Convert hours:minutes:sec

Asked 9 years, 5 months ago Modified 2 years, 4 mo ve

25

I have a vector "Time.Training" in the for

```
Time.Training <- c("1:00:00", "0:45
```

I would like to convert this into minutes i

```
Time.Training.Minutes <- c(60, 45, 30, 90)
```

I'm wondering if someone has a straightforward method of doing this in R.

Many thanks.

Matt

r datetime time type-conversion

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edited Sep 12, 2021 at 14:13
Henrik
67.3k 15 148 162

asked Mar 15, 2015 at 23:14
Matt Jordan
587 1 6 14

The Time.Training vector is being pulled in from Google Sheets using the url. It comes into R in the format hh:mm:ss. Hoping to convert this so I can calculate a training load for an athlete but I need this in minutes. – Matt Jordan Mar 15, 2015 at 23:21

5 Answers

Sorted by: Highest score (default)

25

Using `lubridate`:

```
Time.Training<- c("1:00:00", "0:45:00", "0:30:00", "1:30:00")

library(lubridate)
res <- hms(Time.Training)        # format to 'hours:minutes:seconds'
hour(res)*60 + minute(res)       # convert hours to minutes, and add minutes
## [1] 60 45 30 90
```

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answered Mar 15, 2015 at 23:34

tospig
8,233 15 44 80

1 This worked. The exact code I used was: library(lubridate); res <- hms(load$Time.Spent.Training); load$Time.Minutes<-hour(res)*60 + minute(res). Thank you. – Matt Jordan Mar 15, 2015 at 23:55

1 You're welcome. On your example given in the question @David Arenburg's method also works. If you want answers based on your actual data you should consider using `dput()` (at least on a subset of the data). – tospig Mar 16, 2015 at 0:00

15

Try this. We basically converting to `POSIXlt` class first by pasting a real date to the vector using the `Sys.Date()` function (because there is no hour class in base R) and then using `hour` and `min` arguments in order to achieve the output

```
Res <- as.POSIXlt(paste(Sys.Date(), Time.Training))
Res$hour*60 + Res$min
## [1] 60 45 30 90
```

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answered Mar 15, 2015 at 23:20

David Arenburg
92.1k 18 141 199

1 The data table is called 'load' and the variable is called 'Time.Spent.Training'. I used the commands: attach(load) followed by Res <- as.POSIXlt(paste(Sys.Date(), Time.Spent.Training)). This gave a vector of dates 2015-03-15. I can't seem to get time from this – Matt Jordan Mar 15, 2015 at 23:35

You need to call your column from your data set. Try `load$Time.Spent.Training` instaed of just `Time.Spent.Training` . – David Arenburg Mar 15, 2015 at 23:44

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Use as.difftime:

```
> Time.Training<- c("1:00:00", "0:45:00", "0:30:00", "1:30:00")
> strtoi(as.difftime(Time.Training, format = "%H:%M:%S", units = "mins"))
[1] 60 45 30 90
```

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answered Feb 22, 2017 at 7:03

Perceptron
379 3 11

10

Here are some alternatives:

1) The chron package has a `"times"` class in which 1 unit is a day and there are 60 * 24 minutes in a day so:

```
library(chron)
60 * 24 * as.numeric(times(Time.Training))
```

giving:

```
[1] 60 45 30 90
```

1a) Another approach using chron is the following (giving the same answer):

```
library(chron)

ch <- times(Time.training)
60 * hours(ch) + minutes(ch)
```

2) Here is an approach using `read.table` and matrix/vector multiplication. No packages are needed:

```
c(as.matrix(read.table(text = Time.Training, sep = ":")) %*% c(60, 1, 1/60))
```

(Using `"POSIXlt"` is probably the most straight-forward approach without packages but another answer already provides that.)

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edited Mar 16, 2015 at 12:22

answered Mar 16, 2015 at 0:02

G. Grothendieck
264k 18 216 356

Taking the hour column from the date time column and create a new cloumn hour and give only hour data in that column 2011-01-01 00:00:01 Ans :

-2

```
bikeshare$hour<-sapply(bikeshare$datetime,function(x){format(x,"%H")})
```

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edited Apr 10, 2022 at 22:22

tospig
8,233 15 44 80

answered Jul 8, 2020 at 4:09

Mano Ramu
1 2