T62 Tutorial 7

1. Observe the contents of some registers when the following instructions are executed. Fill in the table.

(8 marks)

	L_BYTE	H_BYTE	WREG	C flag	DC flag
addwf mem1,W	00	00	28	0	0
daw	00	00	28	0	0
addwf mem2,W	00	00	71	0	1
daw	00	00	77	0	1
addwf mem3,W	00	00	10	1	1
daw	00	00	76	1	1
incf H_BYTE, F	00	01	76	0	0
movwf L_BYTE	76	01	76	0	0

2. What is the summation result?

(2 marks)

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3. Observe the contents of some registers when the following instructions are executed. Fill in the table.

(6 marks)

	L_result	H_result	WREG	N flag	OV flag	C flag	DC flag
addwf number_2_L_byte, W	00	00	B0	1	1	0	1
daw	00	00	16	1	1	1	1
movwf L_result	16	00	16	1	1	1	1
addwfc number_2_H_byte, W	16	00	D2	1	0	0	1
daw	16	00	38	1	0	1	1
movwf H_result	16	38	38	1	0	1	1

4. What is the summation result?

(2 marks)

13816

5.   Observe the contents of some registers when the following instructions are executed.
     Fill in the table.

(4 marks)

	L_result	H_result	WREG	N flag	OV flag	C flag	DC flag
subwf number_2_L_byte, W	00	00	E2	1	0	0	1
movwf L_result	E2	00	E2	1	0	0	1
subwfb number_2_H_byte, W	E2	00	8B	1	1	0	0
movwf H_result	E2	8B	8B	1	1	0	0

6.   What is the subtraction result?

(2 marks)

8BE2