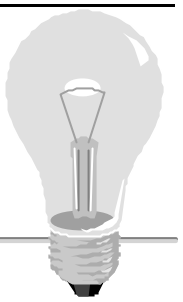
Supplementary Notes 3:
DOS BASICS



What is DOS ?

DOS stands for **D**isk **O**perating **S**ystem. It is the system software that communicates with the hardware of your computer. An operating system is a collection of programs that provide services to other (application software) programs so that the applications do not have to include the code to do these operations.

Some of these services include how to handle the display, keyboard, printer, floppy and hard disk drives, and memory (RAM). You may think that DOS has disappeared but it hasn't. You will find it hiding under Windows 3.1, Windows95 and Windows98. Everything you can do with a GUI (Graphical User Interface) you can do at the DOS (or command) prompt, and more. It is a wonderful troubleshooting tool.

The Prompt

The DOS *prompt*, also know as the command prompt, is the **C:\>_** (or **A:\>_** or **B:\>_** or **D:\>_**) you have seen at some time or another. It can also look like **C:\BUAH\DURIAN>_** or **A:\DOS>_**. The prompt can be made to appear differently than this, but this is how it will look on 99% of the computers you will use.

All commands are typed at the DOS prompt. Basically, it is there to let you know, or ***prompt*** you that the computer is waiting for your input, waiting for you to tell it what to do. After you have typed a command at the prompt you have to press the enter key to let the computer know that you are done telling it what to do and that it should now act on your instructions.

Clear the Screen

When the screen get full of information, you may want to clear it. To do this, type **CLS** at the C:\> prompt and press **return**.

Create a File with DOS

Directions:

1. Type: **`copy con hello.txt`** and press **return.**
2. Type this message in the following format:

```
Hello
Selamat Hari Raya
Bye Bye!
Kee Leong
```

3. Press the **F6 function key (^Z)** and press **return.**
4. DOS gives you a message that **`1 File(s) has been copied.`**
5. Type: **`dir h*`** and press **return**.
6. Now you can see the list of files beginning with the letter Q.

The DOS batch file programming

What are batfiles (batch files)?

A batch is a number of things receiving attention as a group. A good example is a batch of pepsi soft drick; even though they are made as a batch each one is still handled individually.

Batfile is a collection of one or more commands designed to achieve a specific result or results. Typical results are: generating, compiling or filtering data either to or from a file or a device such as the screen, a keyboard or a printer; creating directories or files; altering directory structure or file content; modifying the environment. Batfiles themselves are executable files (programs) which can be run from other programs, the DOS prompt or Windows. Batfiles are an integral part of the Disk Operating System (DOS).

What can batfiles do?

Reduce effort - 33% to 94%

- Reducing keypresses enables you to work much faster and the work less tedious. If you are lost without a mouse this idea may not have occurred to you, but if you enter commands at the prompt, you quickly realize how much keyboard work is involved.
- Suppose you are trying out some new code in autoexec.bat and you therefore need to edit this batfile repeatedly. Just make a batfile called **ea.bat** (**e**dit **a**utoexec.bat) and presto! 83% less effort (that's 6 times faster) - every time.

Handle complicated programs

- It may help in simplifying those DOS programs with dozens of possible parameters.

The ansi.sys device driver

A device driver is a program which is loaded into memory from config.sys with the `DEVICE` or `DEVICEHIGH` commands, thereby enabling the user to control certain devices such as display and keyboard. To unload a driver you must edit it out of config.sys and reboot. **Ansi.sys** stands for American National Standards Institute system, and allows us to change display graphics, control cursor movement, and reassign keys. This is the syntax for ansi.sys:

`DEVICE[HIGH]=[`*`drive`*`:][`*`path`*`]ANSI.SYS [/X|/K][/R]`

Place the following line in your config.sys file just before display.sys. Correct the path if yours differs: **`DEVICEHIGH=C:\DOS\ANSI.SYS /X`** You can safely use devicehigh; if the device in question cannot be loaded into high memory, DOS will simply load it into conventional (low) memory. Remember to reboot for any changes to config.sys to be effected. The `/X` parameter enables you to remap the extended keys independently f you have a 101 key or extended keyboard. If you have a number pad to the right of the cursor keys, you have an *extended keyboard*. A standard keyboard has 84 keys.

A Little Bit of Knowledge can be a Dangerous Thing