CS30000 Assignment #1 (100 points, Due: Mon. Sept. 11)

1. Addressing Modes (25 POINTS)

* 0C90003600 * # 3030 003600 * # 3600 103000 * # 439000C345* # 500000C303* # 539000E0B1* # 639000C303* # 6600 006390* # C303003030 *

Suppose (B)=006000, (PC)=003000, and (X)=000090. For each of the following instructions (in hexadecimal), indicate its addressing mode(s) (in detail), compute its target address by showing and following the address computation formula, and indicate the value fetched. 018C00, 0310C303, 034600, 024600, 012600, 03C300, 00C300.

- 2. (10 POINTS) Please write a SIC/XE program which searches a targeted integer in a sequence of integers. If found, return the index (beginning from 0). Otherwise, return -1.
- Textbook: Page 40, Exercises, SECTION 1.3, PROBLEM 2 (10 POINTS), 6 (10 POINTS), 9 (10 POINTS), 11 (15 POINTS), 13 (20 POINTS).