

...cont'd

- 5 In the if block, scan the integers from the file into the elements of the integer array

```
for( i = 0 ; !feof( nums_ptr ) ; i++ )  
{  
    fscanf( nums_ptr , "%d" , &nums[i] ) ;  
}
```
- 6 Next, in the if block, output the array element values

```
fprintf( stdout , "\nTotal numbers found: %d\n" , i ) ;  
for( j=0 ; j<i ; j++ ) { fprintf( stdout , "%d " , nums[j] ) ; }
```
- 7 Now, write the array element values into a file

```
fprintf( hint_ptr , "fscanf and fprintf are flexible\n" ) ;  
for( j=0 ; j<i ; j++ ) { fprintf( hint_ptr , "%d " , nums[j] ) ; }
```
- 8 Finally, in the if block, close both files upon completion

```
fclose( nums_ptr ) ;  
fclose( hint_ptr ) ; return 0 ;
```
- 9 Add an alternative message for if the attempt should fail
else
{
 fprintf(stdout , "Unable to open a file\n") ; return 1 ;
}
- 10 Save the program file, then compile and execute the program to open a file then output and write its contents

```
Command Prompt  
C:\MyPrograms>gcc fscanfprint.c -o fscanfprint.exe  
C:\MyPrograms>fscanfprint  
Total numbers found: 10  
1 2 3 4 5 6 7 8 9 10  
C:\MyPrograms>
```

```
hint.txt - Notepad  
File Edit Format View Help  
fscanf and fprintf are flexible  
1 2 3 4 5 6 7 8 9 10
```



Notice that the **feof()** function is used in this example to test if the end of the file has been reached – exiting the loop when it is reached.



The **fscanf()** and **fprintf()** functions take the same arguments as **scanf()** and **printf()** plus an additional first stream argument.