Supplementary Notes 6:
More on Memory

The amount of available memory affects which programs you can run, how fast they run, and how much data a program can work with at one time. If your computer complains that it does not have enough memory, you can install additional physical memory or optimize the memory your computer already has.

Identifying Your Computer's Memory Configuration

To display information about your computer's memory, type **mem** at the command prompt. The mem command displays a summary of your computer's memory configuration. It shows how much of each kind of memory your computer has, how much is currently in use, and how much is currently free.

Types of Memory

The following table describes the kinds of memory your computer might have:

Type of Memory	Memory Address	Description
Conventional Memory	0 – 640 K.	All MS-DOS based programs require conventional memory
Upper Memory Area	640 – 1024 K. (*The 384K above conventional memory*)	The upper memory area is used by system hardware, such as your display adapter. Unused parts of upper memory area are called *upper memory block* (**UMB**).
Extended Memory (XMS)	Memory beyond 1024 K (or 1MB).	Requires an extended-memory manager, such as HIMEM.
High Memory Area	1024 – 1088 K. (*The first 64K of of XMS*)	On a computer with extended memory, setup conserves conventional memory by installing MS-DOS to run in the high memory area.
Expanded Memory (EMS)	Expanded memory is installed on an expanded memory board and comes with an expended memory manager.	Memory in addition to conventional memory that some MS-DOS based applications can use. Slower than using extended memory.

Freeing Conventional Memory

You can free conventional memory by editing the CONFIG.SYS and AUTOEXEC.BAT files so that they don't start unnecessary memory-resident program. You may run MS-DOS in high memory area too.

-- ☺ Source: `Microsoft MS-DOS 6 Concise User's Guide`