Answers

	s2	s3	OUT0 (80)	OUT1 (C0)	MEM(0) (00)
before INIT	40	81	00	00	XX
after iteration 1	80	C0	C0	00	XX
after iteration 2	C0	E0	C0	E0	XX
after iteration 3	00	F0	C0	E0	F0
after FETCH	F0	F0	C0	E0	F0
after IN	F0	C0	C0	E0	F0

last instruction changing flags ADD s2, 40

preserved Z = 1

preserved C = 1

TOS → | 10E | 10C | 10A |

	s0	s1	C
after IN	1100 0000		
after LOAD		1011 1011	
after XOR		1111 1011	
after AND		1111 1010	
after SRA		0111 1101	0

TEST s0, s1

1100 0000
1111 1010
1100 0000

Z=0 C=0

C=0 Z=0

Answers:

1. PC 306
2. Stack | 10E | 10C | 10A | ← TOS
3. I=0, preserved C=1, preserved Z=1
4. OUT0 = C0
   OUT1 = E0
   MEM(0) = F0
5. s0 = C0
   s1 = 7D
   s2 = F0
   s3 = C0
6. C=0, Z=0