Section 6: Input/Output, Saving and Loading Programs

The commands in this section allow you to redirect your input or output from one physical device to another, to learn what devices you are using, to SAVE programs for later use and to LOAD programs you have SAVEd.

ASSIGN

If your operating system supports an I/O byte (as the Intellec MDS does, and as CP/M can), you may use the ASSIGN command to reassign physical devices to logical devices. A logical device is a device type (such as CONsole or PUNch) which may have several different physical device implementations; for example your system may let you use either a teletype or a CRT terminal as your console device.

The ASSIGN command allows you to switch between physical devices under program control. ASSIGN changes the value of the I/O byte, so subsequent operations are directed to the selected physical device. For example, to change the CONsole device to device 1 you can just type

```
ASSIGN CON#1
```

The logical device you specify must be CON# (CONsole), RDR# (ReaDeR), PUN# (PUNch), or LST# (LiST). The physical device must be specified by a value between 0 and 3 or an FC (Function Call) error will occur.

XYBASIC normally performs all input and output to the CONsole device. Output is echoed to the LiST device whenever <control-P> is typed. The PUNch and ReaDeR devices are used to SAVE and LOAD programs in Custom I/O versions of XYBASIC, as described below.

IOBYTE

The function IOBYTE returns the current value of the I/O byte, so you can use it to check which physical devices you currently have ASSIGNed. If you say

```
X = IOBYTE
```

then X is set to the current value of the I/O byte. The I/O byte contains a two-bit field for each of the four logical devices (CONsole, ReaDeR, PUNch, and LiST), and is organized as indicated by the following diagram.

LiST field Bit 7 ¦ Bit 6	PUNch field Bit 5 ¦ Bit 4	ReaDeR field Bit 3 ¦ Bit 2	CONsole field Bit 1 ¦ Bit 0

To find the current value of the punch field (using the shift function RSHIFT described in Section 8), you could for example type