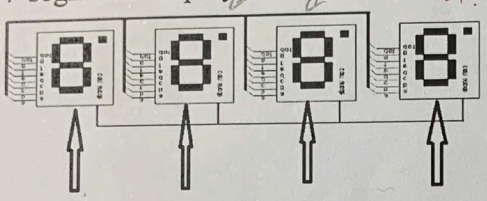
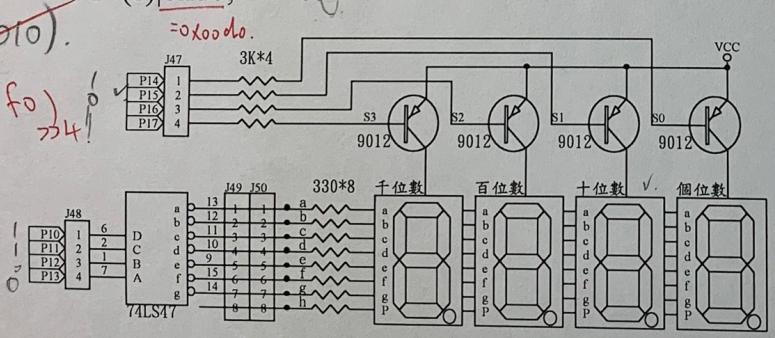
2. (20%) Based on the principle of scanning output for four 7-segment displays, we can use a scanline array to select a 7-segment display in a scanning manner. Please fill out (a) and (b) in the scanline array.
unsigned char code scanline[]={(a), 0xfb, (a), 0xfe}

3. (20%) Assume that digitx1(char x1, char c1) can show 1-digit c1 in the corresponding 7-segments display based on x1. Please fill out (c) and (d) for digitx2M(char c2) to display 2-digit c2 in the tens and hundreds digits of the four 7-segments displays.




```
void digitx2M(char c2)
{
    (c); digitx1(1, c2)
    (d); digitx1(2, c2)
}
```

4. (20%) Based on the following circuit, fill out (e) to output the tens digit (e.g., 3) of i to P1.
unsigned int i = 0x1234;
P1=(e)|0xd0;



5. (20%) If we detect whether button 7 is pressed, what are the value of (R0,R1,R2,R3) and (C0,C1,C2,C3) based on the following circuit.