

CS 102 (Data Preparation)

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```
data("warpbreaks")  
  
#View(warpbreaks)
```

How many observations does it have? 54

```
nrow(warpbreaks)
```

```
## [1] 54
```

```
str(warpbreaks)
```

```
## 'data.frame': 54 obs. of 3 variables:  
## $ breaks : num 26 30 54 25 70 52 51 26 67 18 ...  
## $ wool : Factor w/ 2 levels "A","B": 1 1 1 1 1 1 1 1 1 1 ...  
## $ tension: Factor w/ 3 levels "L","M","H": 1 1 1 1 1 1 1 1 1 2 ...
```

```
#warpbreaks$wool <- as.integer(warpbreaks$wool)
```

```
sapply(warpbreaks, function(x) {paste(class(x), collapse=",")})
```

```
## breaks wool tension  
## "numeric" "factor" "factor"
```

B.

1. Read the complete file using readLines.

```
sample <- readLines("exampleFile.txt")
```

```
## Warning in readLines("exampleFile.txt"): incomplete final line found on  
## 'exampleFile.txt'
```

```
sample
```

```
## [1] "// Survey data. Created : 21 May 2013"
## [2] "// Field 1: Gender"
## [3] "// Field 2: Age (in years)"
## [4] "// Field 3: Weight (in kg)"
## [5] "M;28;81.3"
## [6] "male;45;"
## [7] "Female;17;57,2"
## [8] "fem.;64;62.8"
```

2. Separate the vector of lines into a vector containing comments and a vector containing the data. Hint: use `grepl`.

```
file_content <- readLines("exampleFile.txt")
```

```
## Warning in readLines("exampleFile.txt"): incomplete final line found on
## 'exampleFile.txt'
```

```
comment <- file_content[grepl("^//", file_content)]
data_lines <- file_content[grepl("^[^//]", file_content)]
```

3. Extract the date from the first comment line and display on the screen "It was created data."

```
date_lines <- comment[1]
dat <- gsub("^// Created on ", "", date_lines)
#cat("created on", date, "\n")
```

4.

```
#spli_data way na time na
```