File Handling

DOS Services

- 03Ch : Create File

  - Overwrite the existing file

- 03Dh : Open File

- 03Eh : Close File

- 03Fh : Read From File

- 040h : Write to File

- 42h   : Move File Pointer

03Ch- Create File

Input:
- Ah = 03ch
- DX = offset file-name
- CX = File Attribute
    - 0h   Normal
    - 01h   Read Only
    - 02h   Hidden
    - 04h   System
- Return:
    - On success   AX= FileHandle
    - On Error carry will be generated

3DH **Open File**

- INPUT:
  - Ah = 03dh
  - DX =*offset* of the ASCIZ filename.
  - AL =*file access code*
    - 0 =read-only,
    - 1 =write-only,
    - 2 =read/write).
- OUTPUT: AX=file handle.

03FH Read a record from a file

INPUT:
- – Ah = 03Fh
- – BX = file handle
- – CX = record size
- – DX = start of the buffer into which data will be read
- OUTPUT:
- – AX=number of bytes actually read into buffer.

40H Write a record to a file (or a device).

- INPUT:
  - Ah   = 40h
  - BX   = file handle ;01=display,02=printer rest for files
  - CX   = record size ;no of bytes to write
  - DX   = buffer
- OUTPUT:
  - AX=number of bytes actually written.

3EH **Close File**

Input:

- *AH   = 3EH*
- BX   =file handle.

Separate File/Module Linking

- We have two files, IOProc.asm and GetAryElement.asm
  - IOProc.asm has GetNo and ShowNo procs.
- Public: is used in the main program(IOProc.asm) to share the variables and procs in other program(GetAryElement.asm, i.e; Public GetNo, ShowNo,PrevNo)
- Extrn: Means External is used in the sub programs (GetAryElement.asm) to access those elements which are external (present in IOProc.asm as public but Extrn as in subprorams)
Extrn GetNo:Proc,ShowNo:proc,PrevNo:Word)

Assembling and Linking

- Masm IOProc.asm;
  - Generates IOProc.obj
- Masm GetAryElement.asm;
  - Generates GetAryElement.obj
- Link GetAryElement IOProc;
  - Generates GetAryElement.Exe