TMC 204
Statistical Data Analysis with R
Unit 3
Exporting Data from R(Part 3)

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Output data to file

writeLines()

Description:

It writes text lines to a connection or a file

Syntax:

writeLines(text, con=stdout(), sep="\n",useBytes=FALSE)

Return:

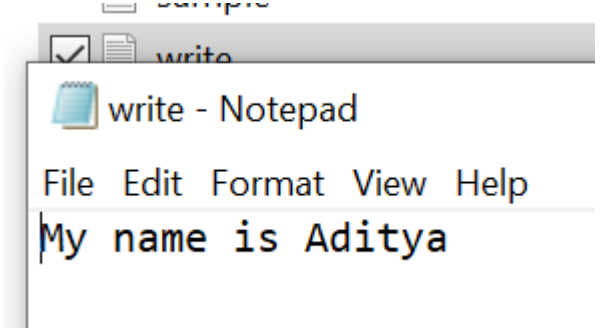
File with overwritten text.

Documentation:

help(writeLines)

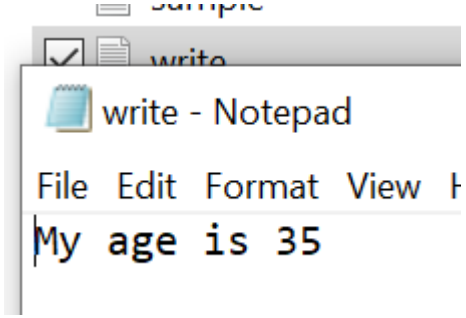
Example 1:

```
> details<-"My name is Aditya"
> writeLines(details,"write.txt")
> readLines("write.txt")
[1] "My name is Aditya“
```



Example 2:

```
> details_2<-"My age is 35"
> writeLines(details_2,"write.txt")
> readLines("write.txt")
[1] "My age is 35“
```



writeLines() overwrite contents of a file to append it you have to use write()

write()

Description:

write() writes/appends data to a file

syntax:

write(x, file="data", ncolumns=if(is.character(x)) 1 else 5, append=FALSE, sep=" ")

Returns:

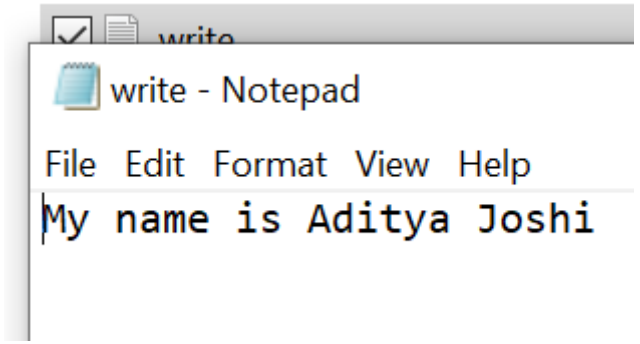
File with appended text

Documentation:

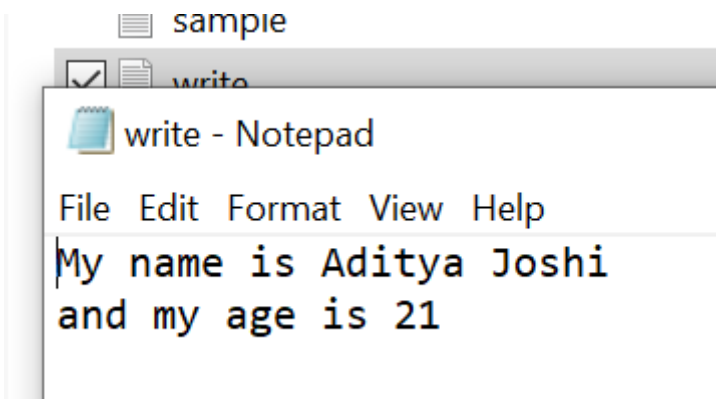
help(write)

Example:

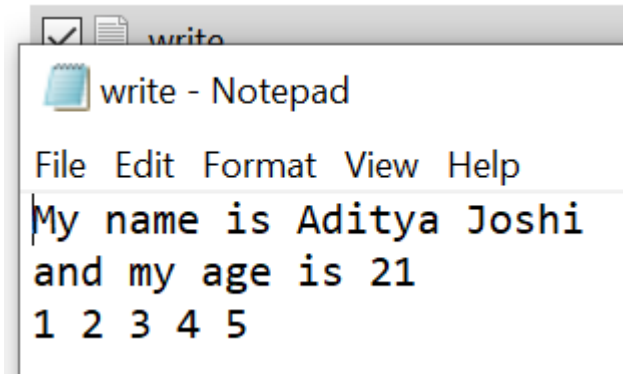
```
> name<-"My name is Aditya Joshi"
> write(name,file="write.txt")
> readLines("write.txt")
[1] "My name is Aditya Joshi“
```



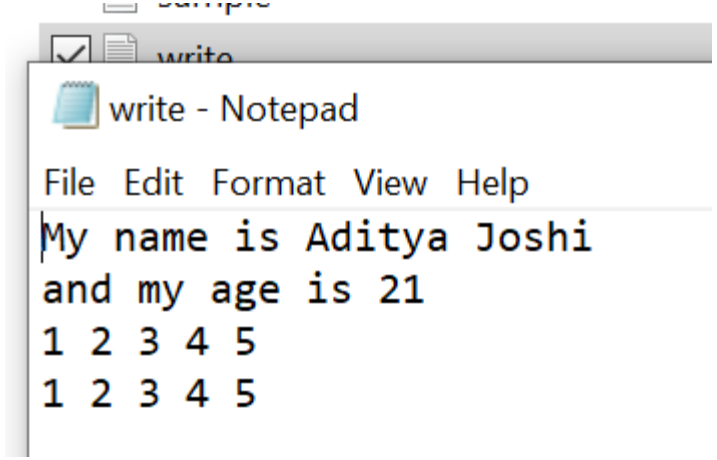

```
> age<-"and my age is 21"
> write(age,file="write.txt",append=TRUE)
> readLines("write.txt")
[1] "My name is Aditya Joshi" "and my age is 21"
```



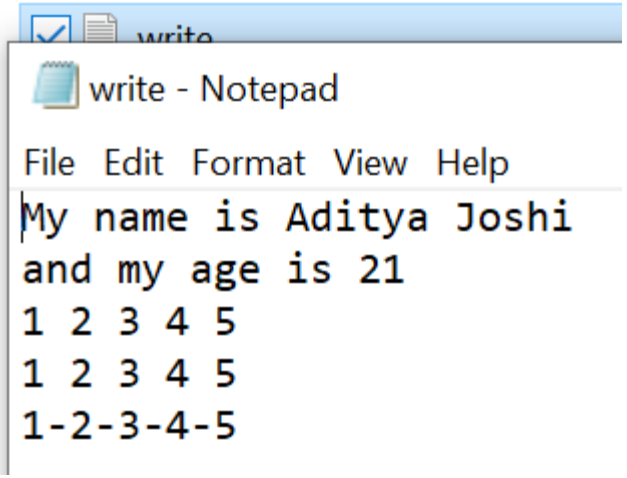

```
> x<-1:5
> x
[1] 1 2 3 4 5
> write(x,file="write.txt",append=TRUE)
> readLines("write.txt")
[1] "My name is Aditya Joshi" "and my age is 21"
[3] "1 2 3 4 5"
```



```
> write(x,file="write.txt",append=TRUE)
> readLines("write.txt")
[1] "My name is Aditya Joshi" "and my age is 21"
[3] "1 2 3 4 5"               "1 2 3 4 5"
```




```
> write(x,file="write.txt",append=TRUE, sep="-")
> readLines("write.txt")
[1] "My name is Aditya Joshi" "and my age is 21"
[3] "1 2 3 4 5"               "1 2 3 4 5"
[5] "1-2-3-4-5"
```



write.table()

Description

write.table() will convert the data into data.frame or matrix before writing it to a file

Syntax

write.table(x, file="", append=FALSE, quote=TRUE, sep=" ", eol="\n", na="NA", dec=".", row.names=TRUE, col.names=TRUE, qmethod=c("escape","double"), fileEncoding="")

Returns

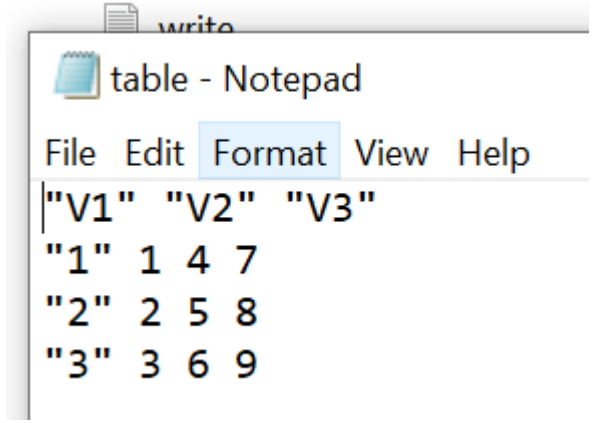
File with data as data frame or matrix

Documentation

Help(write.table)

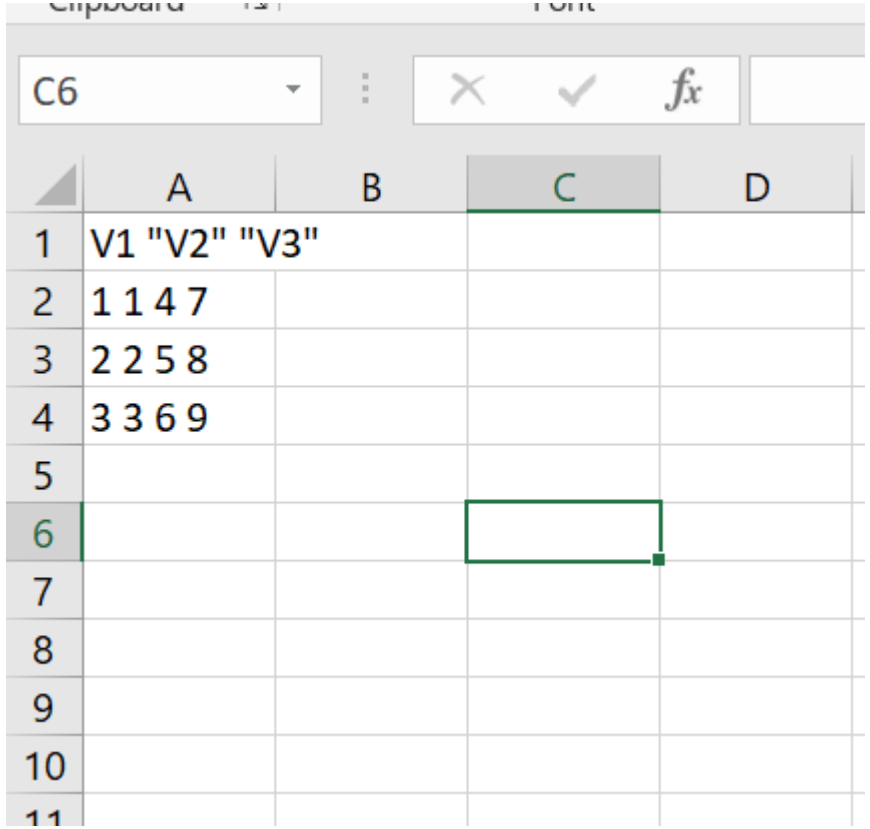
Example: write to a text file

```
> m<-matrix(1:9,nrow=3)
> m
     [,1] [,2] [,3]
[1,]    1    4    7
[2,]    2    5    8
[3,]    3    6    9
> write.table(m,file="table.txt")
> readLines("table.txt")
[1] "\"V1\" \"V2\" \"V3\"" "\"1\" 1 4 7"
[3] "\"2\" 2 5 8"         "\"3\" 3 6 9"
```



Example: write to a csv file

```
write.table(m,file="table.csv")
> readLines("table.csv")
[1] "\"V1\" \"V2\" \"V3\"" "\"1\" 1 4 7"
[3] "\"2\" 2 5 8"         "\"3\" 3 6 9"
```

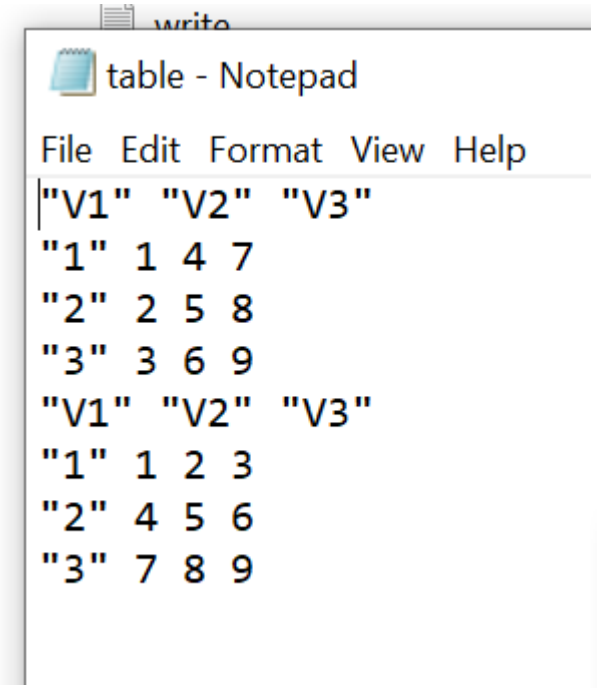


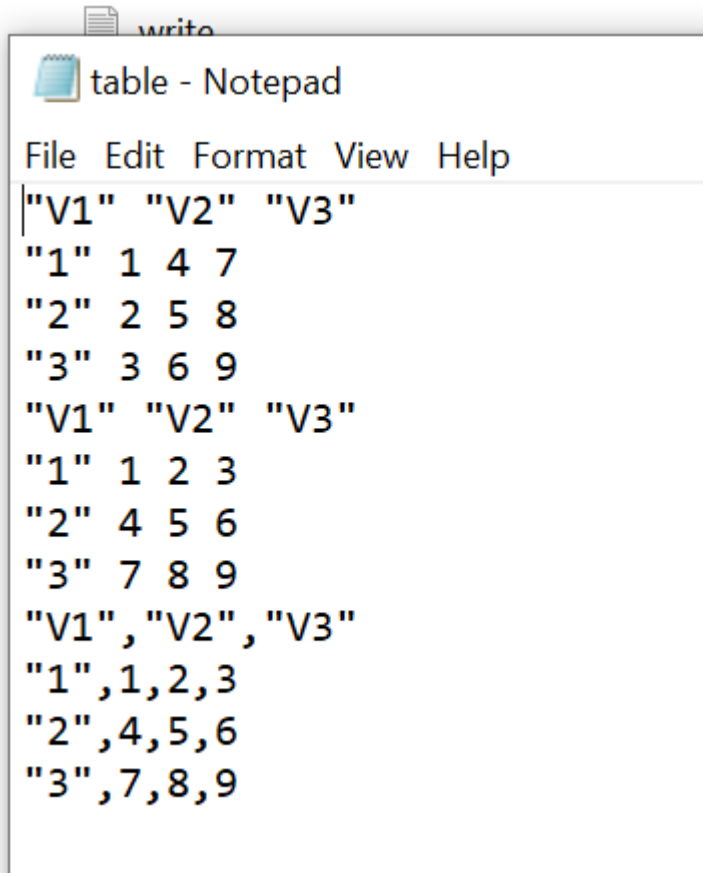
Example: Append the transpose of the matrix

```
> write.table(t(m),file="table.txt", append=TRUE)
Warning message:
In write.table(t(m), file = "table.txt", append = TRUE) :
  appending column names to file
> readLines("table.txt")
[1] "\"V1\" \"V2\" \"V3\"" "\"1\" 1 4 7"
[3] "\"2\" 2 5 8"         "\"3\" 3 6 9"
[5] "\"V1\" \"V2\" \"V3\"" "\"1\" 1 2 3"
[7] "\"2\" 4 5 6"         "\"3\" 7 8 9"
```

Use comma as separator

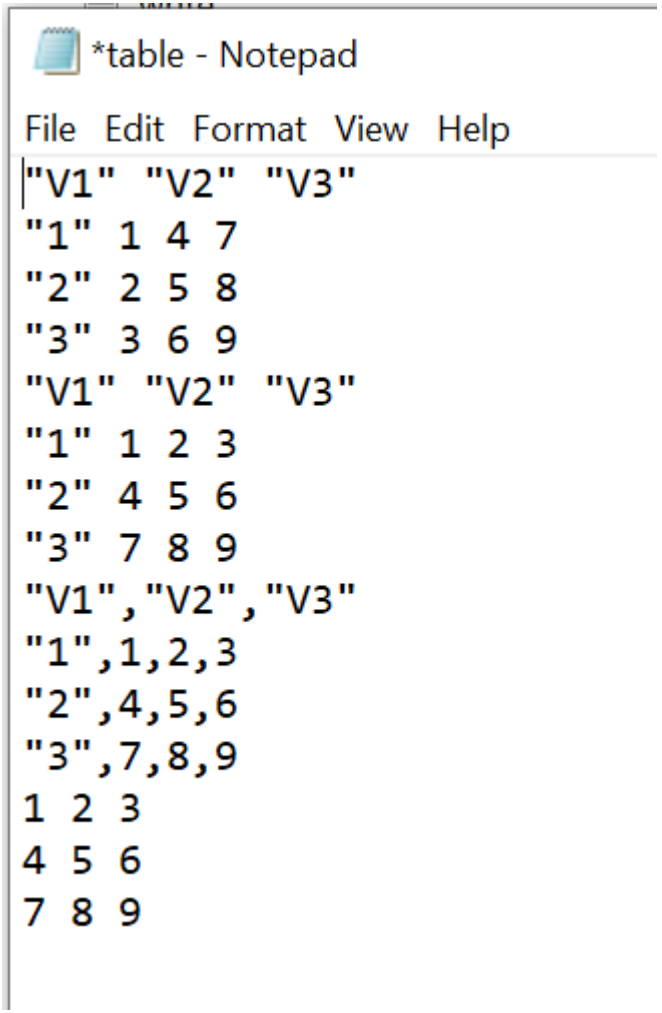
```
> write.table(t(m),file="table.txt", append=TRUE, sep=",")
Warning message:
In write.table(t(m), file = "table.txt", append = TRUE, sep = ",") :
  appending column names to file
> readLines("table.txt")
 [1] "\"V1\" \"V2\" \"V3\"" "\"1\" 1 4 7"
 [3] "\"2\" 2 5 8"         "\"3\" 3 6 9"
 [5] "\"V1\" \"V2\" \"V3\"" "\"1\" 1 2 3"
 [7] "\"2\" 4 5 6"         "\"3\" 7 8 9"
 [9] "\"V1\",\"V2\",\"V3\"" "\"1\",1,2,3"
[11] "\"2\",4,5,6"         "\"3\",7,8,9"
```





Without row and column names

```
> write.table(t(m),file="table.txt", append=TRUE, row.names=FALSE, col.names=FALSE)
> readLines("table.txt")
 [1] "\"V1\" \"V2\" \"V3\"" "\"1\" 1 4 7"
 [3] "\"2\" 2 5 8"         "\"3\" 3 6 9"
 [5] "\"V1\" \"V2\" \"V3\"" "\"1\" 1 2 3"
 [7] "\"2\" 4 5 6"         "\"3\" 7 8 9"
 [9] "\"V1\",\"V2\",\"V3\"" "\"1\",1,2,3"
[11] "\"2\",4,5,6"         "\"3\",7,8,9"
[13] "1 2 3"               "4 5 6"
[15] "7 8 9"
```



Source of lecture: Slideshare:r-squared.in