

# Periodic\_growth\_of\_df.R

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Mon Jan 14 10:38:57 2019

```
# adpated from R Inferno https://www.burns-stat.com/documents/books/the-r-inferno/
#
# This script is an example of one way to overcome the issue of fragmented memory caused by 'growing ob
#
#
#
n <- as.numeric(10)
current.N <- 10 * n
my.df <- data.frame(a = character(current.N),
                    b = numeric(current.N),
                    stringsAsFactors = FALSE)

count <- 0
set.seed(58008)
for (i in 1:n){
  this.N <- rpois(1, 10)

  if (count + this.N > current.N) {
    old.df <- my.df
    current.N <- round(1.5 * (current.N + this.N))
    my.df <- data.frame(a = character(current.N),
                        b = numeric(current.N),
                        stringsAsFactors = F)
    my.df[1:count, ] <- old.df[1:count,]
    print(my.df)
  }
  my.df[count + 1:this.N, ] <- data.frame(a = sample(letters,
                                                    this.N, replace = TRUE),
                                          b = runif(this.N))

  count <- count + this.N
}
my.df <- my.df[1:count, ] #this operation trims the zero rows from the bottom
my.df
```

```
##      a      b
## 1  6 0.64801413
## 2  2 0.04366762
## 3  3 0.48040822
## 4  1 0.42206178
## 5  5 0.90812082
## 6  2 0.77015892
## 7  4 0.79140401
## 8  1 0.05346619
## 9  6 0.44667432
## 10 8 0.49053550
## 11 3 0.83089149
## 12 5 0.29899754
## 13 9 0.19913514
```

## 14 7 0.47829378  
## 15 4 0.44364721  
## 16 2 0.86301979  
## 17 6 0.39113905  
## 18 4 0.51590165  
## 19 2 0.96513782  
## 20 2 0.11371298  
## 21 1 0.65068486  
## 22 3 0.91074943  
## 23 6 0.82118152  
## 24 5 0.90568649  
## 25 1 0.55378980  
## 26 2 0.52428599  
## 27 3 0.14103984  
## 28 5 0.80584355  
## 29 4 0.82329404  
## 30 3 0.97114221  
## 31 2 0.37256942  
## 32 4 0.96468122  
## 33 7 0.36004371  
## 34 5 0.09276328  
## 35 6 0.37750584  
## 36 3 0.15017776  
## 37 1 0.40081375  
## 38 5 0.13548491  
## 39 3 0.69106309  
## 40 4 0.78927234  
## 41 7 0.95818570  
## 42 6 0.82635954  
## 43 8 0.44558268  
## 44 4 0.34659587  
## 45 10 0.23460693  
## 46 1 0.57090711  
## 47 8 0.53801591  
## 48 2 0.78816427  
## 49 6 0.91450563  
## 50 9 0.30497877  
## 51 1 0.79220645  
## 52 2 0.94722950  
## 53 3 0.33908431  
## 54 2 0.15528266  
## 55 4 0.83520241  
## 56 9 0.70175676  
## 57 8 0.06129689  
## 58 5 0.39433048  
## 59 1 0.30217609  
## 60 6 0.28251845  
## 61 7 0.57349477  
## 62 6 0.49657262  
## 63 8 0.79972108  
## 64 3 0.95627945  
## 65 3 0.59886888  
## 66 2 0.85920856  
## 67 1 0.10914945

```
## 68 3 0.15933006
## 69 6 0.67720759
## 70 5 0.73743137
## 71 1 0.99194860
## 72 4 0.99172174
## 73 1 0.86793250
## 74 3 0.73559785
## 75 2 0.67818143
## 76 7 0.94993673
## 77 6 0.64223726
## 78 5 0.29313204
```