

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

NeedsCompilation no

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CAGR *Compute CAGR(Compound Annual Growth Rate)*

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 *Computing First Year data*

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	<i>Log-linear Trend Model</i>
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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	<i>Computing Number of Years</i>
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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

n.years

5

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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