

Squares of certain integers

The table below lists the squares of all integers between **0** and **100** whose decimal expansions end with either a **1** or a **9**. The information in this table is needed to complete the solution for final item in Additional Exercise 9 from the file

<http://math.ucr.edu/~res/math153/math153solutions06.pdf>.

n	n²	n	n²
xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx
11	0121	19	0361
21	0441	29	0841
31	0961	39	1521
41	1681	49	2401
51	2601	59	3481
61	3721	69	4761
71	5041	79	6241
81	6561	89	7921
91	8281	99	9801
01	0001	09	0081

In each case, notice that the tens digit is even, and both the hundreds digit and half the tens digit are either even or odd.