1012 LAB 6 TRACE TABLES

Problem 1:

PRECONDITION : Any non-negative integer
POSTCONDITION : A boolean value

original	i	digits	sum	output
153	0	[]		
15	1	[3]		
1	2	[3,5]		
0	3	[3,5,1]		
			0	
	0		27	
	1		152	
	2		153	
				true

Problem 2:

PRECONDITION : Any non-negative integer
POSTCONDITION : A boolean value

number	i	divisors	sum	output
6	1	[]		
	2	[1]		
	3	[1,2]		
	4	[1,2,3]		
			0	
	0		1	
	1		3	
	2		6	
				true

Problem 3:

PRECONDITION : Any non-negative integer
POSTCONDITION : An integer multiple of 5

number	counter	sum	i	num	output
4	1	0			
			1	5	
	2	5			
			1	5	
			2	55	
	3	60			
			1	5	
			2	55	
			3	555	
	4	615			
			1	5	
			2	55	
			3	555	
			4	5555	
	5	6170			
					6170

Problem 4:

PRECONDITION : Any non-negative integer
POSTCONDITION : A boolean value

number	flag	i	output
1	true	2	
	false		
			false
2	true	2	
			true
3	true	2	
			true
4	true	2	
		3	
			true (incorrect)

Problem 5:

PRECONDITION : Any non-negative integer
POSTCONDITION : A float/decimal number representing the cost for that luggage

number	cost	remainder	output
500	5.75	0	
460	86.25	0	
			86.25

Problem 6:

PRECONDITION : Any non-negative integer
POSTCONDITION : An integer

number	a	b	c	val	output
2		0	1	2	
	0	1	1	3	
					1
4		0	1	2	
	0	1	1	3	
	1	1	2	4	
	1	2	3	5	
					3
5		0	1	2	
	0	1	1	3	
	1	1	2	4	
	1	2	3	5	
	2	3	5	6	
					5