# Package 'UnitStat'

June 18, 2021

Type Package
Title Performs Unit Root Test Statistics
Version 1.1.0
Description A test to understand the stability of the underlying stochastic data. Helps the user's understand whether the random variable under consideration is stationary or non-stationary without any manual interpretation of the results. It further ensures to check all the prerequisites and assumptions which are underlying the unit root test statistics and if the underlying data is found to be non-stationary in all the 4 lags the function diagnoses the input data and returns with an optimised solution on the same
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UnitStat

Performs Unit Root Test Statistics

## **Description**

'A test to understand the stability of the underlying stochastic data. Helps the user understand whether the random variable under consideration is stationary or non-stationary without any manual interpretation of the results. It further ensures to check all the prerequisites and assumptions which are underlying the unit root test statistics and if the underlying data is found to be non-stationary in all the 4 lags the function diagnoses the input data and returns with an optimised.

#### Usage

```
UnitStat(y, lag = 0, View_results = "True")
```

#### Arguments

y Univariate time series or vector to be tested

lag Numeric.Default is 0.Select Lags to view results at different lags. Maximum

number of lags is 4

View\_results Boolean.Default is False. If True is selected the function returns results for all

the 4 lags.

#### Value

An object with class UnitStat(). Returns with a statement explaining the type of input data and its stability. lag - Displays results for the lag number selected View\_results - Shows all lag results

#### Author(s)

Ankita Sharma

#### References

Dickey, D. A. and Fuller, W. A. (1981), Likelihood Ratio Statistics for Autoregressive Time Series with a Unit Root, Econometrica, 49, 1057–1072. Hamilton (1994), Time Series Analysis, Princeton University Press

### **Examples**

```
y = runif(50,1,49)
UnitStat(y)
UnitStat(y,View_results = "T") #To view results at all lags
```

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