FILES

Introduction

Data Structures and Algorithms

Lab Code: **19ECSP201**

Why should I file?

- Giving a input(large) to a program manually every time is a time consuming job
  - ***Can we save the input data?***

- A programs calculations may be required for the future run
  - ***Can we save the output data?***

The inference is,

"Can we save the data?"

File Definition

A collection of data or information that has a name.

Almost all information stored in a computer must be in a file.

Reference: webopedia.com

A file is a place on the disk where a group of related data is stored.

Text book definition

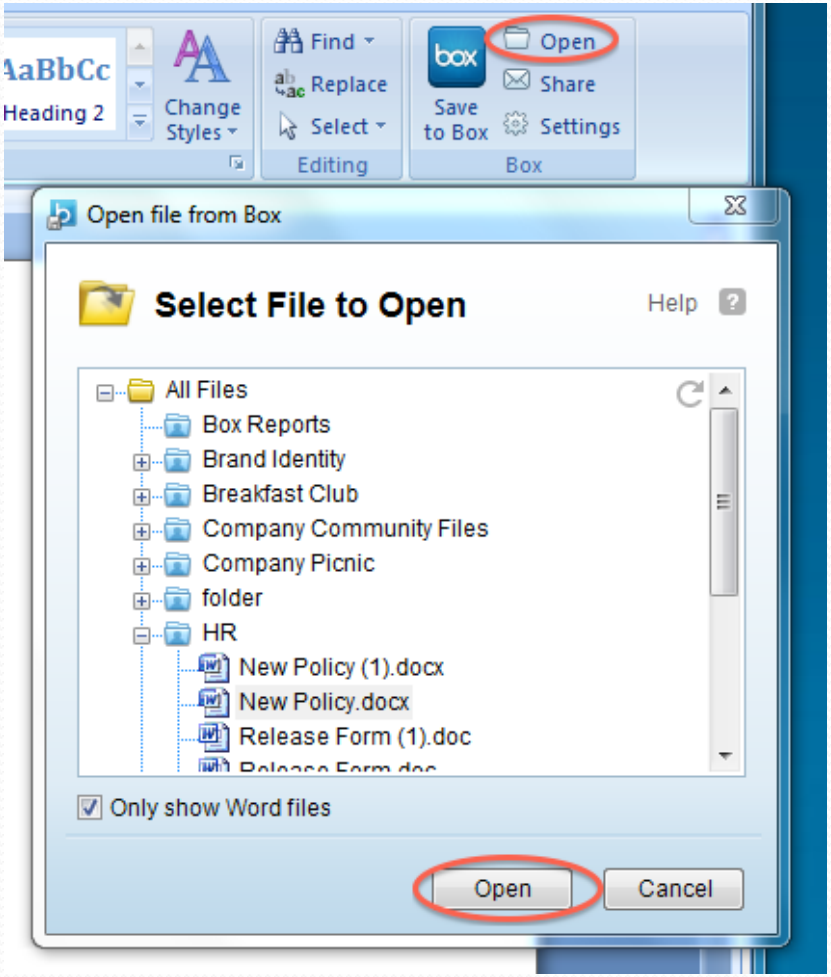
File Name

A file name has ***two*** parts:

- A name and
- An Extension

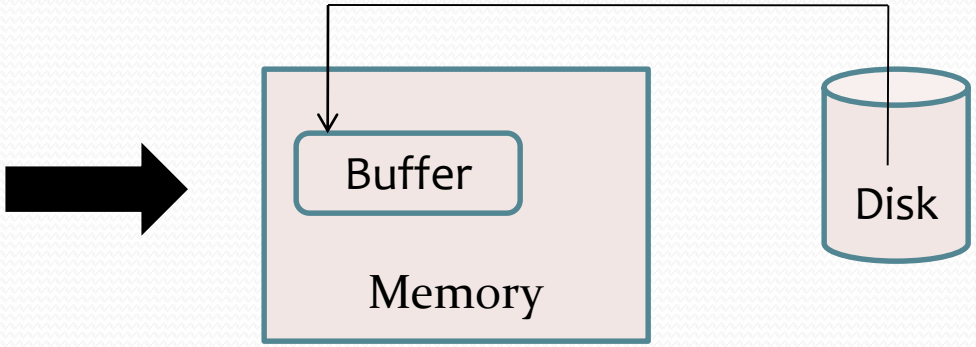
Extension depends on the type of the file.

What Happens When I Open a File?



Opening a File

Search the file on the disk



Loads file form disk to buffer space

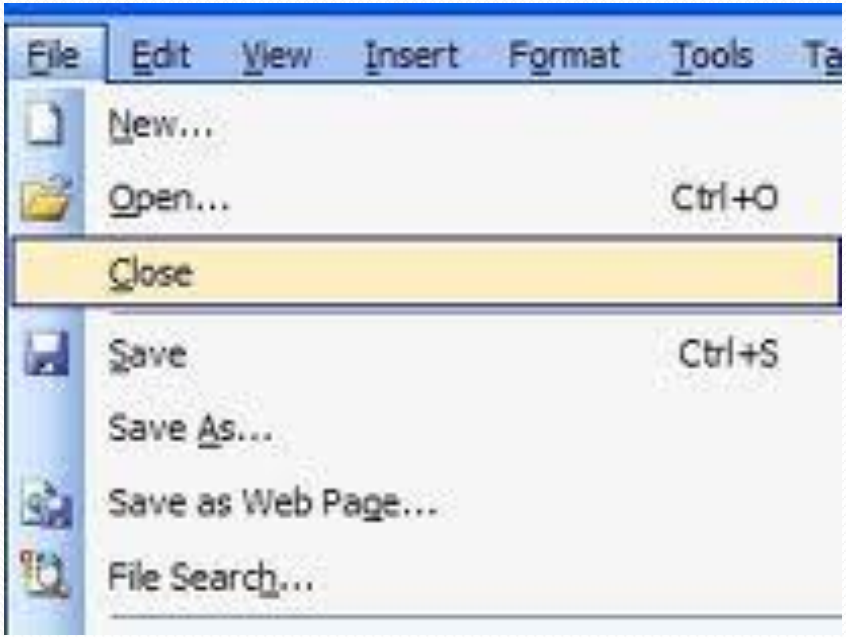
F	I	L	E	D	A	T	A	...	...

Character Pointer

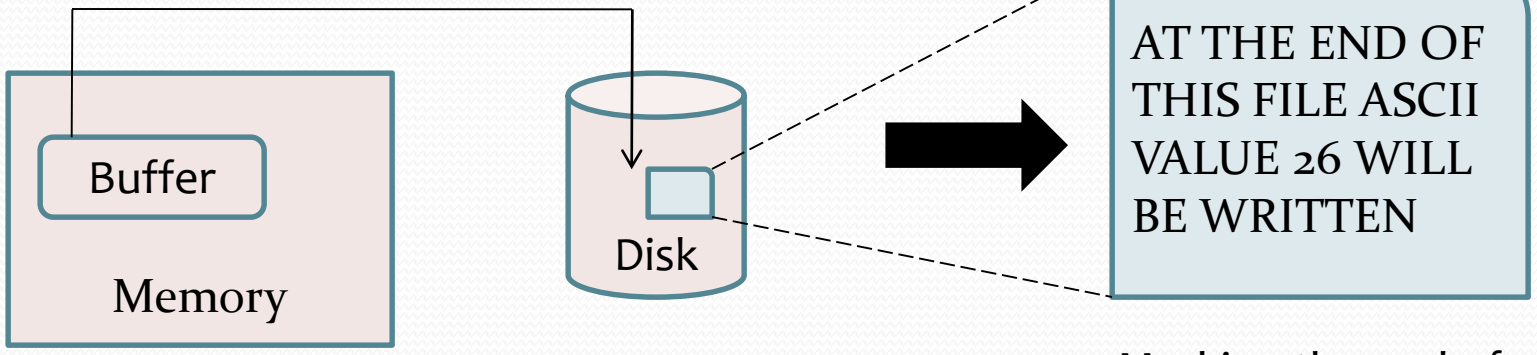
Sets a character pointer pointing to first character of the buffer

The Blinking Cursor

What Happens When I Close a File?

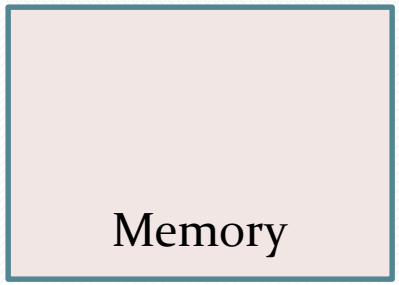


Closing a File



Characters from buffer are written to file on disk

Marking the end of the file



Buffer is eliminated form the memory

File Operations

- Create a file
- Open a file
- Read from a file
- Write to a file
- Move to a specified location in a file
- Close a file

References

Contents:

[1] Yashwant P Kanetkar, "Let Us C", BPB Publications, 2010

Images Icons:

[1]http://pod.doe.in.gov/groups/learningconnectionhelp/wiki/8f52d/images/f1fd4.png

[2]http://sites.box.com/help/images/plugins/office/open_file.png

[3]https://www.ctdlc.org/remediation/3-SoftwareApp/images/fileClose.jpg

Thank you.

(More about files and API's in Next lab session)