MIT Tutorial - 3

1	1000 LXI SP, 27FFH 1003 CALL 1006 1006 POP H Determine the content of the SP (Stack Pointer) and HL registers.
2	The program start at location 0100H LXI SP, 00FFH LXI H 0701 MVI A 20H SUB M 1. Determine the content of an accumulator when program counter reaches 0109H. 2. Following code exist from 0109H onwards then what will be the result in accumulator after last instruction. ORI 40H ADD M
3	This program is to multiply the numbers OAH by OBH and stored the result in Accumulator. If contents of B=0AH, C=0BH then complete the following program. MVI A, 00H LOOP: ……. ……. ……. HLT END
4	WALP without using any arithmetic instruction to store Hexadecimal number 5D in flag register of 8085. Data in the other registers must not alter upon executing the program.
5	The following block of data is stored in memory locations from 2055H to 205AH. Transfer the data to the locations 2080H to 2085H in the reverse order. Data : 65, A4, C3, B2, 22, 56 (65 should be stored at 2085H and 56 at 2080H)
6	Identify the contents of the registers, the memory location (2055H), and the flags at the following instructions are executed. A H L S Z CY M(2055H) LXI H,2055H MVI M,8AH MVI A,76H ADD M STA 2055H HLT

7	Read the following program and answer the following.
	Contents of the memory locations are 2000H=18H, 2001H=10H, 2002H=2BH
	MVI C,03H
	LXI H, 2000H
	MOV A, M
	DRC C
	LOOP1: INX H
	MOV B, M
	CMP B
	JNC LOOP2
	MOV A, B
	LOOP2: DCR C
	JNZ LOOP1
	STA 2100H
	HLT
	(a) What does the above program do?
	(b) At the end of the program, what will be
	(i) the contents of the registers A, B, C, H and L?
	(ii) the condition of the carry and zero flags?
	(iii) the contents of the memory locations
	2000 H, 2001 H, 2002 H and 2100H.

8	START 2000 LXI SP 1000H LXI H, 2F37 H XRA A MOV A, H INX H PUSH H CZ 20FF H JMP 3000 H HLT 20FF ADD H RZ POP B PUSH B RNZ HLT 3000 HLT Read above program and answer the following. Determine the content of the PC, SP, B, C, H, L after halt instruction is executed.