2/17/2006 Group exercise

10	0000 0011	0001 0100
11	0000 0101	0001 0101
12	0000 0111	0001 0110
13	0000 0100	0001 0111
14	0000 0010	0001 0111
15	0000 0111	0001 0110
16	0000 0100	0001 0111
17	0000 0010	0001 0111
18	0000 1101	0000 0000
19	0000 1111	0000 1010
20	0000 0000	0000 1111
21	0000 0000	0001 0010
22	0000 0000	0000 0010
23		

TIC1

T1

instructions

data area

PC	
ACC	

Show "history" or trace of execution but in base ten decimal.

PC 18 19 20 21 22

Name _____

Assume the input to the program that the user typed at the keyboard was the integers 8 and 200, in that order, i.e. 8 was 1st and 200 was 2nd value entered.

	(T2)	(TIC2)	
0	00000001	00001000	TIC program
1	00000001	00001001	
2	00000011	00001000	
3	00000111	00001000	
4	00000101	00001001	
5	00000100	00001010	
6	00000010	00001010	
7	00001101	00000000	
8			data area
9			
10			

① Show the (binary) contents of locations at addresses 8, 9 and 10 when the computer finishes execution.

② Fill in PC and ACC and show "history" of or trace of execution (in base ten decimal).

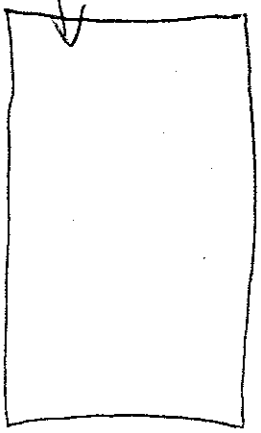
PC	
ACC	

Example

PC 80 ~~81~~ ~~85~~ 84

③ What is the output of the above program (in base ten)?

output screen or printer



0	0000 0011	0000 1100
1	0000 0110	0000 1101
2	0000 1010	0000 1010
3	0000 0011	0000 1111
4	0000 0111	0000 1110
5	0000 0100	0000 1111
6	0000 0011	0000 1101
7	0000 0101	0001 0000
8	0000 0100	0000 1101
9	0000 1100	0000 0000
10	0000 0010	0000 1111
11	0000 1101	0000 0000
12	0	00 0011
13	0	0 0 0001
14	0	0001.01
15	0	0 0 0000 1
16	0	0000 001

program of TIC

TIC 3

T3

data

(1) What is the output of the following TIC program?

output screen

(2)

PC	
ACC	

↑ show history (base ten OK)

(3) Show 12, 13, 14, 15, and 16 in base ten too, with history.