COMPUTER BOARD MATRIX

0800	FF	FF	FF	\mathbf{FF}	FF	FF	FF	FF	FF	FF
OA	$\mathbf{F}\mathbf{F}$	00	00	00	00	00	00	00	00	FF
14	FF	00	00	00	00	00	00	00	00	FF
1E	FF	00	00	00	00	00	00	00	00	FF
0828	FF	00	00	00	01	80	00	00	00	FF
32	FF	00	00	00	80	01	00	00	00	FF
30	FF	00	00	00	00	00	00	00	00	FF
46	FF	00	00	00	00	00	00	00	00	FF
50	FF	00	00	00	00	00	00	00	00	FF
5A	FF	FF	FF	FF	FF	FF	FF	FF	$\mathbf{F}\mathbf{F}$	FF

Even though the computer board shown here is stored in a continuous manner in memory (as all things), writing it down this way helps to visualize its construction. It <u>looks</u> like an 8 x 8 checkerboard this way, and is easier to think about.

The FF bytes around the board form a border that makes move generation fast and easy by preventing a possible situation where the computer overreaches the edge of the board. The border bytes mark, clearly, the edges of the matrix.

The trick in dealing with a matrix such as this is to find the address of any particular "square" on the board given only the X and Y coordinates to locate that square. In other words, what is the address of the byte that represents the square 3:4? The 3 is the X or horizontal coordinate while the 4 is the Y or vertical. On the sample computer board above,