

How can I use dplyr to transpose a data frame?

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Dplyr is a popular R package used for data manipulation and analysis. One useful function of dplyr is its ability to transpose a data frame. Transposing a data frame means converting the current columns into rows and vice versa. This can be achieved by using the "transpose" function provided by dplyr. The syntax for using this function is simple and straightforward, making it an efficient tool for data manipulation tasks. By using dplyr to transpose a data frame, users can easily restructure their data to fit the desired format for further analysis and visualization. Overall, dplyr's "transpose" function provides a convenient and efficient solution for data frame transposition in R.

Transpose a Data Frame Using dplyr

You can use the following basic syntax to transpose a data frame using the package in R:

```
library(dplyr)
```

```
library(tidyr)
```

```
df %>%
```

```
  pivot_wider(names_from = column1, values_from =  
  column2)
```

The names_from argument specifies the values to use for the column names in the transposed data frame and the values_from argument specifies the cell values to use within the transposed data frame.

Note that the pipe operator (%>%) comes from the dplyr package while the pivot_wider() function comes from the tidyr package.

The following example shows how to use this syntax in practice.

Example: Transpose a Data Frame Using dplyr

Suppose we have the following data frame in R that contains information about various basketball teams:

```
#create data frame
```

```
df <- data.frame(team=c('Mavs', 'Nets', 'Kings', 'Lakers'),  
points=c(99, 104, 119, 113))
```

```
#view data frame
```

```
df
```

```
team points
```

```
1 Mavs 99
```

```
2 Nets 104
```

```
3 Kings 119
```

```
4 Lakers 113
```

Now suppose we would like to transpose the data frame so that the team names are used as column names and the points values are used as the cell values inside the data frame.

We can use the following syntax to do so:

```
library(dplyr)
```

```
library(tidyr)
```

```
#transpose data frame
```

```
df %>%
```

```
pivot_wider(names_from = team, values_from = points)
```

```
# A tibble: 1 x 4
```

```
Mavs Nets Kings Lakers
```

```
1 99 104 119 113
```

The data frame has been transposed so that the team names are used as columns and the points values are used as cell values within the data frame.

Notice that the resulting data frame now contains 1 row and 4 columns.

The following tutorials explain how to perform other common tasks using dplyr: