

File Input and Output

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◆ Overview

- Types of Data Access
- Selecting a Filename
- Processing Data in a Sequential-Access File
- General File I/O Issues

Types of Data Access

Access type	Description
Sequential	Files containing variable-length records.
Random	Files containing fixed-length records.
Binary	Everything else. A file is treated as a sequence of individual bytes.

File Access Overview

- 1 Select a Filename
- 2 Assign a File Number
- 3 Open the File
- 4 Process the Data
- 5 Close the File

File Functions and Statements

FUNCTIONS:

- File Handle `FreeFile()`
- File Size `Len(FileHandle)`
- File Location `Seek(FileHandle)`
- End of File `EOF(FileHandle)`
- Beginning of File `BOF(FileHandle)`

STATEMENTS:

- Position File `Seek FileHandle, Position`

Selecting a Filename

The image shows a Windows 'Open' file dialog box. The title bar is 'Open'. The 'File Name:' field contains '*.txt'. Below it, a list shows 'test.txt'. The 'Directories:' field shows 'c:\vbclass\labs'. Below it, a tree view shows 'c:\', 'vbclass', 'labs', 'autox', and 'copyfile'. The 'List Files of Type:' field shows 'text files (*.txt)'. The 'Drives:' field shows 'c:'. There are 'OK' and 'Cancel' buttons, and a 'Read Only' checkbox. Two pink arrows point from text boxes to the dialog: one to the top and one to the bottom. The top text box contains 'CMDIALOG.Action = 1' and the bottom text box contains 'filename\$ = CMDIALOG.FileName'.

CMDIALOG.Action = 1

File Name: *.txt

test.txt

Directories: c:\vbclass\labs

c:\

vbclass

labs

autox

copyfile

OK

Cancel

☐ Read Only

List Files of Type: text files (*.txt)

Drives: c:

filename\$ = CMDIALOG.FileName

Open and Close Statements

```
Dim fhandle As Integer
```

```
fhandle = FreeFile
```

```
Open file$
```

```
    [For mode] [Access access]
```

```
    As fhandle
```

```
    [Len = len]
```

```
Close fhandle
```

Example Open Statements

■ Sequential Files:

- `Open filename$ For Append As filehandle$`
- `Open filename$ For Input As filehandle$`
- `Open filename$ For Output As filehandle$`

■ Binary Files:

- `Open filename$ For Binary Access Read As filehandle$`

■ Random Files:

- `Open filename$ For Random Access Read As filehandle$ Len = length`

Input and Output Statements

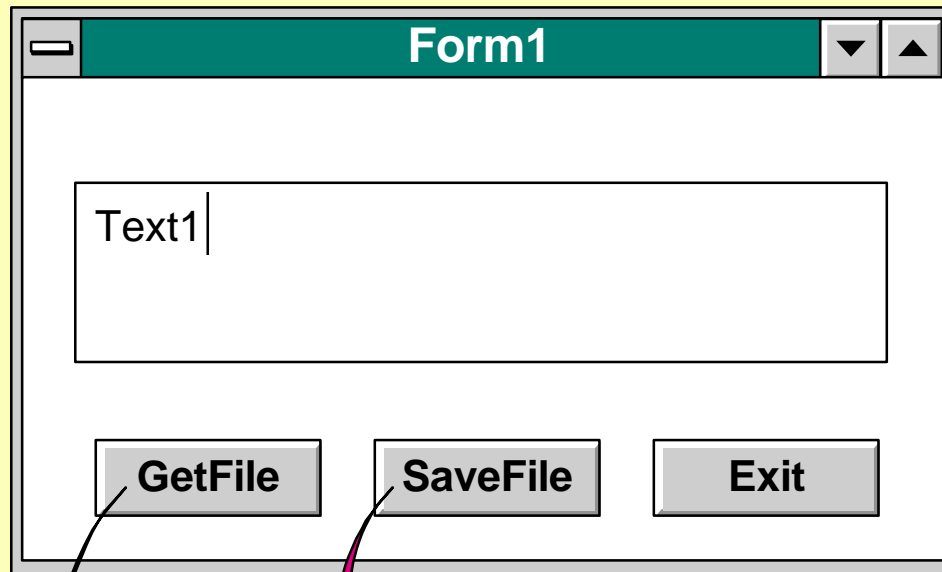
- To Read an Entire File

```
Text1.Text = Input$(LOF(fhandle), fhandle)
```

- To Write to a File

```
Print #fhandle, Text1.Text
```

A Simple Text Editor



The image shows a graphical user interface window titled "Form1". Inside the window, there is a text box containing the text "Text1". Below the text box, there are three buttons labeled "GetFile", "SaveFile", and "Exit".

Open FileName For Output...
Print #FileNum...

Open FileName For Input...
Text1.Text = Input\$(LOF (FileNum)...)

File Management

■ FileCopy

```
FileCopy sourcefilename$ destfilename$
```

■ Dir\$ Function

```
Match = Dir$(FileSpec$)
```

◆ General File I/O Issues

- Overwrite Existing File?
- Save Changes Before Exit?
- ChDir Statement
- ChDrive Statement

Summary

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