EXTENDED COMPUTATIONS OF TERMINAL DIGIT COINCIDENCES

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In [1] Brother U. Alfred asked the following question: What Fibonacci numbers of index less than 10,000 have terminal digits coincident with the index? Recently in this Quarterly, Gerald R. Deily [2] gave an answer by directly computing these coincidences with the aid of a computer. We note that in Table III of Mr. Deily's article the digits "65" should be added to the last number in each of the lines 14 to 21. Here we extend these computations to indices less than 100,000. The results, given in the table below, were obtained on an IBM 1620 computer using a FORTRAN program logically similar to Mr. Deily's. As a point of observation, we note that all entries are of the form $480n + 5$ or $480n - 95$, with the four exceptions 60,001, 61,249, 62,501, and 63,749.

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TERMINAL DIGIT COINCIDENCES WITH INDEX BETWEEN 10,000 AND 100,000

10945	18725	27745	35525
11045	19105	27845	35925
11425	19205	28225	36005
11525	20545	28325	37345
11905	20645	28705	37445
12005	21025	28805	37825
13345	21125	30145	37925
13445	21505	30245	38305
13825	21605	30625	38405
13925	22945	30725	39745
14305	23045	31105	39845
14405	23425	31205	40225
15745	23525	32545	40325
15845	23905	32645	40705
16225	24005	33025	40805
16325	25345	33125	42145
16705	25445	33505	42245
16805	25825	33605	42625
18145	25925	34945	42725
18245	26305	35045	43105
18625	26405	35425	43205
			44545

44645	60001	74405	90725
45025	60005	75745	91105
45125	61249	75845	91205
45505	61345	76225	92545
45605	61445	76325	92645
46945	61825	76705	93025
47045	61925	76805	93125
47425	62305	78145	93505
47525	62405	78245	93605
47905	62501	78625	94945
48005	63745	78725	95045
49345	63749	79105	95425
49445	63845	79205	95525
49825	64225	80545	95905
49925	64325	80645	96005
50305	64705	81025	97345
50405	64805	81125	97445
51745	66145	81505	97825
51845	66245	81605	97925
52225	66625	82945	98305
52325	66725	83045	98405
52705	67105	83425	99745
52805	67205	83525	99845
54145	68545	83905	
54245	68645	84005	
54625	69025	85345	
54725	69125	85445	
55105	69505	85825	
55205	69605	85925	
56545	70945	86305	
56645	71045	86405	
57025	71425	87745	
57125	71525	87845	
57505	71905	88225	
57605	72005	88325	
58945	73345	88705	
59045	73445	88805	
59425	73825	90145	
59525	73925	90245	
59905	74305	90625	

REFERENCES

1. Brother U. Alfred, "Exploring Fibonacci Numbers with a Calculator," Fibonacci Quarterly, 2(1964), No. 2, p. 138.

2. Gerard R. Deily, "Terminal Digit Coincidences Between Fibonacci Numbers and Their Indices," Fibonacci Quarterly, 4(1966), Vol. 2,No. 1, pp 151-156.

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