

How can I convert a column in a data frame to a vector in R?

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Converting a column in a data frame to a vector in R can be done using the "as.vector" function. This function allows you to extract a specific column from a data frame and convert it into a vector, which is a one-dimensional array that can hold multiple values of the same data type. This conversion process is useful for performing various operations and analyses on the data within that column, as vectors in R are more flexible and efficient to work with compared to data frames. By using the "as.vector" function, you can easily manipulate and analyze your data in R to obtain insights and make informed decisions.

Convert Data Frame Column to Vector in R

You can use one of the following three methods to convert a data frame column to a vector in R:

#use \$ operator

```
new_vector <- df$column_name
```

#use indexing

```
new_vector <- df[]
```

#use 'pull' from *dplyr* package

```
new_vector <- dplyr::pull(df, column_name)
```

Each of these methods returns identical results.

The following examples show how to use each of these methods in practice with the following data frame:

```
#create data frame
```

```
df <- data.frame(a=c(1, 2, 5, 6, 12, 14),  
b=c(8, 8, 9, 14, 22, 19),  
c=c(3, 3, 2, 1, 2, 10))
```

```
#display data frame
```

```
df
```

```
a b c
```

```
1 1 8 3
```

```
2 2 8 3
```

```
3 5 9 2
```

```
4 6 14 1
```

```
5 12 22 2
```

```
6 14 19 10
```

Example 1: Use \$ Operator

The following code shows how to use the \$ operator to convert a data frame column to a vector:

```
#convert column 'a' to vector
```

```
new_vector <- df$a
```

```
#view vector
```

```
new_vector
```

```
1 2 5 6 12 14
```

```
#view class of vector  
class(new_vector) "numeric"
```

Example 2: Use Indexing

The following code shows how to use indexing to convert a data frame column to a vector:

```
#convert column 'a' to vector  
new_vector <- df]
```

```
#view vector  
new_vector
```

```
1 2 5 6 12 14
```

```
#view class of vector  
class(new_vector) "numeric"
```

Example 3: Use 'pull' from dplyr

The following code shows how to use the 'pull' function from the package to convert a data frame column to a vector:

```
library(dplyr)
```

```
#convert column 'a' to vector
```

```
new_vector <- pull(df, a)
```

```
#view vector
```

```
new_vector
```

```
1 2 5 6 12 14
```

```
#view class of vector
```

```
class(new_vector) "numeric"
```

Notice that all three methods return identical results.

Note: If you happen to be working with an extremely large dataset, the 'pull' function from the dplyr package will perform the fastest out of the three functions shared in this tutorial.