CIS 350 – INFRASTRUCTURE TECHNOLOGIES
HOMEWORK # 4

NAME(S): _____
(You may do this homework in groups of 2 students maximum.)

Topics: The CPU and Memory (Chapters 7 and 8)

Ex. 7.26, p. 236

Ex. 7.2 a, b, p. 237

Instruction: 20 LDA 50 (in decimal 550)

		PC	MAR	MDR	IR	A
1.	PC→ MAR	20	20	550	?	?
2.	MDR→ IR	___	___	___	___	___
3.	IR[addr] → MAR	___	___	___	___	___
4.	MDR→ A	___	___	___	___	___
5.	PC+1→ PC	___	___	___	___	___

Instruction: 21 ADD 51 (in decimal 151)

		PC	MAR	MDR	IR	A
1.	PC→ MAR	___	___	___	___	___
2.	MDR→ IR	___	___	___	___	___
3.	IR[addr] → MAR	___	___	___	___	___
4.	MDR+A→ A	___	___	___	___	___
5.	PC+1→ PC	___	___	___	___	___

Ex. 7.3, p. 237

Ex. 7.7 a, p. 237

Ex. 8.4 and 8.5, p. 272

Ex. 8.16, p. 272. Also briefly explain how cache memory works.

Ex. 8.17, p. 272

Ex. 8.18, p. 272