

TUTORIAL 6

1. The memory locations 1000, 1001 and 1020 have data values 18, 1 and 16 respectively before the following program is executed.

MOVI	Rs, 1	Move immediate
LOAD	Rd, 1000(Rs) *	Load from memory
ADDI	Rd, 1000	Add immediate
STOREI	0(Rd), 20 *	Store immediate

Which of the statements below is TRUE after the program is executed?

- a. Memory location 1000 has value 20
- b. Memory location 1020 has value 20
- c. Memory location 1021 has value 20
- d. Memory location 1001 has value 20

* content of displacement addressing mode.

2. Consider the following memory values and a one-address machine with an accumulator, what values do the following instructions load into accumulator?

- Word 20 contains 40
- Word 30 contains 50
- Word 40 contains 60
- Word 50 contains 70

Instructions are-

- a) Load immediate 20
- b) Load direct 20
- c) Load indirect 20
- d) Load immediate 30
- e) Load direct 30
- f) Load indirect 30