

Package ‘CAGR’

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Type Package

Title Compound Annual Growth Rate

Version 1.1.1

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Description A time series usually does not have a uniform growth rate. Compound Annual Growth Rate measures the average annual growth over a given period. More details can be found in Bardhan et al. (2022) <[DOI:10.18805/ag.D-5418](https://doi.org/10.18805/ag.D-5418)>.

Imports stats

License GPL-3

Encoding UTF-8

RoxygenNote 7.3.2

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CAGR	<i>Compute CAGR(Compound Annual Growth Rate)</i>
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Description

Compute CAGR(Compound Annual Growth Rate)

Usage

```
CAGR(data.1, data.n, n)
```

Arguments

data.1	Data of the first year
data.n	Data of the last year
n	Number of years

Value

CAGR and between years values

References

Bardhan, D., Singh, S.R.K., Raut, A.A.and Athare, T.R. (2022). Livestock in Madhya Pradesh and Chhattisgarh: An Analysis for Some Policy Implications. Agricultural Science Digest. DOI:10.18805/ag.D-5418.

Examples

```
c.cagr<-CAGR(100, 189, 5)
```

data.first	<i>Computing First Year data</i>
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Description

Computing first year data

Usage

```
data.first(data.n, r, n)
```

Arguments

data.n	Data of the last year
r	CAGR
n	Number of years

Value

First year data and between years values

References

Bardhan, D., Singh, S.R.K., Raut, A.A.and Athare, T.R. (2022). Livestock in Madhya Pradesh and Chhattisgarh: An Analysis for Some Policy Implications. Agricultural Science Digest. DOI:10.18805/ag.D-5418.

Examples

```
d.first<-data.first(189, 13.57751, 5)
```

data.last	<i>Computing Last Year data</i>
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Description

Computing last year data

Usage

```
data.last(data.1, r, n)
```

Arguments

data.1	Data of the first year
r	CAGR
n	Number of years

Value

Last year data and between years values

References

Bardhan, D., Singh, S.R.K., Raut, A.A.and Athare, T.R. (2022). Livestock in Madhya Pradesh and Chhattisgarh: An Analysis for Some Policy Implications. Agricultural Science Digest. DOI:10.18805/ag.D-5418.

Examples

```
d.last<-data.last(100, 13.57751, 5)
```

LLTM

*Log-linear Trend Model***Description**

Estimating the growth rate using the log-linear trend model

Usage

```
LLTM(data)
```

Arguments

data Time series data set

Value

Growth rate and model summary

References

Bardhan, D., Singh, S.R.K., Raut, A.A.and Athare, T.R. (2022). Livestock in Madhya Pradesh and Chhattisgarh: An Analysis for Some Policy Implications. Agricultural Science Digest. DOI:10.18805/ag.D-5418.

Examples

```
data<- c(100,105,110,118,116,120,130)
g.rate <- LLTM(data)
```

n.years

*Computing Number of Years***Description**

Computing number of years

Usage

```
n.years(data.1, data.n, r)
```

Arguments

data.1 Data of the first year
data.n Data of the last year
r CAGR

Value

Number of years and between years values

References

Bardhan, D., Singh, S.R.K., Raut, A.A.and Athare, T.R. (2022). Livestock in Madhya Pradesh and Chhattisgarh: An Analysis for Some Policy Implications. Agricultural Science Digest. DOI:10.18805/ag.D-5418.

Examples

```
n.yrs<-n.years(100, 189, 13.57751)
```

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