

JS4 // My Number Senses are Tingling

Mr. Ing is teaching yet another day of Function Class when Aaryan Patel proudly raises his hand to answer a question. Ing goes further into the question and starts asking Aaryan to take the sum, product, and alternate sum of some numbers. Aaryan, however, is kinda slow at arithmetic taking much time to answer simple questions such as $-1 + 7$. We need to help Aaryan with his arithmetic skills. Without relying on a Casio Cg-50, make a program that takes the digits of a number and outputs the sum, product, and alternate sum separated by spaces. On the next line, output the sum of all the three numbers.

Input Specification:

The input will consist of one 32-bit integer.

Output Specification:

Take the sum, product, and alternate sum of the digits. To take an alternate sum, add the first digit, subtract the second digit, add the third digit, subtract the fourth, and so on. Output these numbers on one line separated by spaces. Output the sum of these three numbers on the following line.

Sample Input:

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1230
```

Sample Output:

```
6 0 2
8
```

Sample Input:

```
1234321
```

Sample Output:

```
16 144 0
160
```