Problem of the Week
Problem C
All the Digits

Georgina listed the integers from 1 to 13:

$$1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13$$

She determined that the sum of all of the digits of the integers in this list is

$$1+2+3+4+5+6+7+8+9+(1+0)+(1+1)+(1+2)+(1+3) = 55$$

She then challenged you to determine the sum of all of the digits of the integers from 1 to 100. What sum would you get?

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

THEME: NUMBER SENSE