

# lottoDataFrame

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```
library(stringi)
library(stringr)
```

```
substrRight <- function(x, n){
  substr(x, nchar(x)-n+1, nchar(x))
}
```

```
# Main Clean -----
```

```
df <- read.table('C:/Users/crich/Downloads/DownloadAllNumbers.txt', sep = '\t')
```

```
# REMOVE FIRST 3 UNNECESSARY ROWS
```

```
lotto <- data.frame(df[-(1:3),])
```

```
# Rename column
```

```
colnames(lotto) <- 'Record'
```

```
# remove white space
```

```
lotto$strip <- gsub("\\s", "", lotto$Record)
```

```
lotto$digitsOnly <- gsub('\\D','', lotto$strip)
```

```
# this is built on the constant variable of digits always ending in order 'Serial #, date, and winning #'
```

```
lotto$Serial <- as.integer(substr(lotto$digitsOnly, 1, nchar(lotto$digitsOnly)-9))
```

```
# Extract DaY as %b%d%Y
```

```
lotto$stringDate <- str_extract(lotto$Record, '\\D{9}).+(\\d{2})')
```

```
lotto$stringDate <- substring(lotto$stringDate, 10)
```

```
# Remove whitespace from Date
```

```
lotto$stringDate <- gsub("\\s", "", lotto$stringDate)
```

```
# insert , between month & day for regex purposes
```

```
lotto$stringDate <- sub('^(.{3})(.*)', "\\1,\\2", lotto$stringDate)
```

```
lotto$stringDate <- gsub(",", "/", lotto$stringDate)
```

```
# convert stringDate into international date standard
```

```
lotto$Date <- as.Date(lotto$stringDate, format = '%b/%d/%Y' )
```

```
# grab string containing date
```

```
lotto$Day <- gsub('\\d','', lotto$strip)
```

```
# grab exact day
```

```
lotto$Day <- stri_sub(lotto$Day, 1, 3)
```

```
# label rows according to draw time
```

```
lotto$Time[lotto$Serial %% 2 == 1] <- 'Evening'
```

```
lotto$Time[lotto$Serial %% 2 == 0] <- 'Midday'
```

```

# grab winning #s
lotto$Winning <- as.character(substrRight(lotto$strip,3))

lotto <- lotto[,c(1,4,6:9)]

lotto$One <- as.integer(stri_sub(lotto$Winning, 1, -3))
lotto$Two <- as.integer(stri_sub(lotto$Winning, 2, -2))
lotto$Three <- as.integer(stri_sub(lotto$Winning, 3, -1))

# column for the total sum of winning numbers
lotto$WinningSum <- rowSums(lotto[,7:9])

lottoExtended = lotto

# split winning numbers into two columns consisting of 162 and 263
lottoExtended$FrontTwo <- stri_sub(lotto$Winning, 1,2)
lottoExtended$LastTwo <- stri_sub(lotto$Winning,2,3)

lottoExtended$FrontTwoSum <- lotto$One + lotto$Two
lottoExtended$LastTwoSum <- lotto$Two + lotto$Three

write.table(lotto, file = 'C:/Users/crich/Desktop/Googz/lottoResearch/Data/cleanedLotto.csv', sep = ',')

# contains 3
write.table(lottoExtended, file = 'C:/Users/crich/Desktop/Googz/lottoResearch/Data/cleanedLottoExtended.csv', sep = ',')

# tableau friendly}
lottoExp = lotto[,c(2:9)]
write.table(lottoExp, file = 'C:/Users/crich/Desktop/Googz/lottoResearch/Data/cleanedLottoTabl.csv', sep = ',')
rm(lottoExp)

```