Logical & Bit operations (In Assembly Language) Exercises

1. Set port 0, bits 1,3, 5 and7, to 1; set the rest to 0.
2. Clear bit 3 of RAM location 22h without affecting any other bit.
3. Invert the data of the port 0 pins and write the data to port 1.
4. Swap the nibbles of R0 and R1 so that the low nibble of R0 swaps with the high nibble of R1 and the high nibble of R0 swaps with the low nibble of R1.
5. Complement the lower nibble of RAM location 2Ah.
6. Make the high nibble of R5 the complement of the low nibble of R6.
7. Move bit 4 of RAM location 30h to bit 2 of A.
8. Store the least significant nibble of A in both nibbles of RAM address 3Ch; for example, if A=36h, then 3Ch == 66h.
9. Set the Carry flag to 1 if the number in A is even; set the Carry flag to 0 if the number in A is odd.
10. Treat registers R0 and R1 as 16-bit registers, and rotate them on place to the left; bit 7 of R0 becomes bit 0 of R1, bit 7 of R1 becomes bit 0 of R0, and so on.
11. Reverse the bits of R0 registers.
12. Rotate the DPTR one place to the right