

# Package ‘gds’

October 13, 2022

**Type** Package

**Title** Descriptive Statistics of Grouped Data

**Version** 0.1.1

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**Description** Contains a function called gds() which accepts three input parameters like lower limits, upper limits and the frequencies of the corresponding classes. The gds() function calculate and return the values of mean ('gmean'), median ('gmedian'), mode ('gmode'), variance ('gvar'), standard deviation ('gstdev'), coefficient of variance ('gcv'), quartiles ('gq1', 'gq2', 'gq3'), inter-quartile range ('gIQR'), skewness ('g1'), and kurtosis ('g2') which facilitate effective data analysis. For skewness and kurtosis calculations we use moments.

**License** GPL (>= 2)

**Encoding** UTF-8

**RoxygenNote** 7.1.1

**NeedsCompilation** no

**Repository** CRAN

**Date/Publication** 2021-07-23 06:30:02 UTC

## R topics documented:

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gds	<i>Descriptive statistics of grouped data: with the help of this package we calculate mean, median, mode, variance, standard deviation, coefficient of variance, quartiles, IQR, skewness, and kurtosis of grouped data.</i>
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### Description

Descriptive statistics of grouped data: with the help of this package we calculate mean, median, mode, variance, standard deviation, coefficient of variance, quartiles, IQR, skewness, and kurtosis of grouped data.

### Usage

```
gds(l1, ul, freq)
```

### Arguments

<code>l1</code>	A data vector to store lower limit of the classes
<code>ul</code>	A data vector to store upper limit of the classes
<code>freq</code>	A data vector to store the frequencies of the corresponding classes

### Value

`gmean, gmedian, gmode, gvar, gstdev, gcv, gq1, gq2, gq3, gIQR, g1, g2`

### References

1. Gupta, S.P., and Gupta, M.P. (2005) Business statistics, Sultan Chand and Sons educational publishers, New Delhi.
2. Levine, D.M., Krehbiel, T.C., Bereson, M.L. and Viswanathan, P.K. (2011) Business statistics: a first course, 5th edition, Pearson.
3. Langford, E. (2006) Quartiles in Elementary Statistics, Journal of Statistics Education Volume 14, Number 3.
4. Das, N. G. (2010) Statistical Methods- Combined Edition (Volumes I & II), Tata McGraw Hill Education Private Limited, New Delhi.

### Examples

```
gds(c(10,20,30,40,50),c(20,30,40,50,60),c(7,13,23,20,8))
```

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