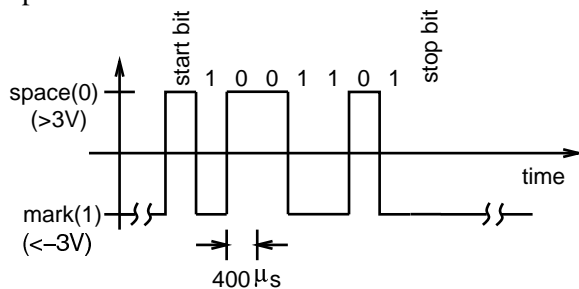


Solutions to Assignment 8 Serial Ports

Question 1

The ASCII code for the character 'Y' is hex 59 or binary 01011001. Bits are transmitted from LS to MS bit with a space-level start bit and a mark-level stop bit:



Question 2

The RTS (clear to send) handshaking line is an output on a DTE and an input on a DCE. Thus the computer is wired up as a DTE since RTS is an output. The DTR (data set ready) handshaking line is also an output on a DTE and an input on a DCE. Thus the likely cause of the problem is that both devices are wired as DTEs. A “null modem” could be used. It would cross-connect the data and some handshaking lines. For example, TxD on one connector would be connected to RxD on the other. This should allow the two devices to communicate.