



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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CHANDIGARH UNIVERSITY

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UNIVERSITY INSTITUTE OF ENGINEERING

Department of Computer Science & Engineering

Subject Name: Data Mining

Subject Code: 20CSP-351

Submitted to:

Submitted by:

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Section: 20BCS_DM-704

Group: A



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Ex. No	List of Experiments	Date	Conduct (MM: 12)	Viva (MM: 10)	Record (MM: 8)	Total (MM: 30)	Remarks/ Signature
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2.2							
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Experiment1.1

Student Name: Nabha Varshney

UID: 20BCS4995

Branch: CSE

Section/Group: 20BCS-DM-704 (A)

Semester: 6th

Date of Performance: 10th Feb 2023

Subject Name: Data Mining

Subject Code: 20CSP- 351

Aim - To demonstrate the concept of preprocessing on .arff file

Objective-

- ♦ To get familiarize with R studio and it's components.

Script and Output-

```
getwd()
```

```
name<-c('Nabha','Nikhil','Yash','DJ','Arsh')
```

```
height<-c(180,175,177,172,169)
```

```
city<-c('Delhi','Garhwal','Jaipur','Guhawati','Chandigarh')
```

```
avg_sleep_hour<-c(20,21,23,24,25)
```

```
Data<-data.frame(rating,name,height,city,avg_sleep_hour)
```

```
print(Data)
```

```
library(RWeka)
```

```
library(rJava)
```

```
write.arff(Data,file="Data.arff")
```

```
getwd()
```



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The RStudio interface displays the following components:

- Source Editor:** Contains an R script with the following code:

```
1 getwd()
2
3 name<-c('Nabha','Nikhil','Yash','DJ','Arsh')
4 height<-c(180,175,177,172,169)
5 city<-c('Delhi','Garhwal','Jaipur','Guhawati','Chandigarh')
6 avg_sleep_hour<-c(20,21,23,24,25)
7 Data<-data.frame(rating,name,height,city,avg_sleep_hour)
8 print(Data)
9
10 library(Rweka)
11 library(rJava)
12 write.arff(Data,file="Data.arff")
13 getwd()
14
15
```
- Console:** Shows the output of the script execution:

```
R 4.2.2 ~/>
[workspace loaded from ~/.RData]
> getwd()
[1] "C:/Users/NABH/Documents"
>
> name<-c('Nabha','Nikhil','Yash','DJ','Arsh')
> height<-c(180,175,177,172,169)
> city<-c('Delhi','Garhwal','Jaipur','Guhawati','Chandigarh')
> avg_sleep_hour<-c(20,21,23,24,25)
> Data<-data.frame(rating,name,height,city,avg_sleep_hour)
> print(Data)
  rating name height city avg_sleep_hour
1     1 Nabha   180  Delhi             20
2     2 Nikhil  175 Garhwal             21
3     3 Yash   177  Jaipur             23
4     4 DJ     172  Guhawati            24
5     5 Arsh   169  Chandigarh          25
> library(Rweka)
> library(rJava)
> write.arff(Data,file="Data.arff")
>
```
- Environment:** Shows the current environment with the following variables:

Variable	Value
Data	5 obs. of 5 variables
Data1	4 obs. of 4 variables
avg_sleep_hour	num [1:5] 20 21 23 24 25
city	chr [1:5] "Delhi" "Garhwal" "Jaipur" "Guhawati" "Chandigarh"
country	chr [1:4] "india" "india" "india" "india"
height	num [1:5] 180 175 177 172 169
name	chr [1:5] "Nabha" "Nikhil" "Yash" "DJ" "Arsh"
- Files:** Shows the file structure of the project, including the 'Data.arff' file.

The Windows File Explorer window displays the contents of the 'Data.arff' file, which is a text-based format for machine learning data. The file is located in the 'Documents' folder.

The file content is as follows:

```
@relation R_data_frame
@attribute rating numeric
@attribute name string
@attribute height numeric
@attribute city string
@attribute avg_sleep_hour numeric

@data
1,Nabha,180,Delhi,20
2,Nikhil,175,Garhwal,21
3,Yash,177,Jaipur,23
4,DJ,172,Guhawati,24
5,Arsh,169,Chandigarh,25
```