R list of lists to data.frame

Asked 4 years, 7 months ago Active 3 months ago Viewed 46k times

23

3

I've got a list of lists, call it `listHolder`, which has length 5.

Every element in `listHolder` is a list of numeric data, with 160 or so elements.

I need to turn this list of lists into a `data.frame` of length 5, with each element being a numeric vector with 160 or so elements.

But everything I've tried, from iterating through the list of lists and turning each element with `as.numeric(unlist(listHolder[[i]]))`, to

```
data.frame(matrix(unlist(listHolder), nrow = length(totalKeywords), byrow = T))
```

ends up creating a data frame of length 160 or so, with each element being a numeric vector with 5 or so elements.

How do I do what I want?

Attempting `data.frame(matrix(unlist(totalKeywords), nrow=132, byrow=T))` yields the opposite of what I want - 160 small items each 5 elements long.

r dataframe

edited Oct 29 '16 at 23:21
Léo Léopold Hertz 준영
51k ● 143 ● 392 ● 617

asked Apr 16 '15 at 12:25

Bacter
128 ● 1 ● 1 ● 6

7 Try `do.call(rbind, listHolder)`. – dimitris_ps Apr 16 '15 at 12:26

1 possible duplicate of R list to data frame – user3710546 Apr 16 '15 at 12:28

I think he wants to turn each listHolder item in a column, so it would be `cbind` instead of `rbind`. – Molx Apr 16 '15 at 12:28

2 Why not `as.data.frame(listHolder)` – shadow Apr 16 '15 at 12:35

Could you provide sample data for `listHolder`? – Hack-R Apr 16 '15 at 12:47

4 Answers

27

The value of nrow needs to be fixed. I fixed your code as follows:

```
dd  <-  as.data.frame(matrix(unlist(listHolder), nrow=length(unlist(listHolder[1]))))
```

 5,231 ●5 ●26 ●52  1,693 ●1 ●11 ●10

4 Is there anything I could do to preserve types? Following this approach, if one column was `POSIXct`, it converts it to `chr`. – R.M. Jul 12 '17 at 14:05

12

AS @dimitris_ps mentioned earlier, the answer could be:

```
do.call(rbind, listHolder)
```

Since **do.call** naturally "strips" 1 level of the "list of list", obtaining a list, not a list of lists.

After that, **rbind** can handle the elements on the list and create a *matrix*.

answered Sep 20 '18 at 0:12

 Camilo Abboud
321 ●3 ●6

1 This extremely useful when the "rows" were named lists, as it keeps the names of the list (assuming the names are consistent) – tmrlvi Nov 2 '18 at 12:07

10

This achieves a similar result, but is more intuitive (to me at least)

```
#Generate fake data
listoflists=list(c(1,'a',3,4),c(5,'b',6,7))

#Convert to a dataframe, transpose, and convert the resulting matrix back to a dataframe
df= as.data.frame(t(as.data.frame(listoflists)))

#Strip out the rownames if desired
rownames(df)<-NULL

#Show result
df
```

answered Mar 10 '17 at 13:50

 sean
349 ●3 ●12

This is not a list of lists. This is a list of atomic vector (coerced to character since you have different data types). – Victor Mayrink Oct 11 at 16:55

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I think this is easier than the previous solutions:

```
mydf = data.frame(x1 = c('a', 'b', 'c'))
mylist = list(c(4, 5), c(4, 5), c(4, 5))
```

```
2  b 4, 5
3  c 4, 5
```

answered Jul 18 at 18:32

Zhaochen He
36 • 9

Also not a list a of lists – Victor Mayrink Oct 11 at 16:58