

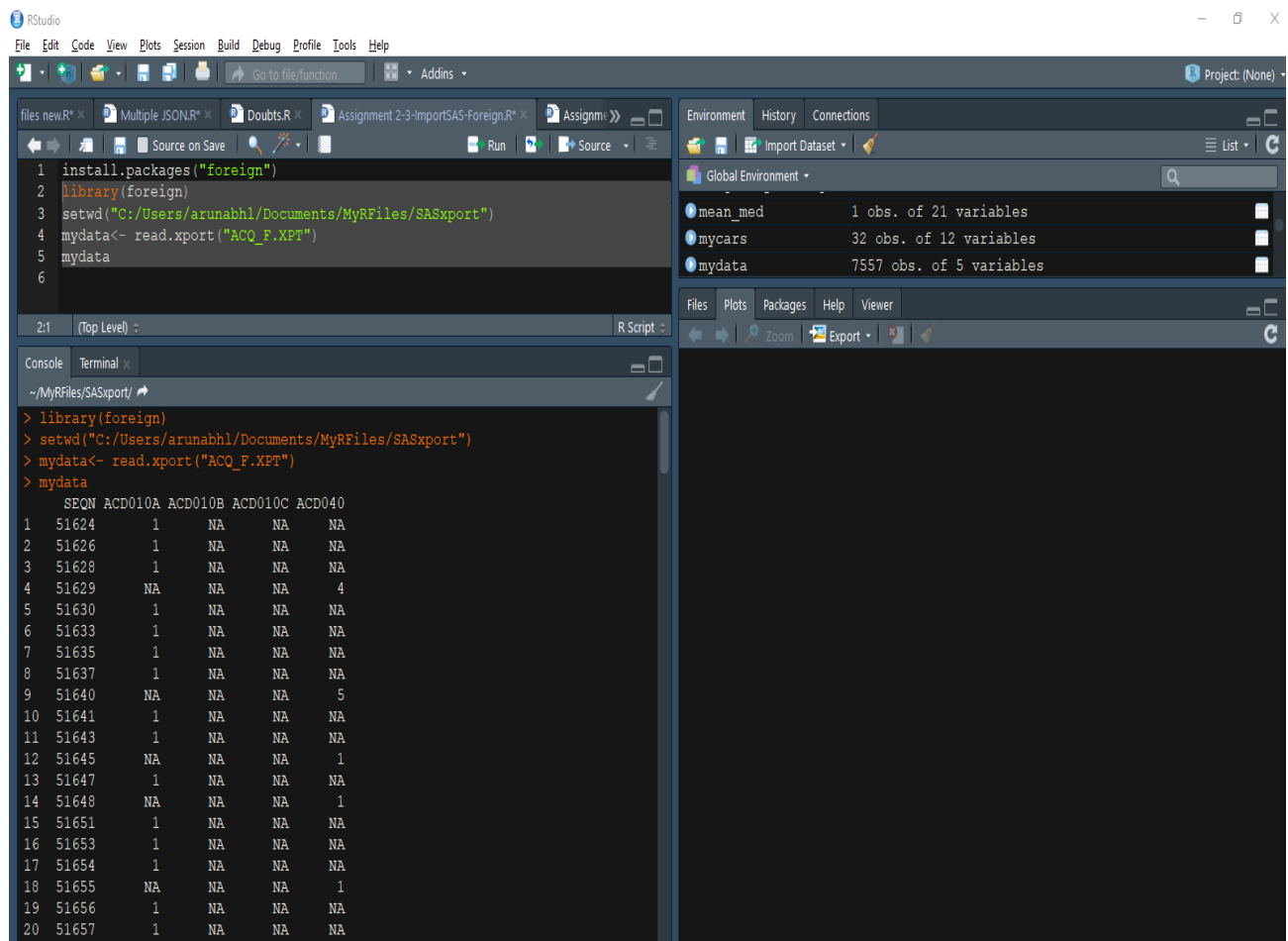
Problem Statement

1. How to Import SAS XPORT Files into R With The foreign package

Answer:

Downloaded the ACQ_F.xpt file from online.

```
library(foreign)  
setwd("C:/Users/aranabhl/Documents/MyRFiles/SASxport")  
mydata<- read.xport("ACQ_F.XPT")  
mydata
```



The screenshot shows the RStudio interface with the following components:

- Source Editor:** Contains the R code used to import the SAS XPORT file.
- Environment:** Shows the global environment with three objects: `mean_med` (1 obs. of 21 variables), `mycars` (32 obs. of 12 variables), and `mydata` (7557 obs. of 5 variables).
- Console:** Displays the output of the R code, showing the structure of the imported data frame.

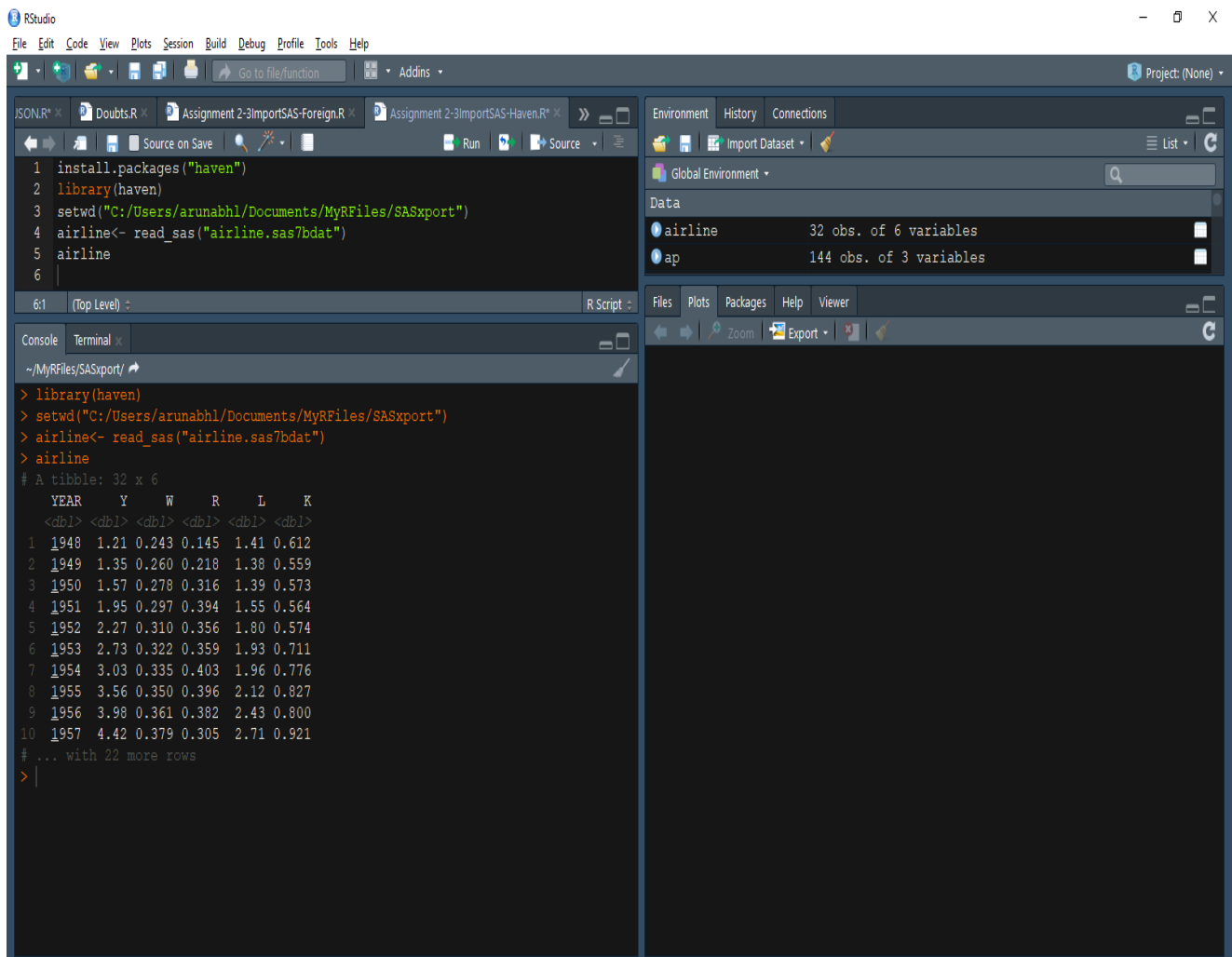
```
1 install.packages("foreign")  
2 library(foreign)  
3 setwd("C:/Users/aranabhl/Documents/MyRFiles/SASxport")  
4 mydata<- read.xport("ACQ_F.XPT")  
5 mydata  
6
```

```
> library(foreign)  
> setwd("C:/Users/aranabhl/Documents/MyRFiles/SASxport")  
> mydata<- read.xport("ACQ_F.XPT")  
> mydata  
      SEQN ACD010A ACD010B ACD010C ACD040  
1  51624      1      NA      NA      NA  
2  51626      1      NA      NA      NA  
3  51628      1      NA      NA      NA  
4  51629      NA      NA      NA      4  
5  51630      1      NA      NA      NA  
6  51633      1      NA      NA      NA  
7  51635      1      NA      NA      NA  
8  51637      1      NA      NA      NA  
9  51640      NA      NA      NA      5  
10 51641      1      NA      NA      NA  
11 51643      1      NA      NA      NA  
12 51645      NA      NA      NA      1  
13 51647      1      NA      NA      NA  
14 51648      NA      NA      NA      1  
15 51651      1      NA      NA      NA  
16 51653      1      NA      NA      NA  
17 51654      1      NA      NA      NA  
18 51655      NA      NA      NA      1  
19 51656      1      NA      NA      NA  
20 51657      1      NA      NA      NA
```

2. How to Import SAS Files into R With The haven Package?

Answer: To import the SAS file, the **Haven** package is installed.

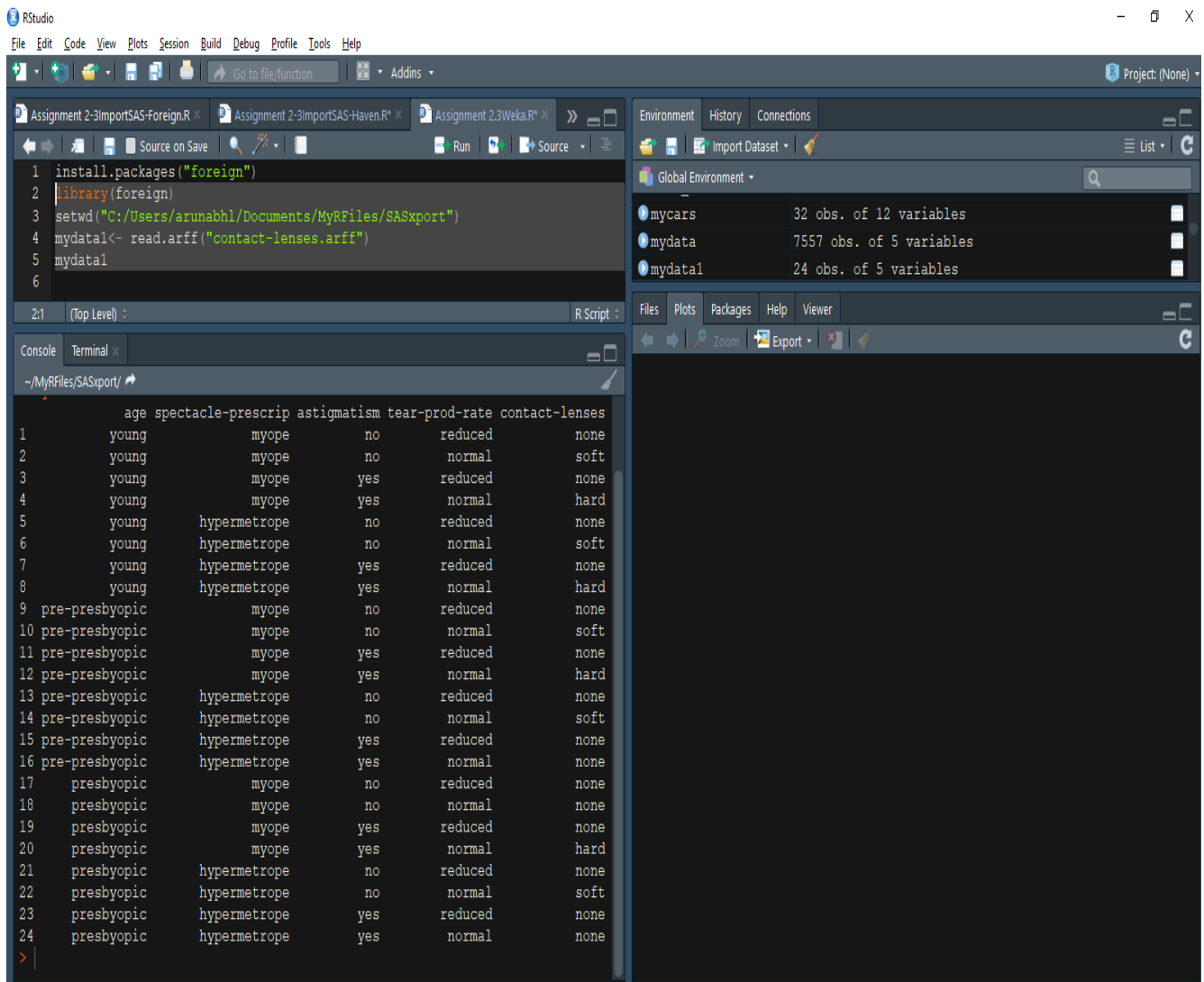
```
library(haven)
setwd("C:/Users/arunabhl/Documents/MyRFiles/SASxport")
airline<- read_sas("airline.sas7bdat")
airline
```



3. How to read Weka Attribute-Relation File Format (ARFF) files in R?

Answer: To read Weka Attribute-Relation file format (ARFF) files, the 'foreign' package has to be installed.

```
install.packages("foreign")
library(foreign)
setwd("C:/Users/arunabhl/Documents/MyRFiles/SASxport")
mydata1<- read.arff("contact-lenses.arff")
mydata1
```



4. How to read a heavy csv/tsv file using readr package?

Answer: Read csv file

```
library(readr)
```

```
setwd("C:/Users/arunabhl/Documents/MyRFiles/SASxport")
```

```
mydata2<- read.csv("2000 Sales Record.csv")
```

```
mydata2
```

The screenshot shows the RStudio environment with the following components:

- Source Editor:** Contains the R code:

```
1 library(readr)
2 setwd("C:/Users/arunabhl/Documents/MyRFiles/SASxport")
3 mydata2<- read.csv("2000 Sales Record.csv")
4 mydata2
5
```
- Environment:** Lists the objects in the global environment:
 - mydata: 7557 obs. of 5 variables
 - mydata1: 24 obs. of 5 variables
 - mydata2: 2023 obs. of 14 variables
- Console:** Shows the execution of the code and the resulting data frame structure:

```
> library(readr)
> setwd("C:/Users/arunabhl/Documents/MyRFiles/SASxport")
> mydata2<- read.csv("2000 Sales Record.csv")
> mydata2
```

	es.Channel	Region	Country	Item.Type	Sal
1	Offline	Sub-Saharan Africa	South Africa	Fruits	
2	Online	Middle East and North Africa	Morocco	Clothes	
3	Offline	Australia and Oceania	Papua New Guinea	Meat	
4	Offline	Sub-Saharan Africa	Djibouti	Clothes	
5	Offline	Europe	Slovakia	Beverages	
6	Online	Asia	Sri Lanka	Fruits	
7	Online	Sub-Saharan Africa	Seychelles	Beverages	
8	Online	Sub-Saharan Africa	Tanzania	Beverages	
9	Online	Sub-Saharan Africa	Ghana	Office Supplies	
10	Online	Sub-Saharan Africa	Tanzania	Cosmetics	
11	Offline	Asia	Taiwan	Fruits	

Read tsv file

```
library(readr)
```

```
setwd("C:/Users/arunabhl/Documents/MyRFiles/SASxport")
```

```
mydata3<- read.table(file= "2000 SalesRecord.tsv", sep ="\t", header =  
TRUE, quote="\")
```

```
mydata3
```

The screenshot shows the RStudio interface with the following components:

- Source Editor:** Contains the R code:

```
1 library(readr)
2 setwd("C:/Users/arunabhl/Documents/MyRFiles/SASxport")
3 mydata3<- read.table(file= "2000 SalesRecord.tsv", sep ="\t", header = TRUE, quote="\")
4 mydata3
5
6
```
- Console:** Shows the output of the code execution:

```
> library(readr)
> setwd("C:/Users/arunabhl/Documents/MyRFiles/SASxport")
> mydata3<- read.table(file= "2000 SalesRecord.tsv", sep ="\t", header = TRUE, quote="\")
+ ")
> mydata3
```

	Region	Country	Item.Type	Sales.Channel
1	ub-Saharan Africa	Seychelles	Beverages	Online
2	Sub-Saharan Africa	Tanzania	Beverages	Online
3	Sub-Saharan Africa	Ghana	Office Supplies	Online
4	Region	Country	Item.Type	Sales.Channel
5	Sub-Saharan Africa	South Africa	Fruits	Offline
6	Middle East and North Africa	Morocco	Clothes	Online
7	Australia and Oceania	Papua New Guinea	Meat	Offline
8	Sub-Saharan Africa	Djibouti	Clothes	Offline
9	Europe	Slovakia	Beverages	Offline
10	Asia	Sri Lanka	Fruits	Online
11	Sub-Saharan Africa	Seychelles	Beverages	Online
12	Sub-Saharan Africa	Tanzania	Beverages	Online
13	Sub-Saharan Africa	Ghana	Office Supplies	Online
14	ub-Saharan Africa	Tanzania	Cosmetics	Offline
15	Asia	Taiwan	Fruits	Offline
16	Middle East and North Africa	Algeria	Cosmetics	Online
17	Asia	Singapore	Snacks	Online
18	Australia and Oceania	Papua New Guinea	Clothes	Offline
19	Asia	Vietnam	Personal Care	Online
20	Sub-Saharan Africa	Uganda	Personal Care	Online
- Environment:** Shows the global environment with three objects:
 - mydata1: 24 obs. of 5 variables
 - mydata2: 2023 obs. of 14 variables
 - mydata3: 2027 obs. of 14 variables