



SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

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DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

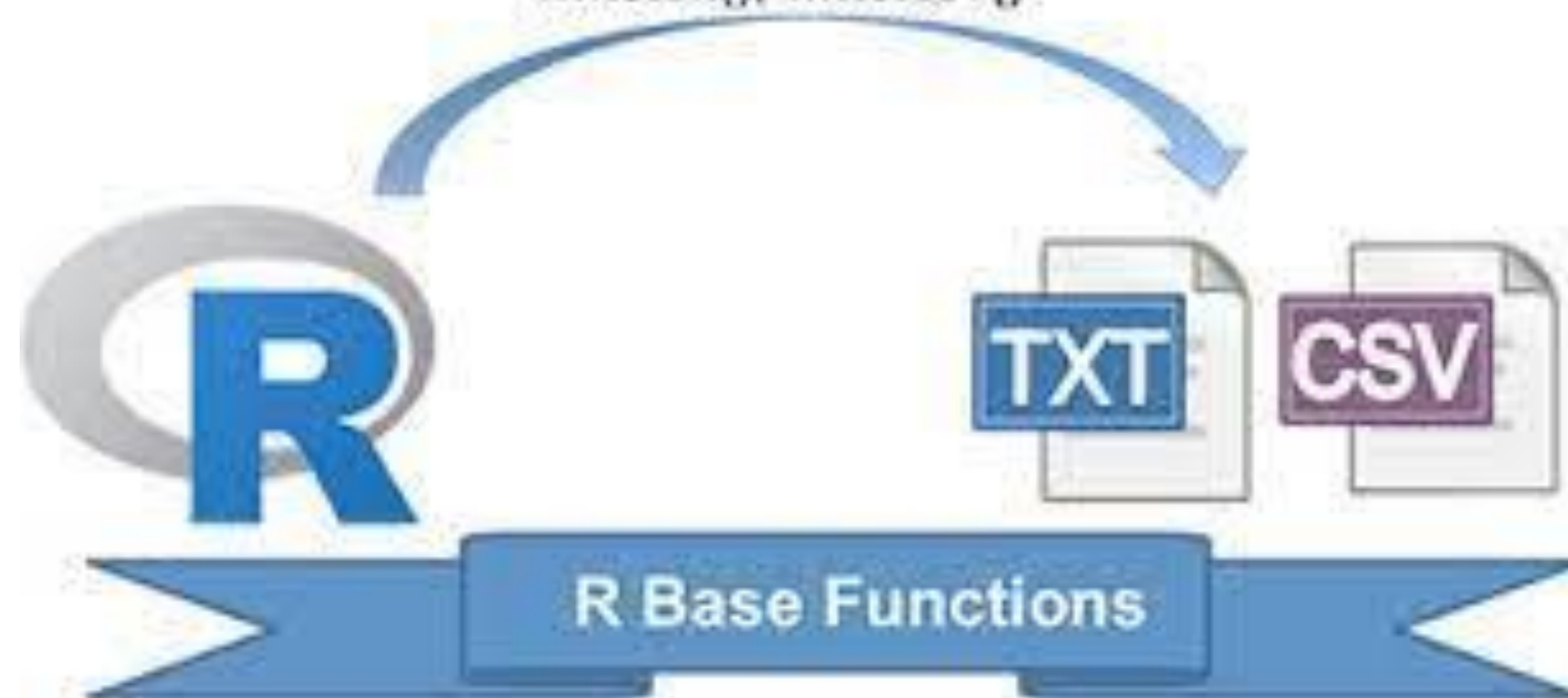
COURSE NAME :19CS407 DATA ANALYTICS WITH R
II YEAR /IV SEMESTER

Unit 5- DATA VISUALIZATION USING R

Topic : Writing to Files in R Programming



Export data from R to txt | csv files
write.txt(), write.csv()





Writing to Files in R Programming



- ✓ R programming Language is one of the very powerful languages specially used for data analytics in various fields.
- ✓ Analysis of data means reading and writing data from various files like excel, CSV, text files, etc.
- ✓ Today we will be dealing with various ways of writing data to different types of files using R programming.



Writing Data to CSV files in R Programming Language



CSV stands for Comma Separated Values. These files are used to handle a large amount of statistical data. Following is the syntax to write to a CSV file:

Syntax:

```
write.csv(my_data, file = "my_data.csv")
```

```
write.csv2(my_data, file = "my_data.csv")
```

Here,

csv() and csv2() are the function in R programming.

write.csv() uses “.” for the decimal point and a comma (“,”) for the separator.

write.csv2() uses a comma (“,”) for the decimal point and a semicolon (“;”) for the separator.



Writing Data to CSV files in R Programming Language



SNO	ACADEMIC YEAR	SEM	LAB NUMBER	TOPIC	ANNUAL VALUE	SEMESTER GRADE	FORMER F%	ETP%
1	2020-21	1ST	18/0000A	SQL	0	1.00	0.00	0.00
2	2020-21	1ST	18/0000B	SQL	0	1.00	0.00	0.00
3	2020-21	1ST	18/0000C	SQL	0	1.00	0.00	0.00
4	2020-21	1ST	18/0000D	SQL	0	1.00	0.00	0.00
5	2020-21	1ST	18/0000E	SQL	0	1.00	0.00	0.00
6	2020-21	1ST	18/0000F	SQL	0	1.00	0.00	0.00
7	2020-21	1ST	18/0000G	SQL	0	1.00	0.00	0.00
8	2020-21	1ST	18/0000H	SQL	0	1.00	0.00	0.00
9	2020-21	1ST	18/0000I	SQL	0	1.00	0.00	0.00
10	2020-21	1ST	18/0000J	SQL	0	1.00	0.00	0.00
11	2020-21	1ST	18/0000K	SQL	0	1.00	0.00	0.00
12	2020-21	1ST	18/0000L	SQL	0	1.00	0.00	0.00
13	2020-21	1ST	18/0000M	SQL	0	1.00	0.00	0.00
14	2020-21	1ST	18/0000N	SQL	0	1.00	0.00	0.00
15	2020-21	1ST	18/0000O	SQL	0	1.00	0.00	0.00
16	2020-21	1ST	18/0000P	SQL	0	1.00	0.00	0.00
17	2020-21	1ST	18/0000Q	SQL	0	1.00	0.00	0.00
18	2020-21	1ST	18/0000R	SQL	0	1.00	0.00	0.00
19	2020-21	1ST	18/0000S	SQL	0	1.00	0.00	0.00
20	2020-21	1ST	18/0000T	SQL	0	1.00	0.00	0.00

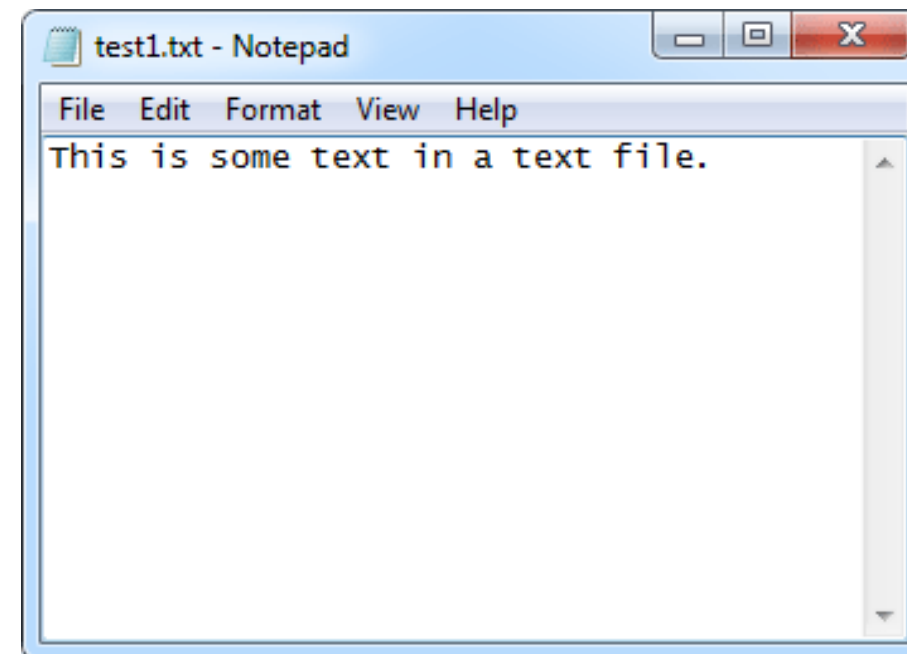


Writing Data to text files

Text files are commonly used in almost every application in our day-to-day life as a step for the “Paperless World”. Well, writing to .txt files is very similar to that of the CSV files. Following is the syntax to write to a text file:

Syntax:

```
write.table(my_data, file = "my_data.txt", sep = "")
```





Writing Data to Excel files

To write data to excel we need to install the package known as “xlsx package”, it is basically a java based solution for reading, writing, and committing changes to excel files. It can be installed as follows:

```
install.packages("xlsx")
```

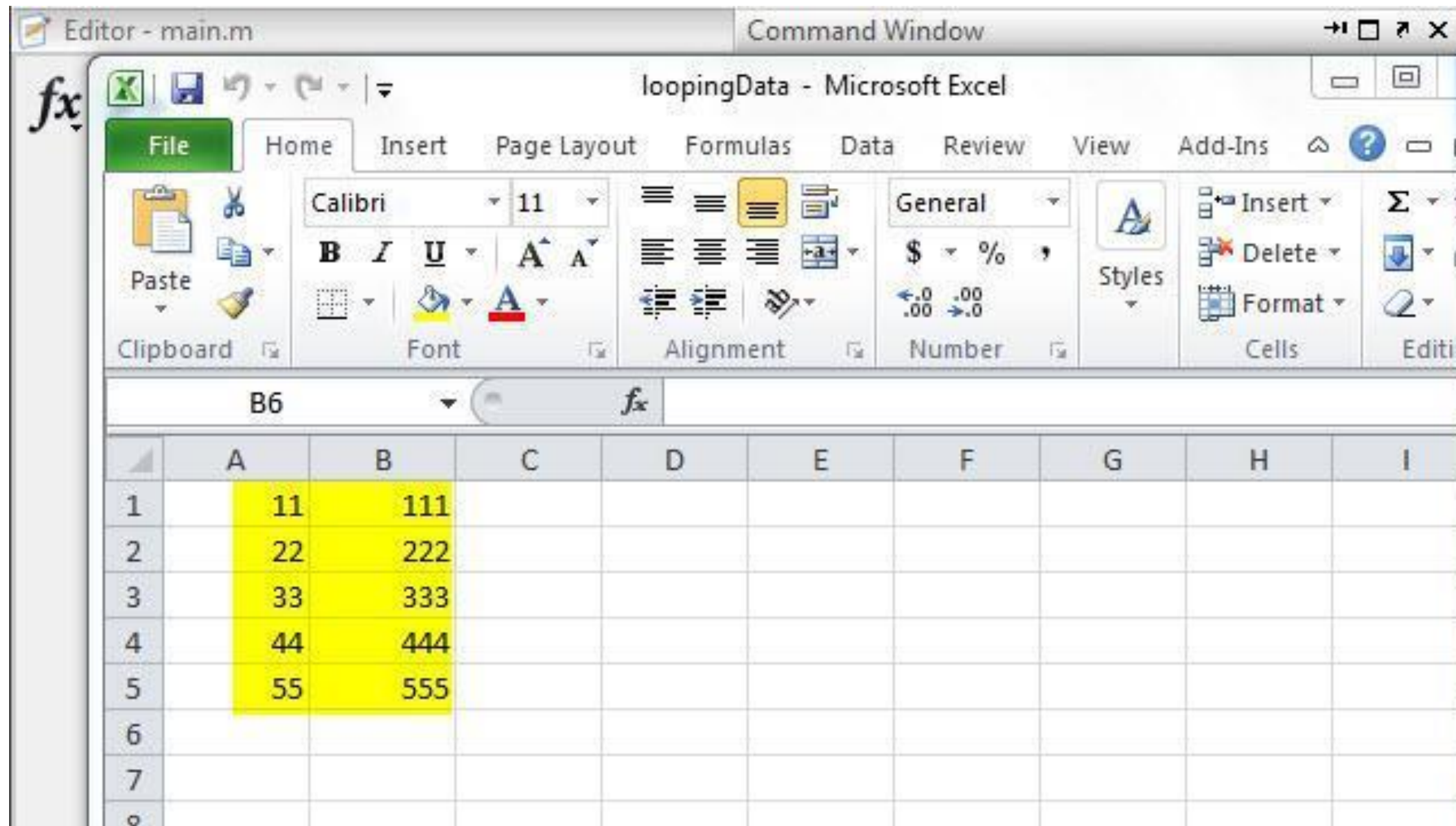
and can be loaded and General syntax of using it is:

```
library("xlsx")
```

```
write.xlsx(my_data, file = "result.xlsx",  
           sheetName = "my_data", append = FALSE).
```



Writing Data to Excel files





Analyzing the CSV File

By default the `read.csv()` function gives the output as a data frame. This can be easily checked as follows. Also we can check the number of columns and rows.

```
data <- read.csv("input.csv")
print(is.data.frame(data))
print(ncol(data))
print(nrow(data))
```

OUTPUT:

```
[1] TRUE
[1] 5
[1] 8
```

Once we read data in a data frame, we can apply all the functions applicable to data frames as explained in subsequent section.



Assessment 1





References



1. João Moreira, Andre Carvalho, Tomás Horvath – “A General Introduction to Data Analytics” – Wiley -2018
2. <https://www.geeksforgeeks.org/writing-to-files-in-r-programming/?ref=lbp>

Thank You