

How can I export a data frame to a CSV file in R?

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Exporting a data frame to a CSV file in R is a simple process that allows you to save your data in a comma-separated values format for easy sharing and analysis. To do so, you can use the built-in "write.csv" function, which takes in the data frame and desired file name as parameters. This function will automatically convert the data frame into a CSV file and save it in your current working directory. This method is useful for quickly exporting data frames in R and is commonly used in data analysis and manipulation tasks.

Export a Data Frame to a CSV File in R (With Examples)

Suppose we have the following data frame in R:

```
#create data frame
```

```
df <- data.frame(team=c('A', 'B', 'C', 'D', 'E'),  
points=c(78, 85, 93, 90, 91),  
assists=c(12, 20, 23, 8, 14))
```

```
#view data frame
```

```
df
```

```
team points assists
```

```
1 A 78 12
```

```
2 B 85 20
```

```
3 C 93 23
```

```
4 D 90 8
```

```
5 E 91 14
```

There are three common ways to export this data frame

to a CSV file in R:

1. Use write.csv from base R

If your data frame is reasonably small, you can just use the `write.csv` function from base R to export it to a CSV file.

When using this method, be sure to specify `row.names=FALSE` if you don't want R to export the row names to the CSV file.

```
write.csv(df, "C:UsersBobDesktopdata.csv",  
row.names=FALSE)
```

2. Use write_csv from reader package

An even faster way to export a data frame to a CSV file is with the `write_csv` function from the reader package. This is about 2x faster than `write.csv` and it never writes the row names from the data frame to a CSV file.

```
library(readr)
```

```
write_csv(df, "C:UsersBobDesktopdata.csv")
```

3. Use fwrite from data.table package

Yet a faster way (and a recommended method for large datasets) to export a data frame to a CSV file is with the `fwrite` function from the `data.table` package. This function is about 2x faster than the `write_csv` method.

```
library(data.table)
```

```
fwrite(df, "C:UsersBobDesktopdata.csv")
```

Note that in each example we used double backslashes (`\\`) in the file path to avoid the following common error:

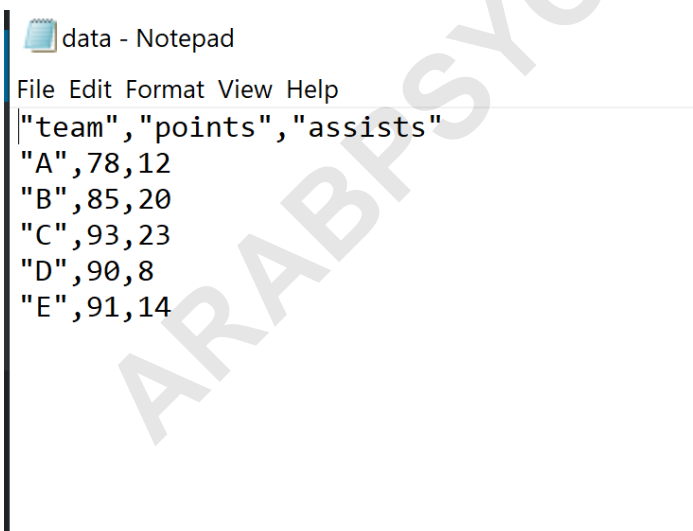
Error: 'U' used without hex digits in character string starting ""C:U"

The Output

Each of the three methods above produce an identical CSV file. If we open this file with Excel, here's what it looks like:

	A	B	C	D	E	F
1	team	points	assists			
2	A	78	12			
3	B	85	20			
4	C	93	23			
5	D	90	8			
6	E	91	14			
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						

And if we open the CSV file with a text reader like Notepad, here's what it looks like:



```
data - Notepad
File Edit Format View Help
"team","points","assists"
"A",78,12
"B",85,20
"C",93,23
"D",90,8
"E",91,14
```

How to Import CSV Files into R