ACADGILD ASSIGNMENT 4.1

1. df1 = data.frame(CustId = c(1:6), Product = c(rep("TV", 3), rep("Radio", 3))) df2 = data.frame(CustId = c(2, 4, 6), State = c(rep("Texas", 2), rep("NYC", 1))) df1 #left table df2 #right table

For the above given data frames and tables perform the following operations: • Return only the rows in which the left table have match. • Returns all rows from both tables, join records from the left which have matching keys in the right table. • Return all rows from the left table, and any rows with matching keys from the right table. • Return all rows from the right table, and any rows with matching keys from the left table.

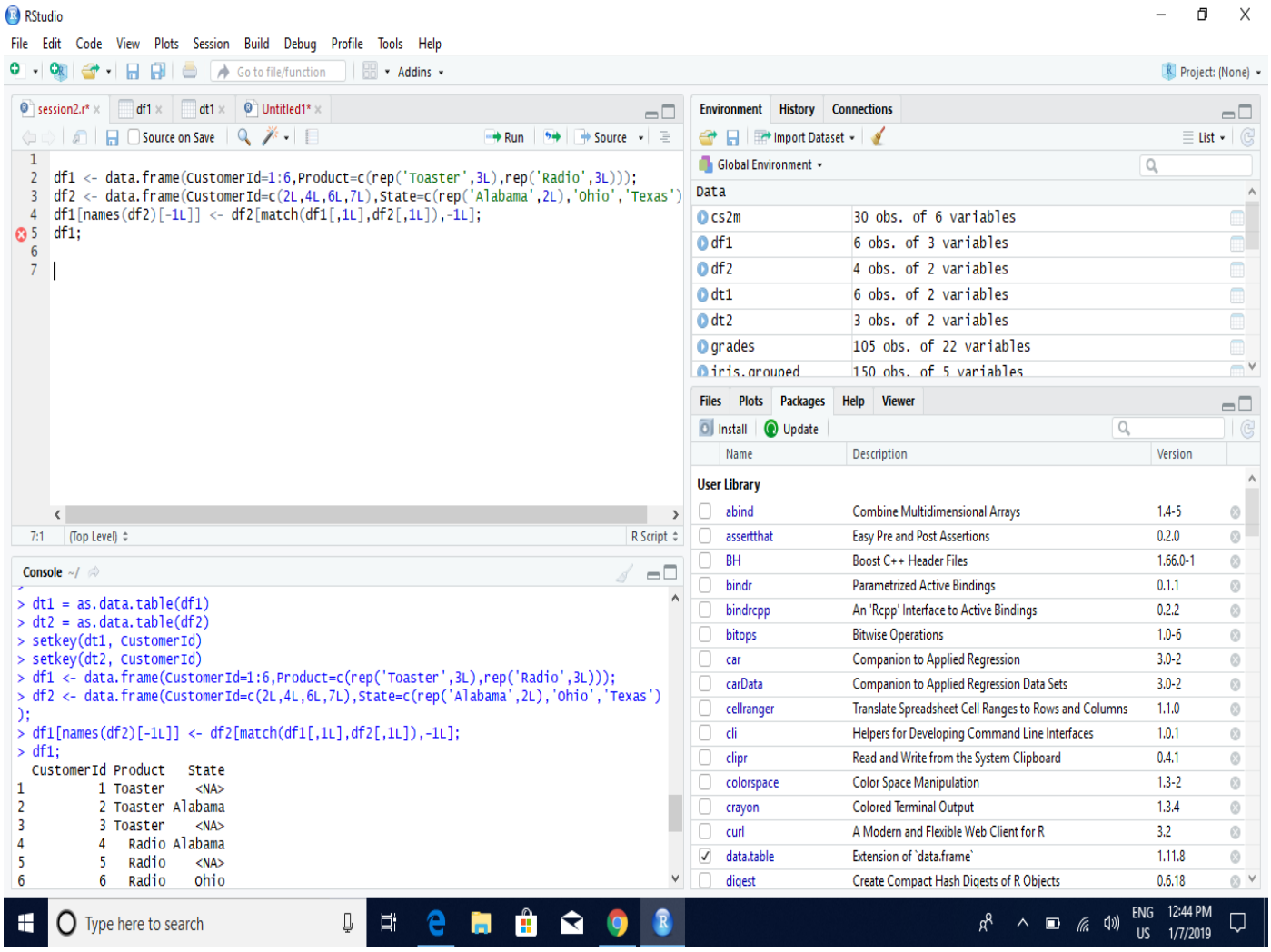
Answer:

```
df1 <-
data.frame(CustomerId=1:6,Product=c(rep('Toaster',3L),rep('Ra
dio',3L)));
df2 <-
data.frame(CustomerId=c(2L,4L,6L,7L),State=c(rep('Alabama',
2L),'Ohio','Texas'));
df1[names(df2)[-1L]] <- df2[match(df1[,1L],df2[,1L]),-1L];
df1;
```

```
df1;
  CustomerId Product   State
1          1 Toaster    <NA>
2          2 Toaster Alabama
3          3 Toaster    <NA>
4          4   Radio Alabama
```

```
5         5  Radio    <NA>
6         6  Radio    Ohio
```

```
> df2;
  CustomerId   State
1          2 Alabama
2          4 Alabama
3          6    Ohio
4          7   Texas
```



```
merge(df1, df2)
  CustomerId   State Product
1          2 Alabama Toaster
2          4 Alabama   Radio
3          6    Ohio   Radio
> merge(df1, df2, by = "CustomerId")
  CustomerId Product State.x State.y
1          2 Toaster Alabama Alabama
2          4   Radio Alabama Alabama
3          6   Radio    Ohio    Ohio
```

2. Perform the below operations on above given data frames and tables:

• Return a long format of the datasets without matching key. • Keep only observations in df1 that match in df2. • Drop all observations in df1 that match in df2.

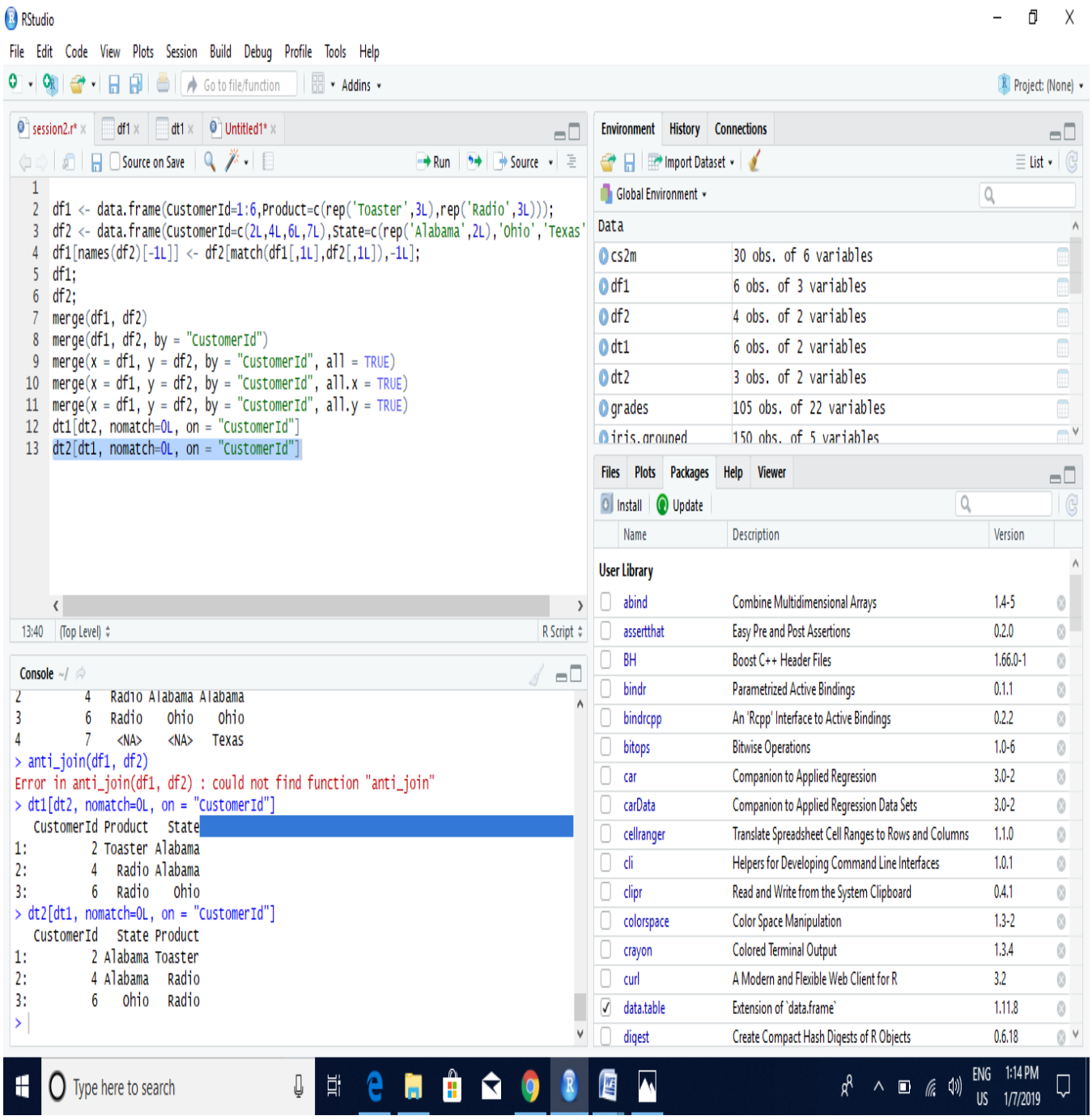
Answer:

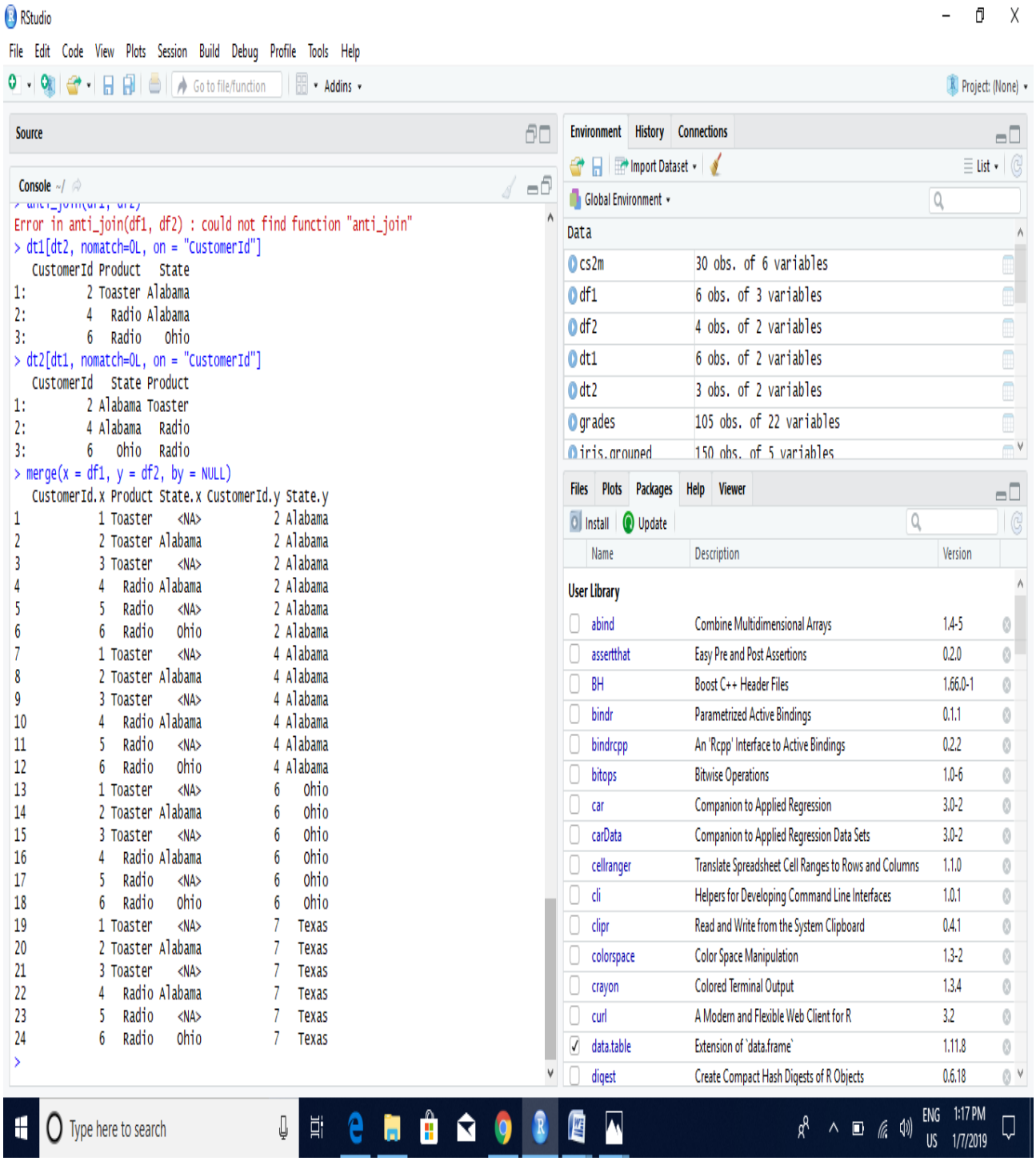
```
dt1[dt2, nomatch=0L, on = "CustomerId"]

> dt1[dt2, nomatch=0L, on = "CustomerId"]
   CustomerId Product   State
1:          2 Toaster Alabama
2:          4   Radio Alabama
3:          6   Radio    Ohio

dt2[dt1, nomatch=0L, on = "CustomerId"]
> dt2[dt1, nomatch=0L, on = "CustomerId"]
   CustomerId   State Product
1:          2 Alabama Toaster
2:          4 Alabama   Radio
```

3: 6 Ohio Radio




RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function
Addins
Project: (None)
Source
Console ~/
Error in anti_join(df1, df2) : could not find function "anti_join"
> dt1[dt2, nomatch=0L, on = "CustomerId"]
CustomerId Product State
1: 2 Toaster Alabama
2: 4 Radio Alabama
3: 6 Radio Ohio
> dt2[dt1, nomatch=0L, on = "CustomerId"]
CustomerId State Product
1: 2 Alabama Toaster
2: 4 Alabama Radio
3: 6 Ohio Radio
> merge(x = df1, y = df2, by = NULL)
CustomerId.x Product State.x CustomerId.y State.y
1 1 Toaster <NA> 2 Alabama
2 2 Toaster Alabama 2 Alabama
3 3 Toaster <NA> 2 Alabama
4 4 Radio Alabama 2 Alabama
5 5 Radio <NA> 2 Alabama
6 6 Radio Ohio 2 Alabama
7 1 Toaster <NA> 4 Alabama
8 2 Toaster Alabama 4 Alabama
9 3 Toaster <NA> 4 Alabama
10 4 Radio Alabama 4 Alabama
11 5 Radio <NA> 4 Alabama
12 6 Radio Ohio 4 Alabama
13 1 Toaster <NA> 6 Ohio
14 2 Toaster Alabama 6 Ohio
15 3 Toaster <NA> 6 Ohio
16 4 Radio Alabama 6 Ohio
17 5 Radio <NA> 6 Ohio
18 6 Radio Ohio 6 Ohio
19 1 Toaster <NA> 7 Texas
20 2 Toaster Alabama 7 Texas
21 3 Toaster <NA> 7 Texas
22 4 Radio Alabama 7 Texas
23 5 Radio <NA> 7 Texas
24 6 Radio Ohio 7 Texas
>
Environment History Connections
Import Dataset
List
Global Environment
Data
cs2m 30 obs. of 6 variables
df1 6 obs. of 3 variables
df2 4 obs. of 2 variables
dt1 6 obs. of 2 variables
dt2 3 obs. of 2 variables
grades 105 obs. of 22 variables
iris.grouped 150 obs. of 5 variables
Files Plots Packages Help Viewer
Install Update
Name Description Version
User Library
abind Combine Multidimensional Arrays 1.4-5
assertthat Easy Pre and Post Assertions 0.2.0
BH Boost C++ Header Files 1.66.0-1
bindr Parametrized Active Bindings 0.1.1
bindrcpp An 'Rcpp' Interface to Active Bindings 0.2.2
bitops Bitwise Operations 1.0-6
car Companion to Applied Regression 3.0-2
carData Companion to Applied Regression Data Sets 3.0-2
cellranger Translate Spreadsheet Cell Ranges to Rows and Columns 1.1.0
cli Helpers for Developing Command Line Interfaces 1.0.1
clipr Read and Write from the System Clipboard 0.4.1
colorspace Color Space Manipulation 1.3-2
crayon Colored Terminal Output 1.3.4
curl A Modern and Flexible Web Client for R 3.2
data.table Extension of `data.frame` 1.11.8
digest Create Compact Hash Digests of R Objects 0.6.18
Type here to search
ENG US
1:17 PM 1/7/2019