# Package 'Mychisq'

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Type Package
Title Chi-Squared Test for Goodness of Fit and Independence Test
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<b>Description</b> The chi-squared test for goodness of fit and independence test.
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gofchisq

Goodness of fit test

#### Description

This function is the goodness of fit test

#### Usage

```
gofchisq(x, p, conf.level = 0.95)
```

#### **Arguments**

x a vector of observedp probability of each groupconf.level confidence level

#### Value

output for goodness of fit test

#### References

Chernoff, H.; Lehmann, E. L.(1954) <doi:10.1214/aoms/1177728726>.

## Examples

```
x=c(12,9,10,7,12)
prob=c(1/5,1/5,1/5,1/5,1/5) #1:1:1:1:1
gofchisq(x=x,p=prob)
```

indchisq

Independence test

#### Description

This function is for independence test

#### Usage

```
indchisq(0, conf.level = 0.95)
```

#### **Arguments**

0 an observed matrix has a rows and b columns

conf.level confidence level

plotchisq 3

#### Value

output for independence test

#### References

```
Plackett, R. L. (1983). <doi:10.2307/1402731>.
```

#### **Examples**

```
v <- c(80,60,150,50,40,20)
X<- matrix(v,ncol=2,byrow = TRUE)  # 3x2
indchisq(X)</pre>
```

plotchisq

Plot of Chi-squared distribution

#### Description

The plot of Chi-squared distribution with k degrees of freedom

#### Usage

```
plotchisq(df = 8)
```

## Arguments

df

degrees of freedom

## Value

The figure of Chi-squared distribution with k degrees of freedom

#### **Examples**

```
plotchisq(df=10)
```

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