# Package 'KleynSTAT344'

June 12, 2014

**Title** EM Algorithm for two component Poisson mixture

**Version** 0.1

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**Description** EM Algorithm for two component Poisson mixture

**Depends** R (>= 3.0.2)

**License** GPL-2

**LazyData** true

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`KleynSTAT344` *An R package for fitting a two-component zero truncated Poisson mixture distribution*

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### Description

This package uses an EM algorithm to fit discrete data to a two-component zero truncated Poisson mixture distribution

### Details

| | |
|---|---|
| Package: | KleynSTAT344 |
| Version: | 1.0 |
| Date: | 2014-6-12 |
| License: | GPL-2 |
| Lazyload: | yes |

MLEestimate(x)

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`MLEestimate` *EM Algorithm for two component zero truncated Poisson mixture distribution*

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## Description

Takes a vector of positive integers x and fits to a two component zero truncated Poisson mixture distribution

## Usage

```
MLEestimate(x, eta = 1e-18)
```

## Arguments

| | |
|---|---|
| `x` | A vector of positive integers |
| `eta` | The threshold value for iterations. |

## Value

lambda1_est The Poisson mean parameter for the first component

lambda2_est The Poisson mean parameter for the second component

p The weight for the first component of the mixture

## Examples

```
x<-c(1:10)
MLEestimate(x)
```

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