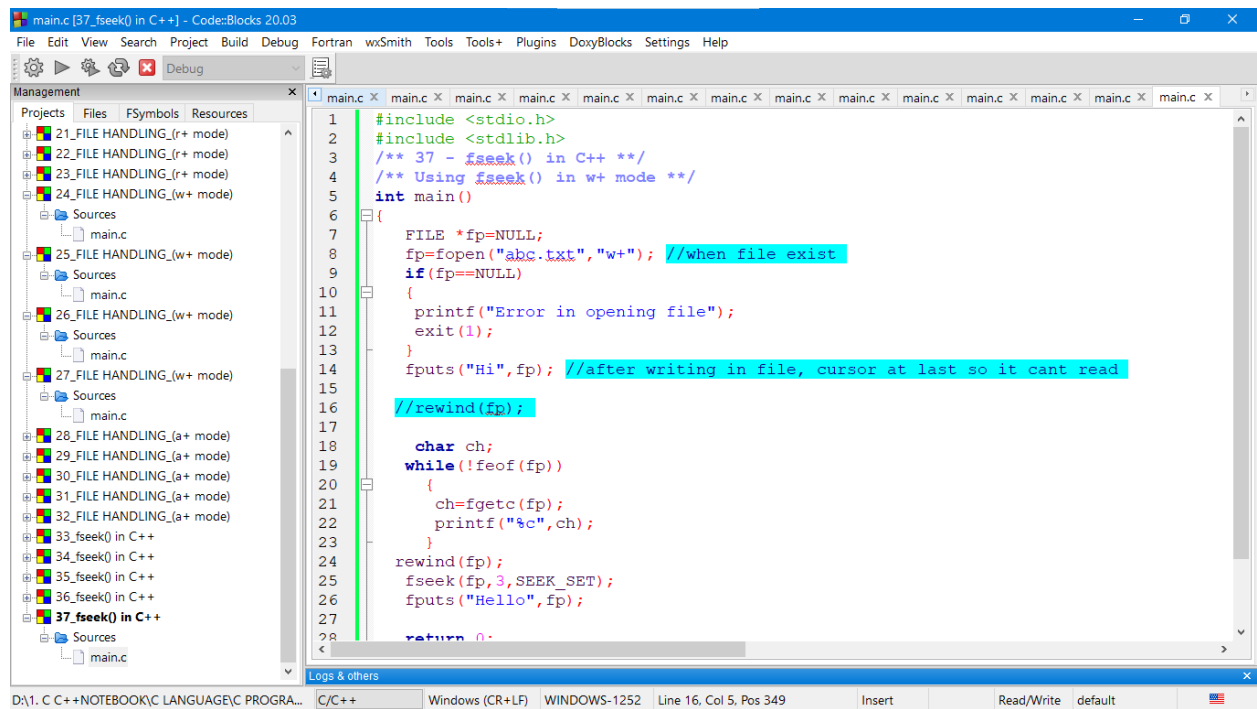
PROGRAM 4:

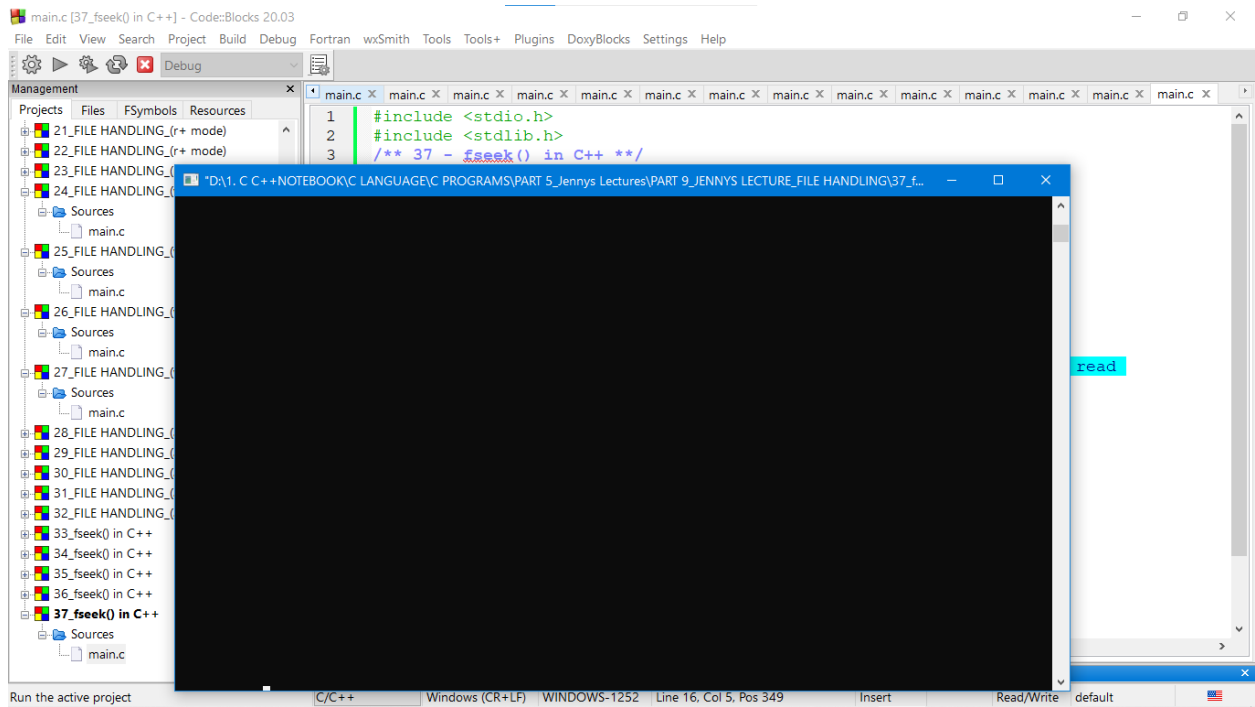
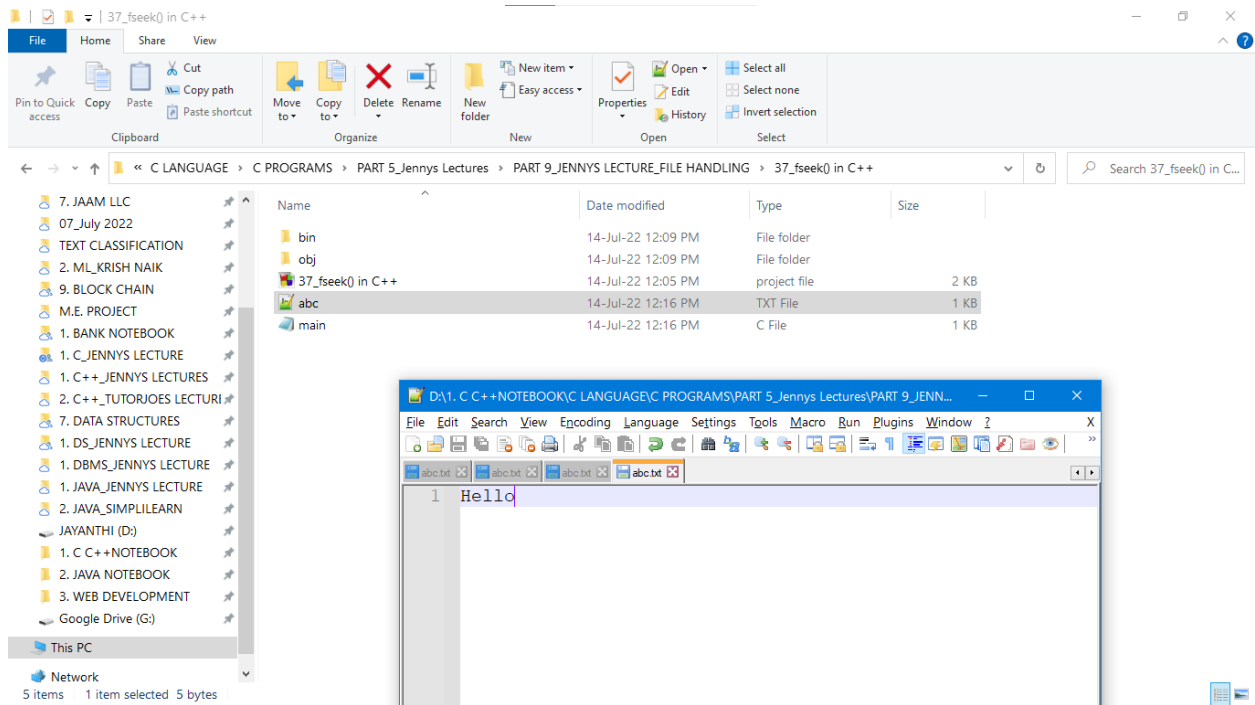




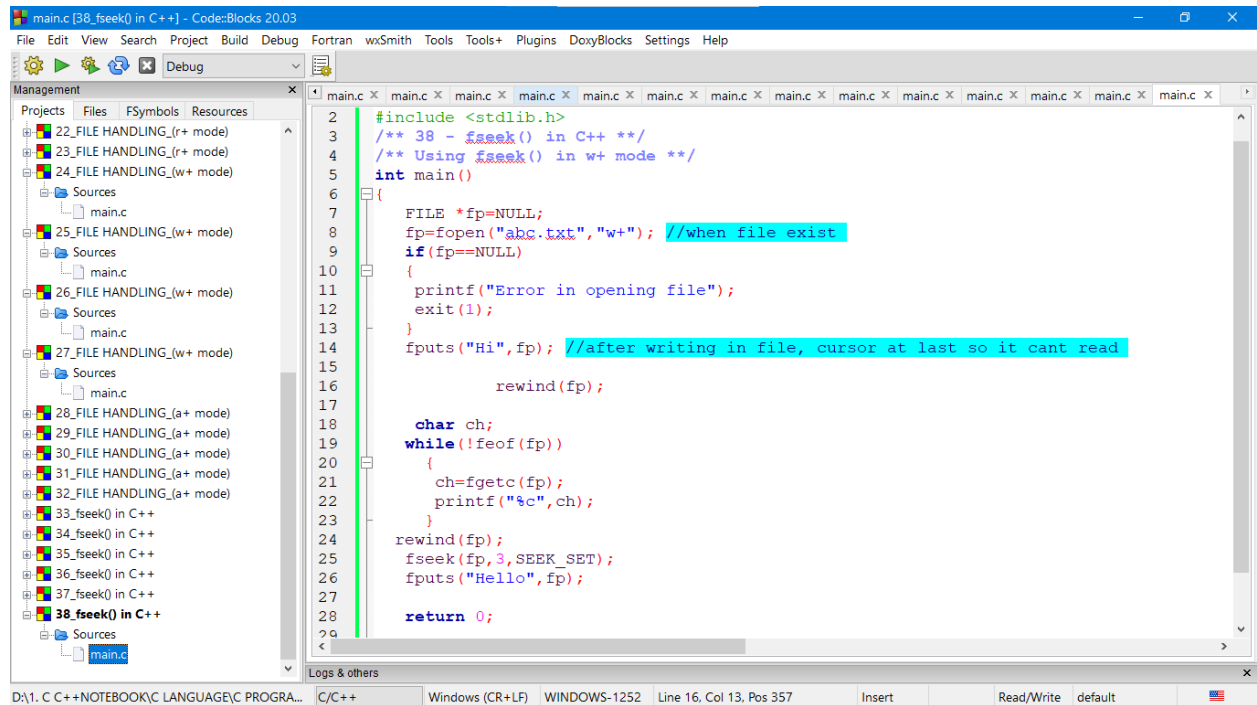


PROGRAM 5:





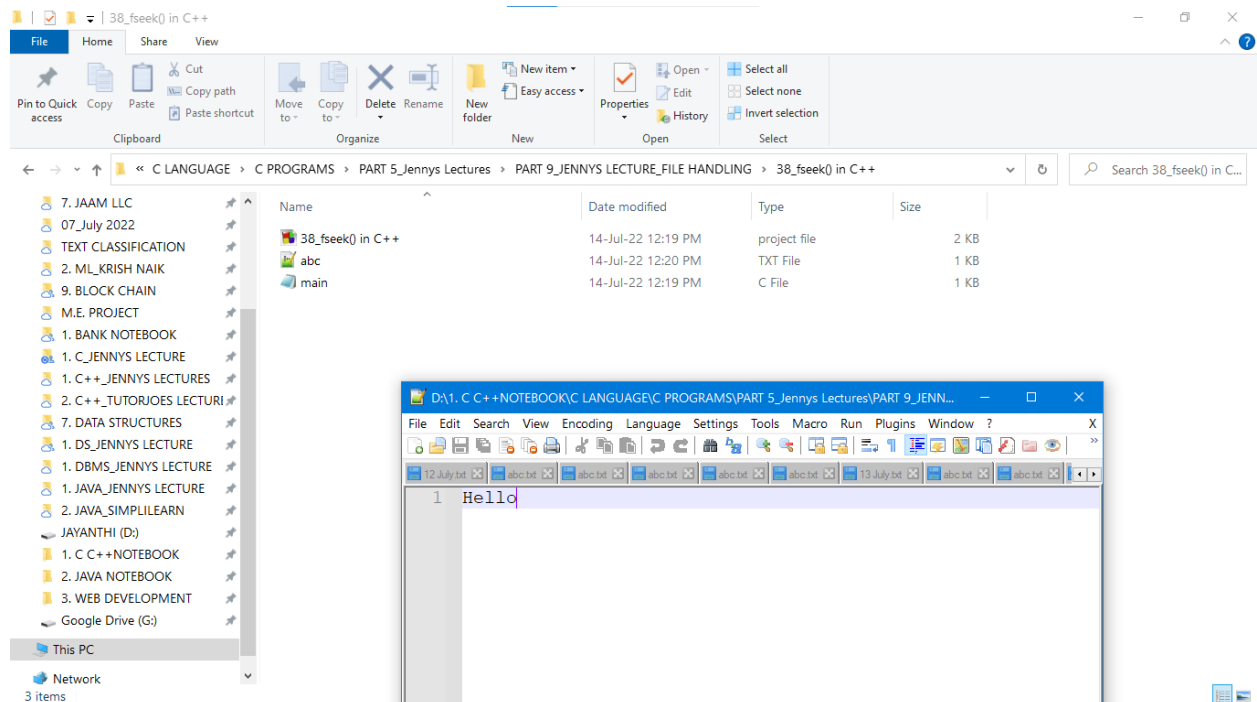
PROGRAM 6:

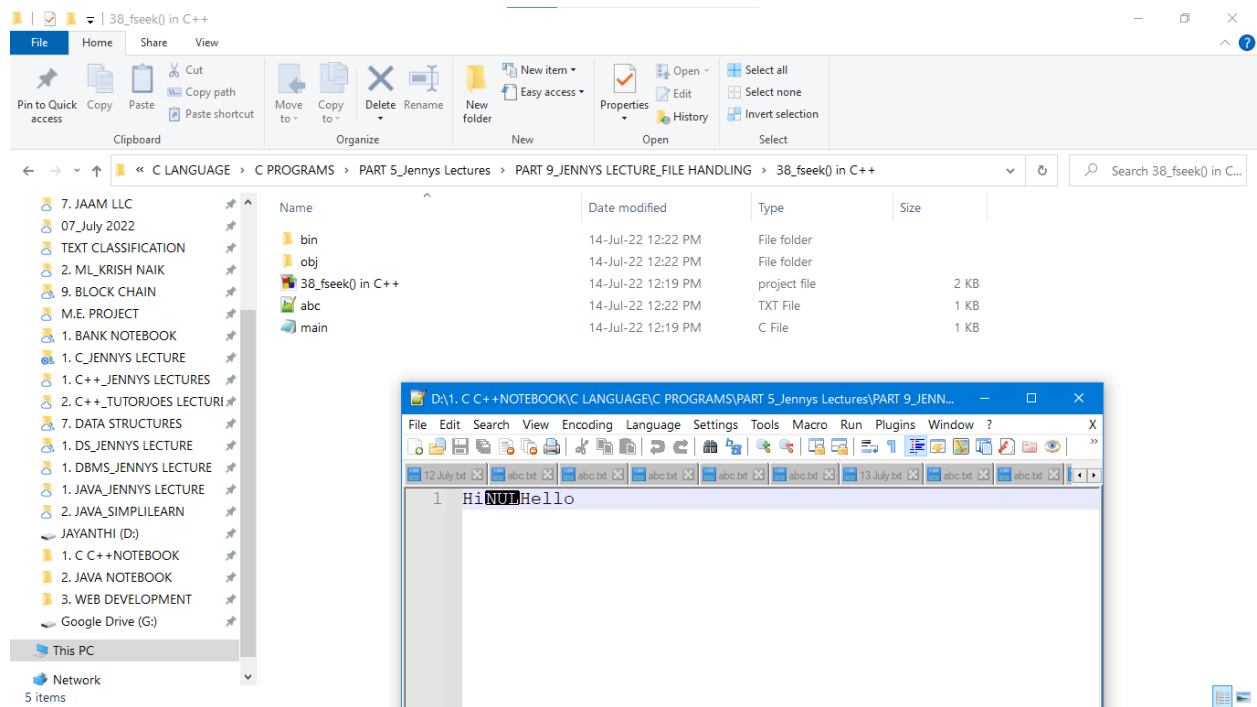
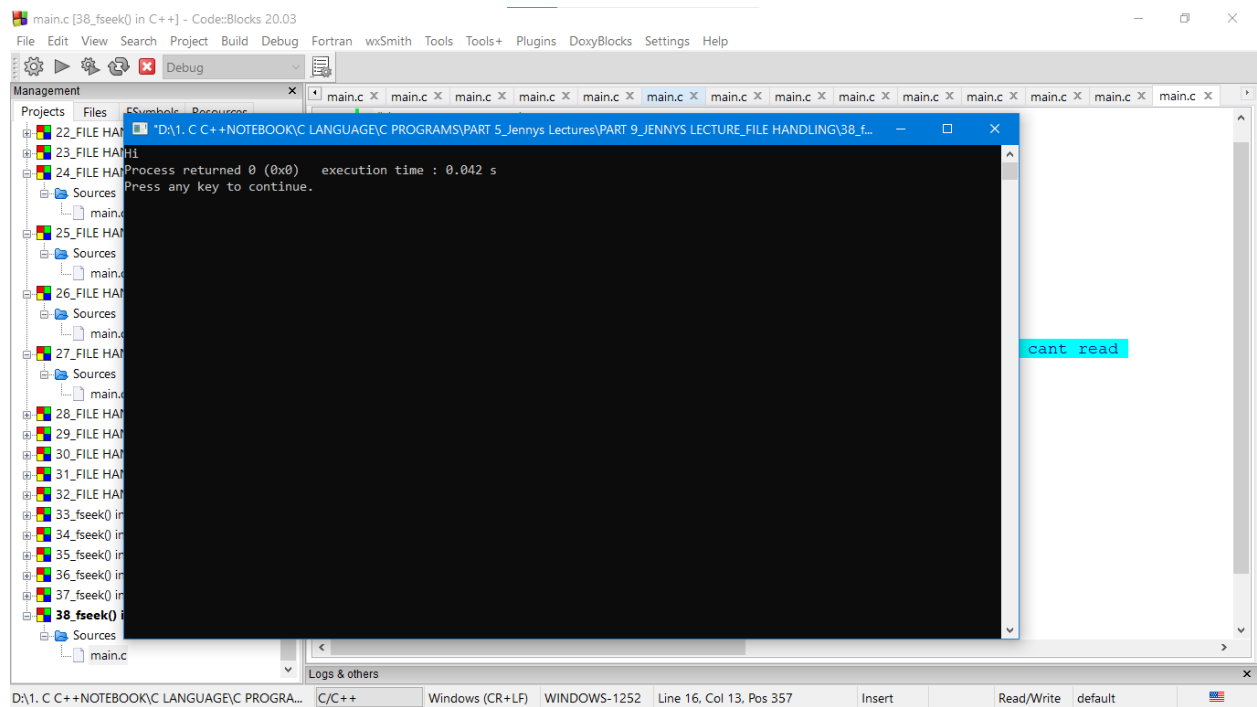


The screenshot shows the Code::Blocks IDE with the project '38_fseek() in C++' open. The left sidebar displays the project structure, including a 'Sources' folder containing 'main.c'. The main editor window shows the following C++ code:

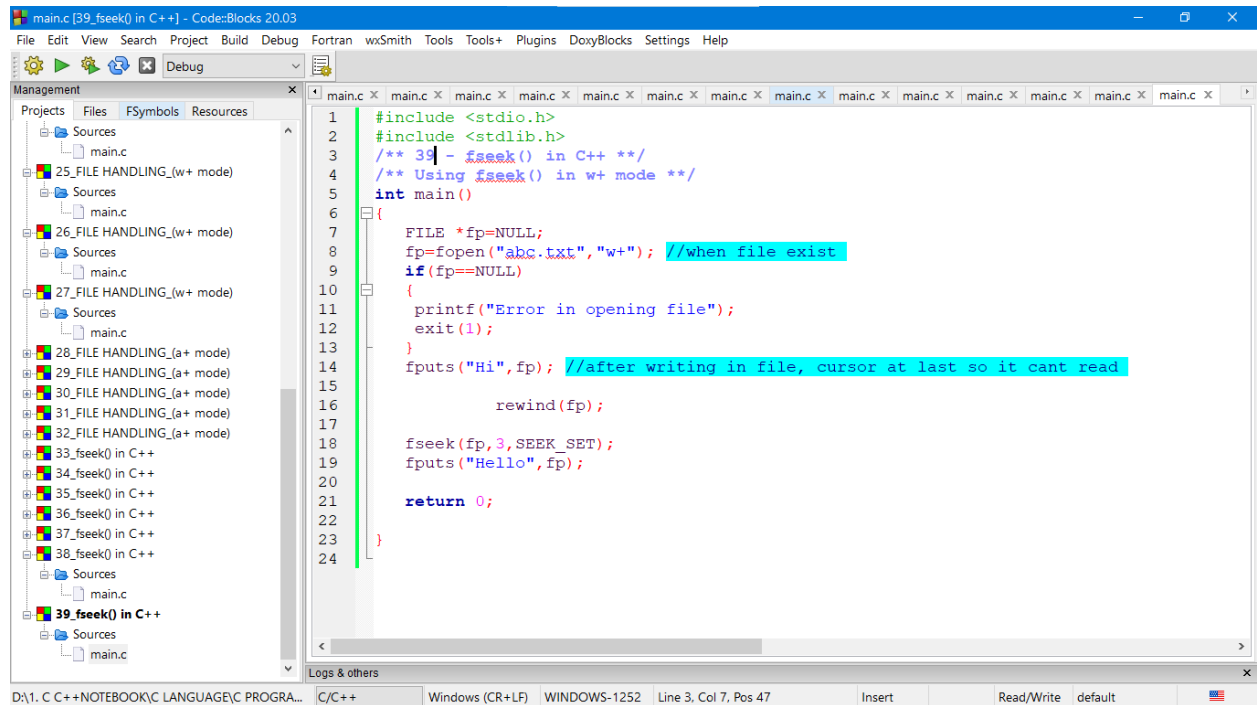
```
1 // 38 - fseek() in C++  
2 #include <stdlib.h>  
3 /** 38 - fseek() in C++ */  
4 /** Using fseek() in w+ mode */  
5 int main()  
6 {  
7     FILE *fp=NULL;  
8     fp=fopen("abc.txt", "w+"); //when file exist  
9     if(fp==NULL)  
10    {  
11        printf("Error in opening file");  
12        exit(1);  
13    }  
14    fputs("Hi", fp); //after writing in file, cursor at last so it cant read  
15  
16    rewind(fp);  
17  
18    char ch;  
19    while(!feof(fp))  
20    {  
21        ch=fgetc(fp);  
22        printf("%c", ch);  
23    }  
24    rewind(fp);  
25    fseek(fp, 3, SEEK_SET);  
26    fputs("Hello", fp);  
27  
28    return 0;  
29 }
```

The status bar at the bottom indicates the file path: D:\1. C C++\NOTEBOOK\C LANGUAGE\C PROGRAMS\PART 5_Jennys Lectures\PART 9_JENN... and the cursor position: Line 16, Col 13, Pos 357.

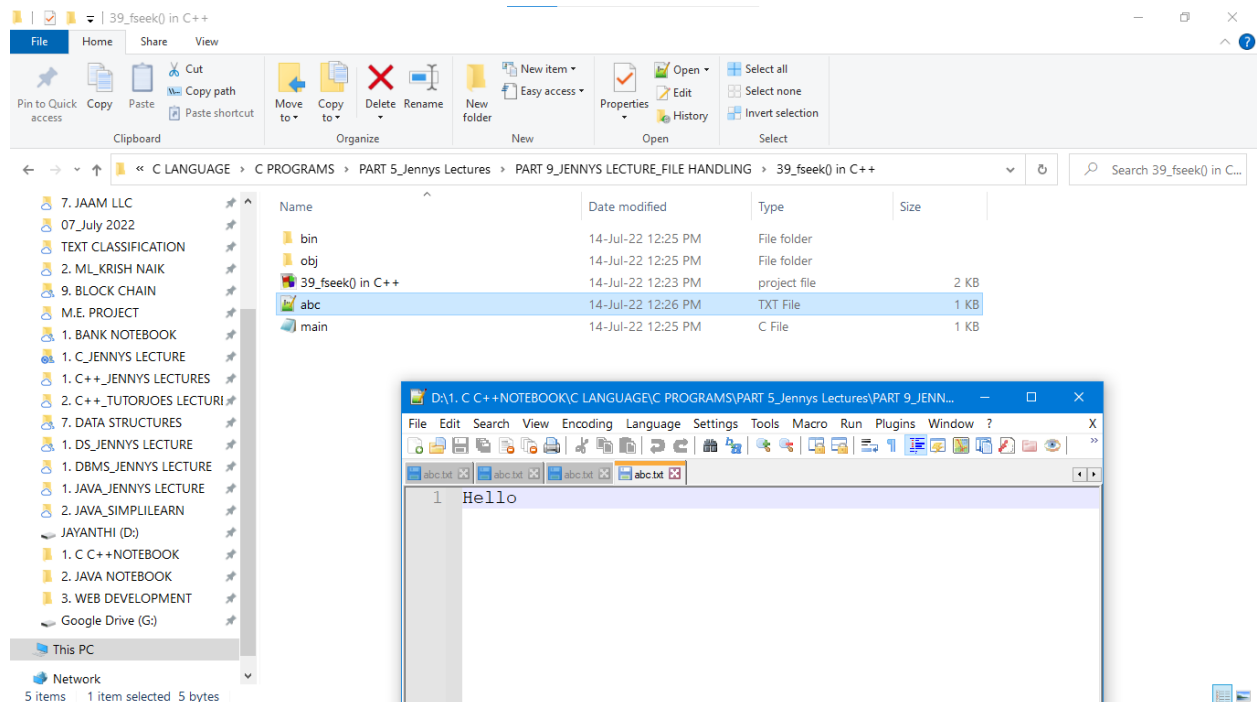


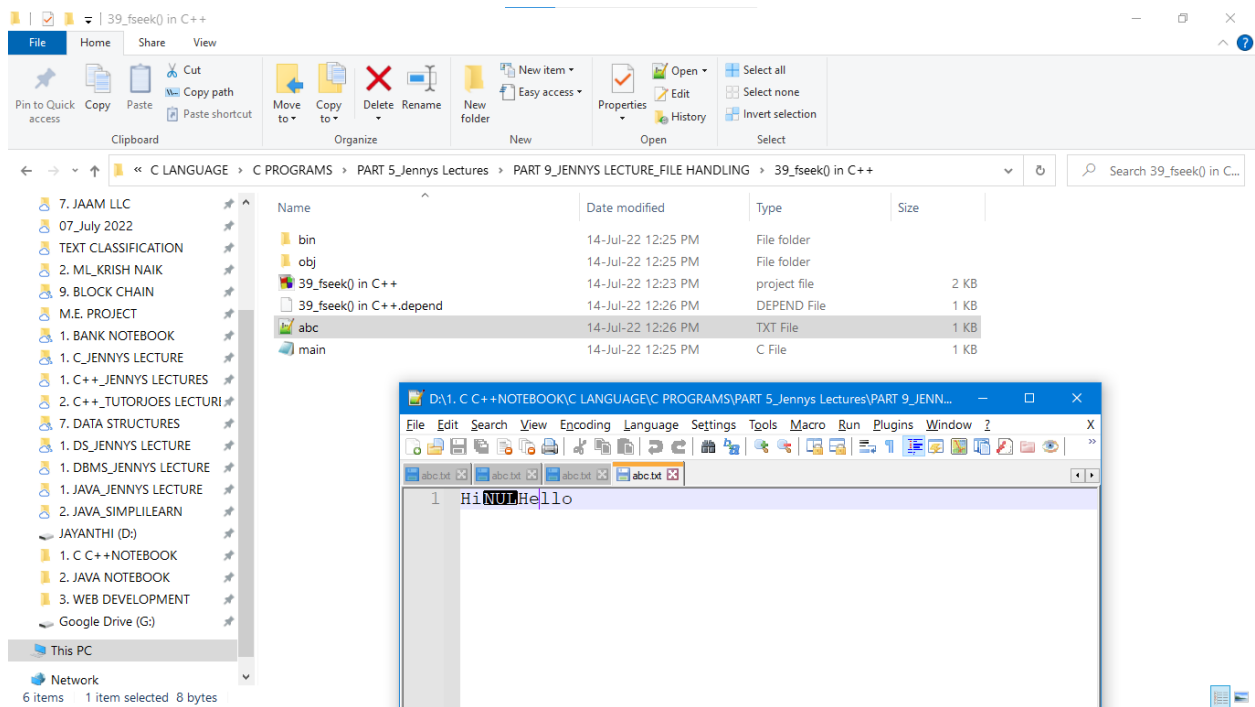
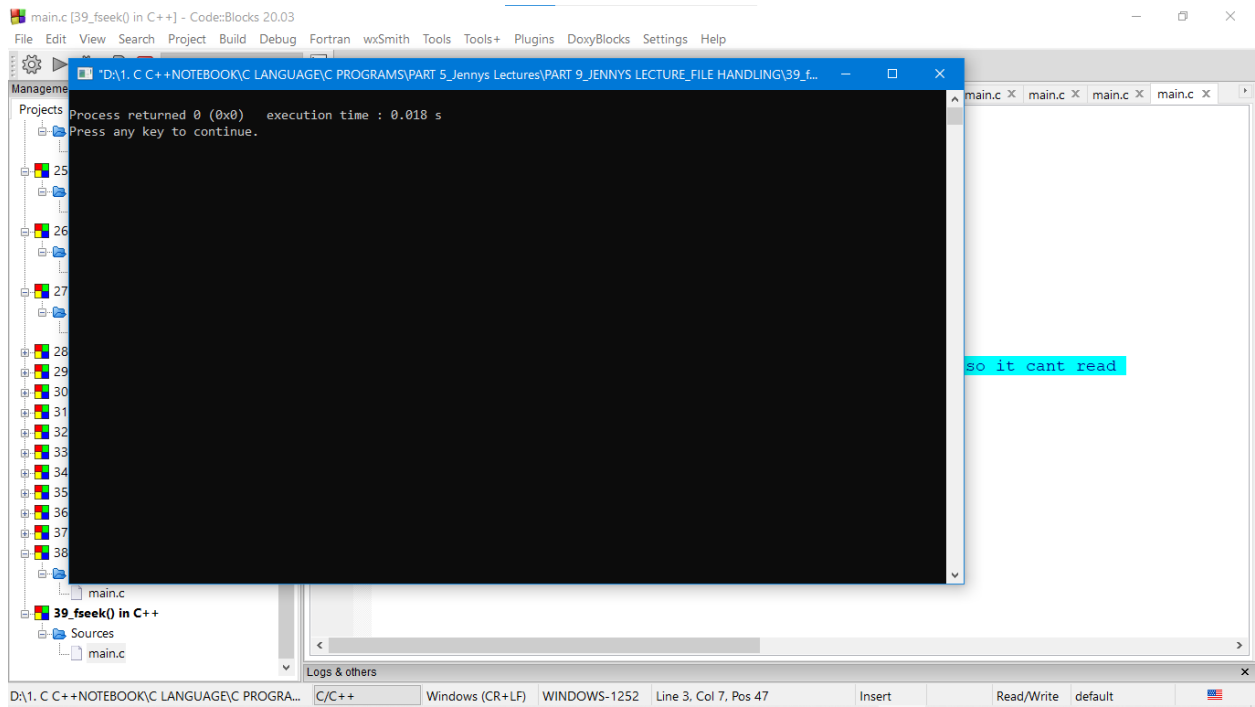


PROGRAM 7:

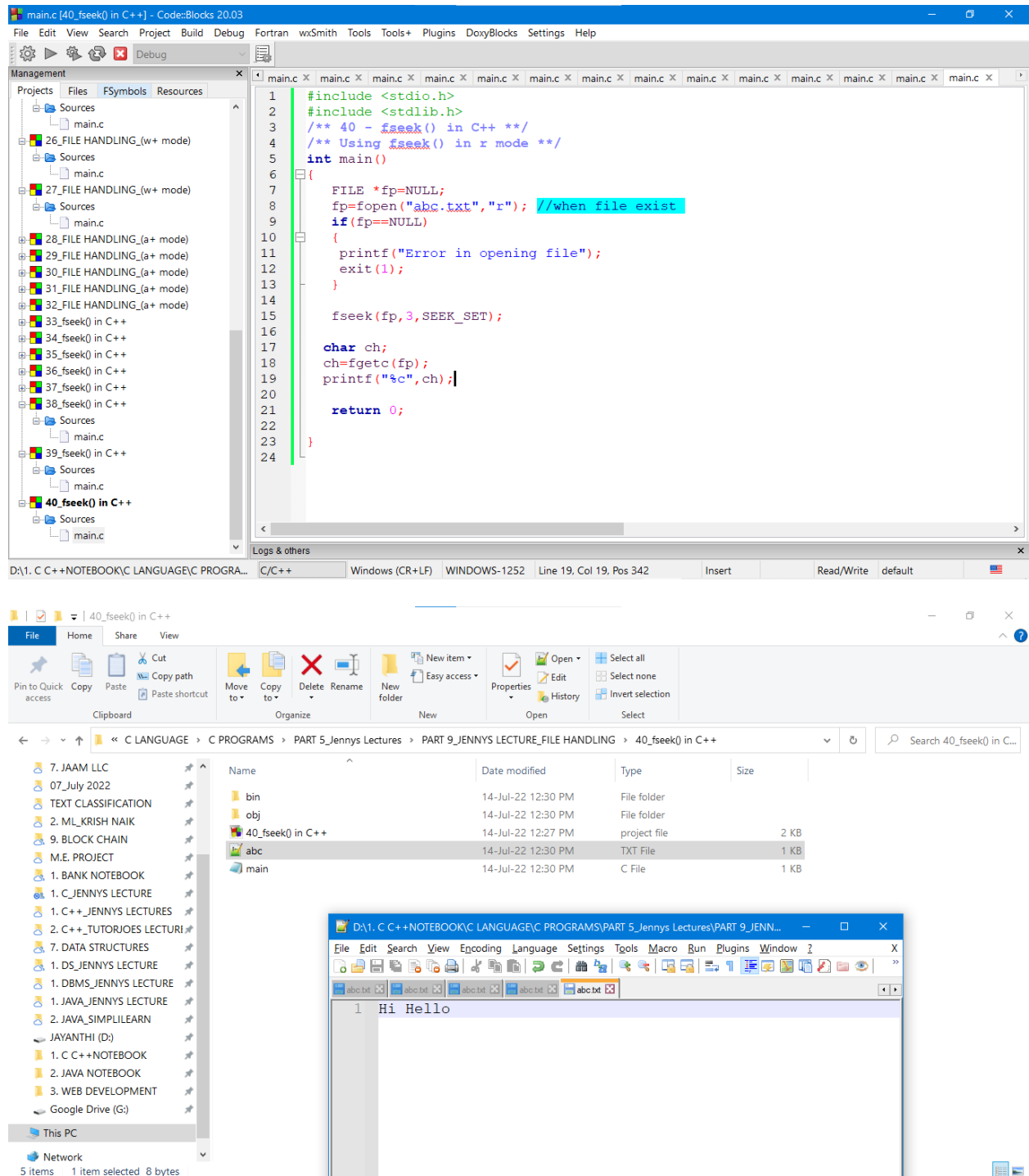


```
1 #include <stdio.h>
2 #include <stdlib.h>
3 /** 39 - fseek() in C++ */
4 /** Using fseek() in w+ mode */
5 int main()
6 {
7     FILE *fp=NULL;
8     fp=fopen("abc.txt","w+"); //when file exist
9     if(fp==NULL)
10     {
11         printf("Error in opening file");
12         exit(1);
13     }
14     fputs("Hi",fp); //after writing in file, cursor at last so it cant read
15
16     rewind(fp);
17
18     fseek(fp,3,SEEK_SET);
19     fputs("Hello",fp);
20
21     return 0;
22 }
23
24
```

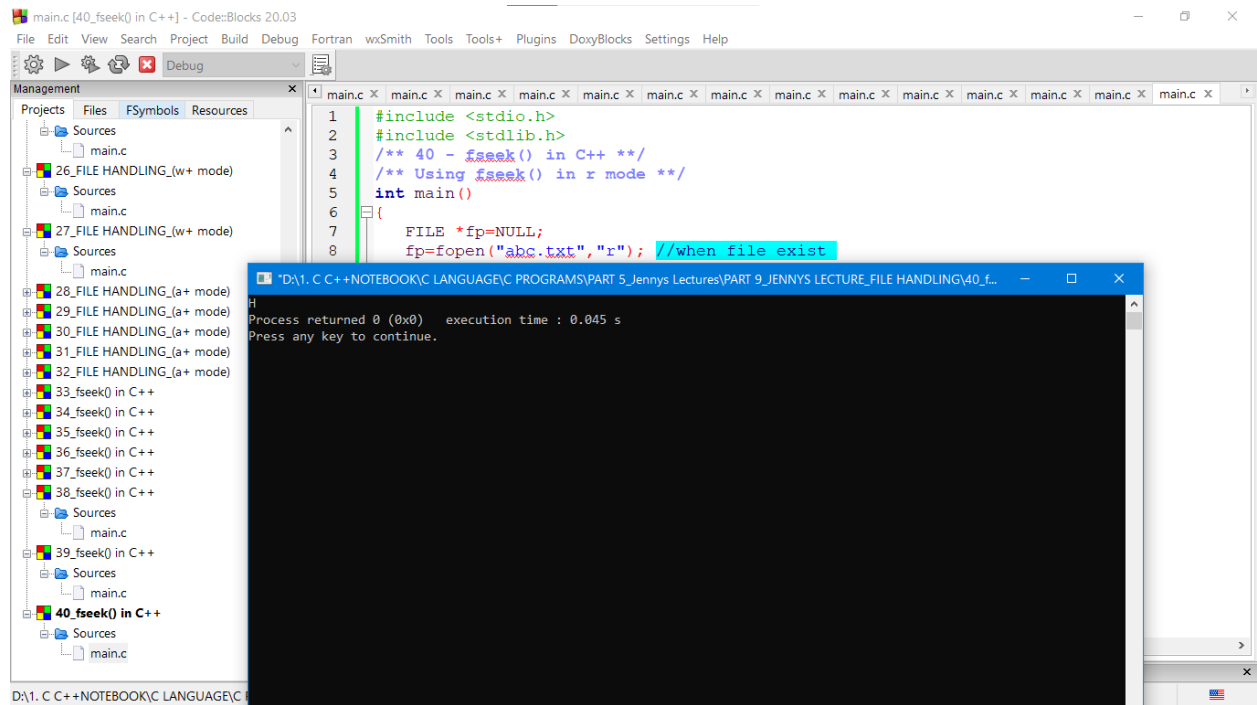




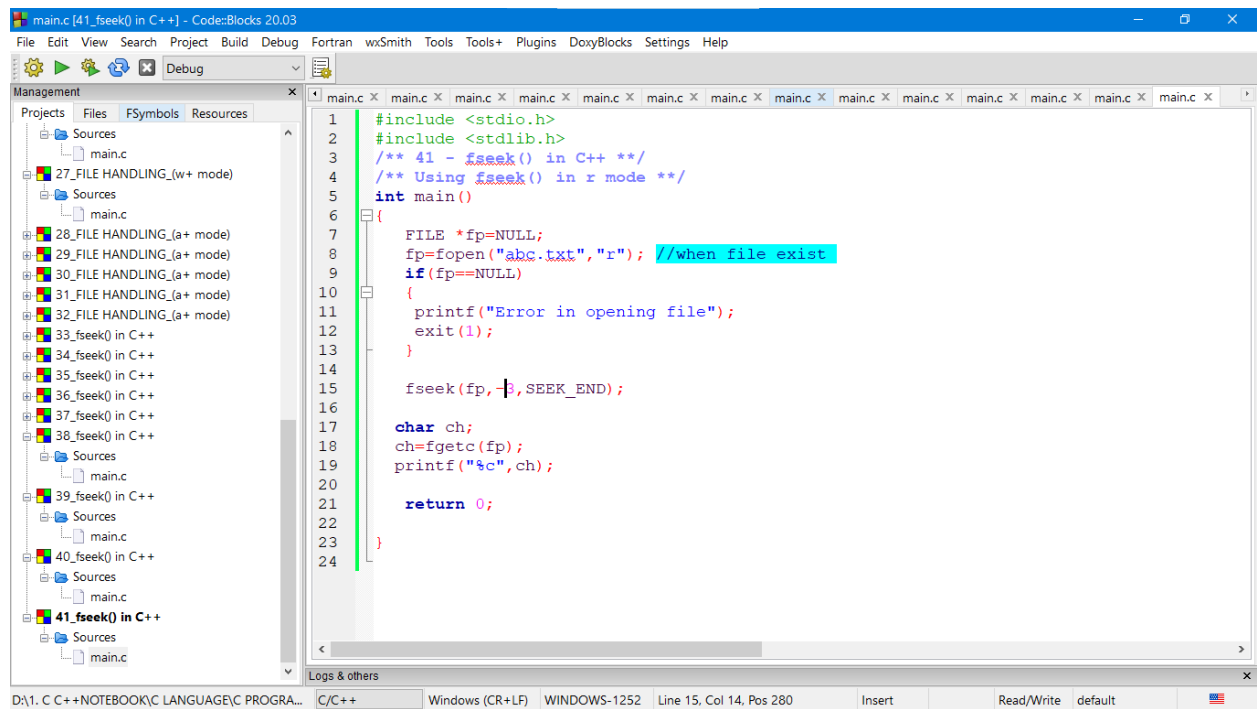
PROGRAM 8:

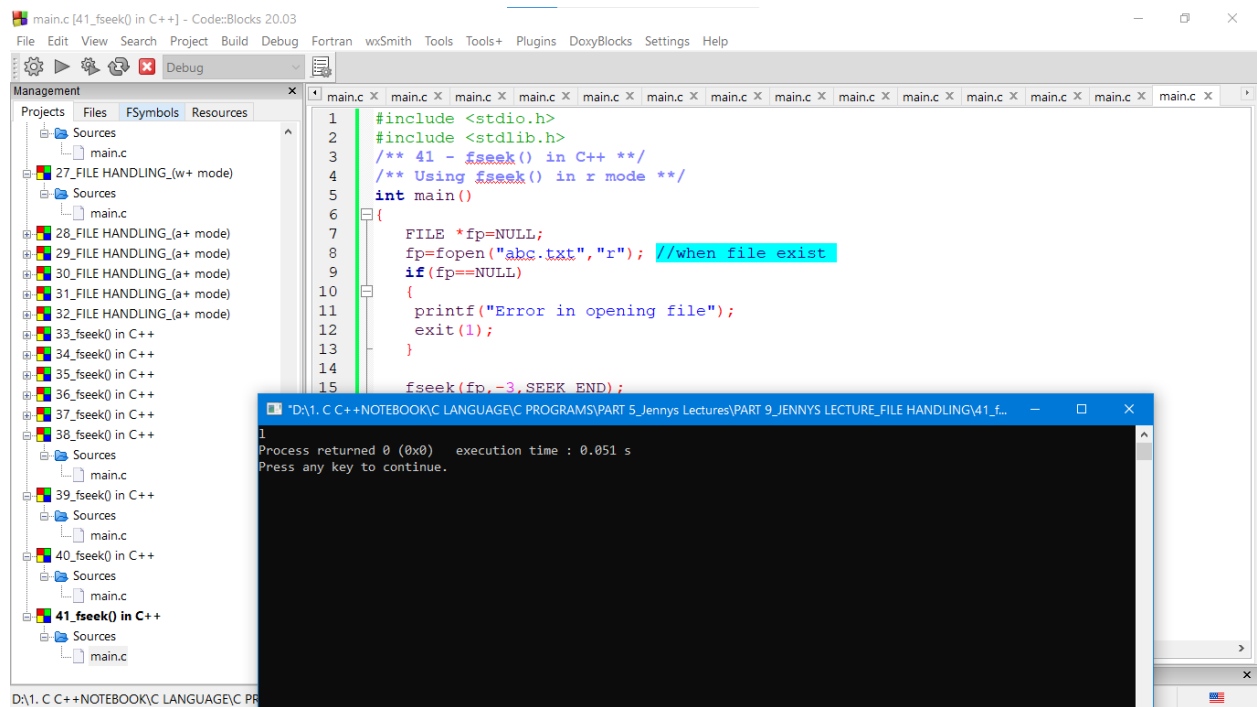
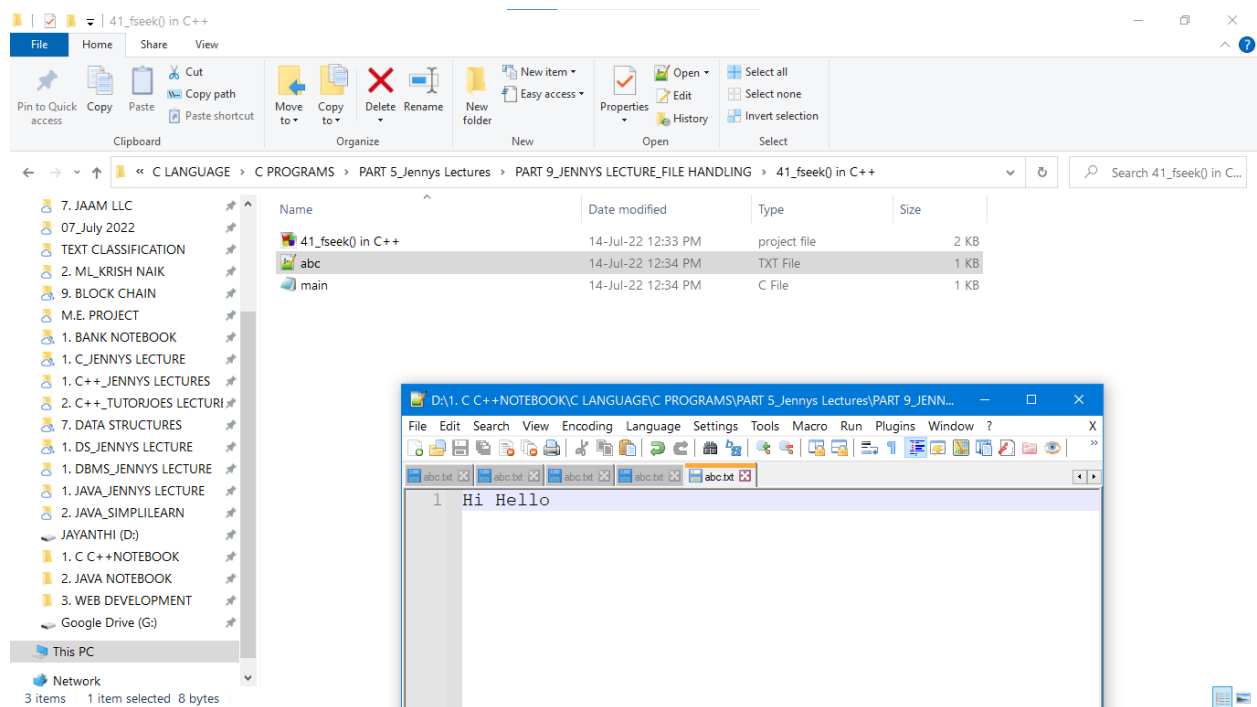


From beginning the count starts from 0, from end the count starts from 1



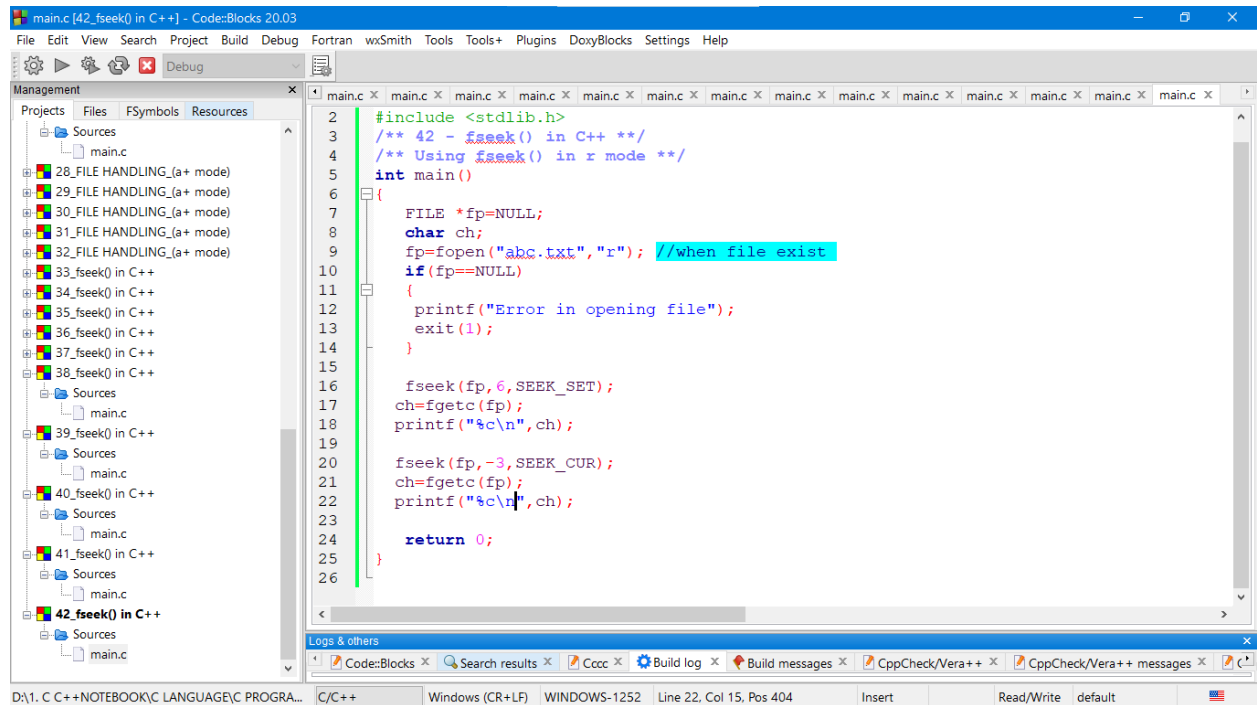
PROGRAM 9:



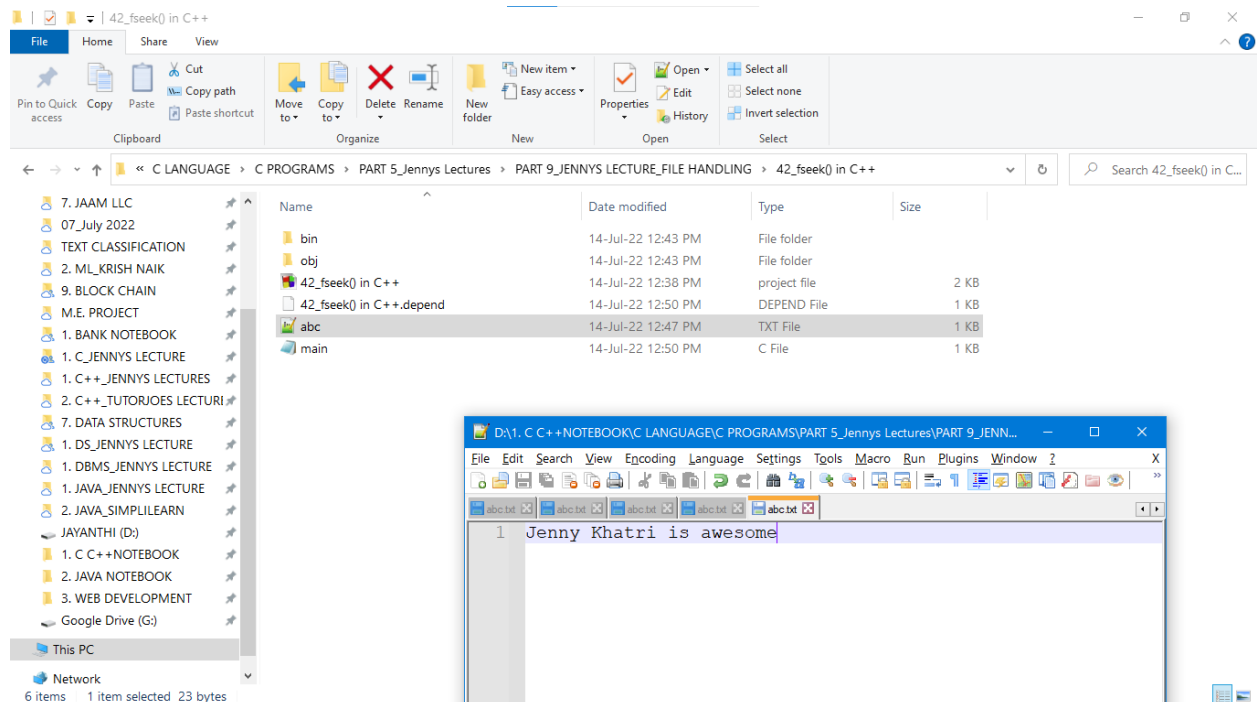


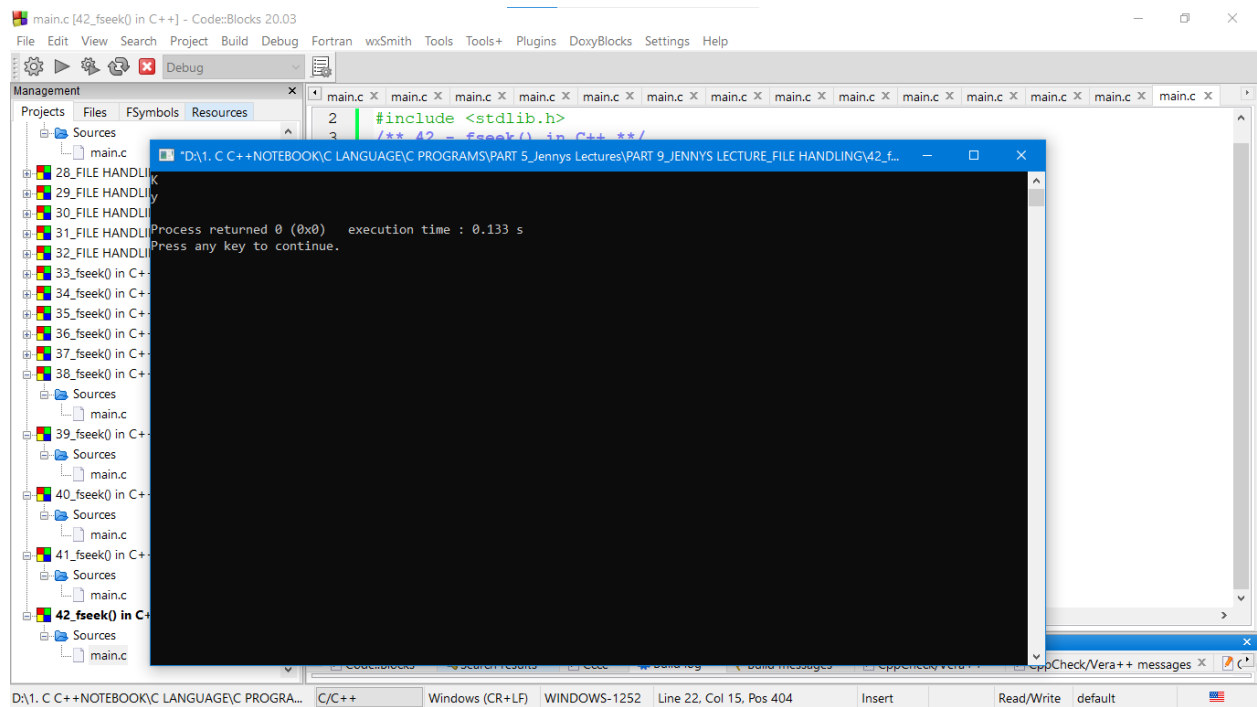
From beginning the count starts from 0, from end the count starts from 1

PROGRAM 10:



```
1  main.c [42_fseek() in C++] - Code::Blocks 20.03
2  #include <stdlib.h>
3  /** 42 - fseek() in C++ */
4  /** Using fseek() in r mode */
5  int main()
6  {
7      FILE *fp=NULL;
8      char ch;
9      fp=fopen("abc.txt","r"); //when file exist
10     if (fp==NULL)
11     {
12         printf("Error in opening file");
13         exit(1);
14     }
15
16     fseek(fp,6,SEEK_SET);
17     ch=fgetc(fp);
18     printf("%c\n",ch);
19
20     fseek(fp,-3,SEEK_CUR);
21     ch=fgetc(fp);
22     printf("%c\n",ch);
23
24     return 0;
25 }
26
```





PROGRAM 11:

