Crypto Collapz

Background

It is the year 2100, Crypto currency has become a viable form of alternate currency. In spite of the government's best attempts to regulate it, new cryptocurrencies are still being created every day.

Over the past hundred years, many cryptocurrencies have become worthless. Even the once almighty bitcoin has fallen to a shadow of its former glory.

Despite the uncertainties in the crypto market, one thing is certain.

All cryptocurrencies will eventually lose their value. It is just a matter of when.

Challenge description

Given a list of integers, each representing the current price of a cryptocurrency, use the following equation to determine the max price it will reach in its lifetime.

You have done analysis and identified that cryptocurrencies in 2100 adhere to the following rules.

- If price is even - > price will fall by half
- If price is odd - > price will multiply by 3 and + 1

Expose an endpoint /cryptocollapz on your server, with the specifications detailed below

Assumptions

List will have a size between 0 < 1 000 000 000 Each value will be a positive integer between 0 < 1 000 000

Input json (from challenge server)

```
[
  // test case 1
  [ 1, 2, 3, 4, 5 ],

  // test case 2
  [ 6, 7, 8, 9, 10 ],

  // other test cases
  ...
]
```

Output json (expected response from your endpoint)

```
[
  // test case 1
  [ 4, 4, 16, 4, 16 ],

  // test case 2
  [ 16, 52, 8, 52, 16 ],

  // other test cases
```

```
    . . .
]
```

Expected response content type: **application/json**

Challenge created by Dion & Moses

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