

# tugas 1 Deret waktu

Budiii

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## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed      dist
##  Min.   : 4.0    Min.   :  2.00
## 1st Qu.:12.0    1st Qu.: 26.00
##  Median :15.0    Median : 36.00
##   Mean  :15.4    Mean   : 42.98
## 3rd Qu.:19.0    3rd Qu.: 56.00
##   Max.  :25.0    Max.    :120.00
```

## Including Plots

You can also embed plots, for example:

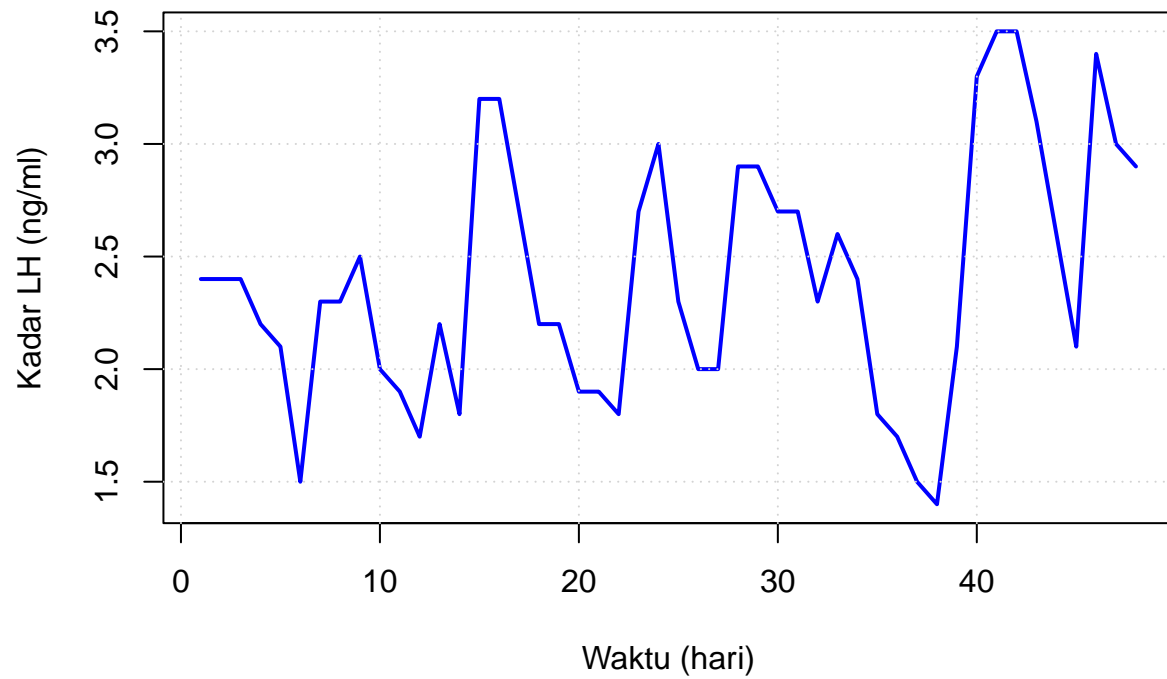


```
# Muat dataset lh (sudah tersedia secara default di R)
data(lh)

# Tampilkan grafik deret waktu dataset lh
plot(lh,
     main = "Grafik Deret Waktu Kadar Hormon LH",
     xlab = "Waktu (hari)",
     ylab = "Kadar LH (ng/ml)",
     col = "blue",
     lwd = 2)

# Tambahkan garis grid agar lebih mudah dibaca
grid()
```

**Grafik Deret Waktu Kadar Hormon LH**



```
# mengubah dataset ke time series dengan frekuensi 7 (mengansumsikan data mingguan)
konvers_ts <- ts(lh, frequency = 7)

# Dekomposisi dengan metode aditif
hasil_dekomposisi <- decompose(konvers_ts, type = "additive")
plot(hasil_dekomposisi)
```

## Decomposition of additive time series

