
First odd digits (1,3,5,7,9), next positive even digits (2,4,6,8)X66638_en

Implement a program that, for each positive natural number x given as input, prints two natural numbers y , z separated by a white space. Natural y is composed by the subsequence of digits of x which are odd (i.e. from the set $\{1, 3, 5, 7, 9\}$), followed by the subsequence of digits of x which are even and positive (i.e. from the set $\{2, 4, 6, 8\}$). Natural z is just twice y , i.e. $z == 2 * y$.

For example, if x is 250813126, then the program must print natural 51312826 first, as the subsequence of odd digits of x is 5131, and the subsequence of even and positive digits of x is 2826. Secondly, the program must print 102625652, as it is twice 51312826.

Input

The input consists of several cases of positive natural numbers x , each one in a line.

Output

For each x from the input, the program prints the corresponding y , z in a new line, and separated by a white space.

Sample input

```
44
8
238760
40
9641540
491378
521162
515894
383581
3455750
521595369
6956602
861021531
233665124
11
981604
4
899293
53
94607
3377539
3
899294
596298
76
515
36
749241874
999213
98636
```

```
4421134
338155
792
32621746
40197
1
1
151
942
313827
56426812
9947367
394294
8502843
474612401
4095187
843993370
38
49698604
3189
```

Sample output

```
44 88
8 16
37286 74572
4 8
915644 1831288
913748 1827496
511262 1022524
515984 1031968
335188 670376
355754 711508
515953926 1031907852
956662 1913324
11531862 23063724
335126624 670253248
11 22
91864 183728
4 8
999382 1998764
53 106
9746 19492
3377539 6755078
3 6
999824 1999648
599628 1199256
76 152
515 1030
36 72
791742484 1583484968
999132 1998264
93866 187732
1134424 2268848
331558 663116
792 1584
31726246 63452492
1974 3948
1 2
1 2
151 302
942 1884
313782 627564
51642682 103285364
9973746 19947492
399424 798848
538284 1076568
71144624 142289248
951748 1903496
39933784 79867568
38 76
9946864 19893728
3198 6396
```

Observation

It is not allowed to use any massive storage data structure, not even `string`. Please solve this exercise by just using type `int` and manipulating integers with the basic operators (+, -, *, /, %).

Problem information

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Generation : 2023-09-23 20:37:38

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