Problem I. Problem 4.8, Tanenbaum textbook, page 299

Problem II. Problem 4.10, Tanenbaum textbook, page 300

Problem III. Problem 4.11, Tanenbaum textbook, page 300

Problem IV. Problem 4.17, Tanenbaum textbook, page 300

Problem V. Problem 4.29, Tanenbaum textbook, page 302

Problem VI. Consider the following control store shown below. The location of the microinstructions for the IJVM instruction IFLT (opcode: 0x9B) along with a few other microinstructions are shown on the left side of each control store entry.

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Control Store

0 0000 0000 (0x000) nop1
0 0000 0001 (0x001) main1
...                   ...
0 0011 1110 (0x03E) iflt4
0 0011 1111 (0x03F) iflt1
...                   ...
0 1010 0010 (0x0A2) F
...                   ...
?                     T
...                   ...
```
a) Fill in the bits below for the control store for these two microinstructions:

iflt1: \(\text{MAR} = \text{SP} = \text{SP} - 1; \text{rd};\)


iflt4: \(\text{N} = \text{OPC}; \text{if (N) goto T; else goto F}\)


b) Give the address in the control store of the following two microinstructions:

iflt1: ________________________________________

T: __________________________________________