



<https://pypi.org/project/anomalies>



anomalies 0.1.4

<https://github.com/restrepo/anomaly/raw/main/solutions.json.gz>



`pip install anomalies`

390074 solutions: $4 < N < 13$

Released: Nov 30, 2020

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Statistics

GitHub statistics:

Stars: 0

Forks: 1

Open issues/PRs: 0

View statistics for this project via [Libraries.io](#) or by using [our public dataset on Google BigQuery](#)

Meta

License: BSD

Author: [restrepo](#)

Maintainers

Anomalies

Implement the anomaly free solution of [arXiv:1905.13729](#) [PRL]:

Obtain a numpy array \vec{z} of N integers which satisfy the Diophantine equations

```
>>> z.sum()
0
>>> (z**3).sum()
0
```

The input is two lists \vec{l} and \vec{k} with any $(N-3)/2$ and $(N-1)/2$ integers for N odd, or $N/2-1$ and $N/2-1$ for N even ($N > 4$). The function is implemented below under the name: `free(l,k)`

Install

```
$ pip install anomalies
```

USAGE

```
>>> from anomalies import anomaly
>>> anomaly.free([-1,1],[4,-2])
array([ 3,  3,  3, -12, -12, 15])
>>> anomaly.free.gcd
3
>>> anomaly.free.simplified
array([ 1,  1,  1, -4, -4,  5])
```

$$N=6$$



$$\alpha=2$$

$$\vec{l} = (-1, 1)$$

$$\vec{k} = (4, -2)$$