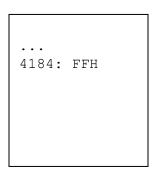
PROBLEM SET

P1. Write an 8051 assembly language program to find the largest element in a given array of N = 6 (length of the array) bytes at location 4009h (starting address). Store the largest element at location 4184h.

Before Execution:

4009:	01H
4010:	02H
4011:	03H
4012:	09H
4013:	FFH
4013:	66H
4184:	00H

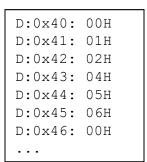
After Execution:



- **P2.** Write an assembly language program to find whether the given number is prime or not. If prime send FFh to Port 0 else send 00h to Port 0.
- **P3.** Write an assembly language program to perform the subtraction of two 16-bit numbers.
- **P4.** Write an assembly language program to check whether the lower nibble is greater than upper nibble of A. If 'yes' send 00h to Port 0 else send FFh to Port 0.
- **P5.** Write an assembly language program to find the cube of a given number.
- **P6.** Write an assembly language program to count number of ones and zeros in an 8-bit number.
- **P7.** Write an assembly language program to find whether given 8-bit number is odd or even. If odd, store 00h in accumulator. If even store FFh in accumulator.
- **P8.** Write an assembly language program to convert a BCD number into ASCII.
- **P9.** Write an assembly language program to convert a binary (hex) number into decimal.
- **P10.** Check whether the given byte of data is present in an array of 'N' bytes of data. If present send 00 in Port 0 else send FF in Port 0.

Check for: O3H ; [N = 6]

Before Execution:



After Execution:

P1: 0xFF