

Session 5

Assignment 3

Q1

The screenshot shows the RStudio interface with the following components:

- Source Editor:** Contains R code for creating vectors `x` and `y` from `mtcars` rownames and comparing them with `identical(x,y)`.
- Console:** Displays the execution of the code, showing the resulting vectors and the output of `setdiff(y,x)`.
- Environment:** Lists global environment variables and their types and values.
- Files:** Shows a file explorer view of the current directory.

Source Editor Code:

```
1 x <- c(rownames(mtcars[1:15,]))
2 y <- c(rownames(mtcars[10:25,]))
3 identical(x,y)
```

Console Output:

```
[5] "Hornet Sportabout" "Valiant" "Datsun 710" "Mazda RX4"
[9] "Merc 230"
> setdiff(y,x)
[1] "Lincoln Continental" "Chrysler Imperial" "Fiat 128"
[4] "Honda Civic" "Toyota Corolla" "Toyota Corona"
[7] "Dodge Challenger" "AMC Javelin" "Camaro Z28"
[10] "Pontiac Firebird" "Fiat X1-9" "Porsche 914-2"
[13] "Lotus Europa" "Ford Pantera L" "Ferrari Dino"
[16] "Maserati Bora" "Volvo 142E"
> x <- c(rownames(mtcars[1:15,]))
> y <- c(rownames(mtcars[10:25,]))
> identical(x,y)
[1] FALSE
> |
```

Environment Variables:

Variable	Type	Value
m	int	[1:10] 1 2 3 4 5 6 7 8 9 10
my_vector	int	[1:10] 1 2 3 4 5 6 7 8 9 10
my_veector	int	[1:10] 1 2 3 4 5 6 7 8 9 10
n	int	10
v1	num	[1:4] 9 5 6 8
v2	num	[1:2] 10 5
vec1	chr	[1:15] "Mazda RX4" "Mazda RX4 wag" "Datsun 710"...
x	chr	[1:15] "Mazda RX4" "Mazda RX4 wag" "Datsun 710"...
y	chr	[1:16] "Merc 280" "Merc 280C" "Merc 450SE" "Mer..."

Files:

File	Size	Modified
.RData	6.7 KB	May 26, 2019, 9:09 PM
.Rhistory	8.7 KB	May 26, 2019, 9:09 PM
1.9.2018 Mega camp details.xlsx	9.6 KB	Aug 29, 2018, 11:38 AM
Book1.xlsx	11.6 KB	Jul 30, 2018, 10:52 PM
Division wise Contractor list - (8-12-2018).xlsx	45.2 KB	Jan 31, 2019, 8:36 PM
GitHub		
image of mail recieved.docx	454.3 KB	Jun 21, 2018, 5:30 PM
R		
SLD DETAILS.docx	119.9 KB	Oct 15, 2018, 1:06 PM
TA bill July 1.xlsx	10.5 KB	Sep 16, 2018, 10:52 PM
TA July.xlsx	10.2 KB	Sep 16, 2018, 10:47 PM

The screenshot shows the RStudio interface with the following components:

- Source Editor:** Contains R code for data manipulation:


```

[7] "Dodge Challenger"      "AMC Javelin"      "Camaro Z28"
[10] "Pontiac Firebird"     "Fiat X1-9"        "Porsche 914-2"
[13] "Lotus Europa"         "Ford Pantera L"   "Ferrari Dino"
[16] "Maserati Bora"        "Volvo 142E"
> x <- c(rownames(mtcars[1:15,]))
> y <- c(rownames(mtcars[10:25,]))
> identical(x,y)
[1] FALSE
> x <- c(rownames(mtcars[1:15,]))
> y <- c(rownames(mtcars[10:25,]))
> sort(x)
[1] "Cadillac Fleetwood"  "Datsun 710"      "Duster 360"
[4] "Hornet 4 Drive"     "Mazda RX4"      "Mazda RX4"
[7] "Mazda RX4 wag"      "Merc 230"       "Merc 240D"
[10] "Merc 280"          "Merc 280C"      "Merc 450SE"
[13] "Merc 450SL"        "Merc 450SLC"    "Valiant"
> sort(y)
[1] "AMC Javelin"        "Cadillac Fleetwood" "Camaro Z28"
[4] "Chrysler Imperial" "Dodge Challenger"  "Fiat 128"
[7] "Honda Civic"        "Lincoln Continental" "Merc 280"
[10] "Merc 280C"          "Merc 450SE"       "Merc 450SL"
[13] "Merc 450SLC"       "Pontiac Firebird"  "Toyota Corolla"
[16] "Toyota corona"
> sort(x, decreasing = TRUE)
[1] "Valiant"          "Merc 450SLC"      "Merc 450SL"
[4] "Merc 450SE"       "Merc 280C"       "Merc 280"
[7] "Merc 240D"        "Merc 230"        "Mazda RX4 wag"
[10] "Mazda RX4"        "Hornet Sportabout" "Merc 280"
[13] "Duster 360"      "Datsun 710"      "Cadillac Fleetwood"
> sort(y, decreasing = TRUE)
[1] "Toyota Corona"     "Toyota Corolla"   "Pontiac Firebird"
[4] "Merc 450SLC"       "Merc 450SL"      "Merc 450SE"
[7] "Merc 280C"        "Merc 280"        "Lincoln Continental"
[10] "Honda Civic"       "Fiat 128"        "Dodge Challenger"
[13] "Chrysler Imperial" "Camaro Z28"      "Cadillac Fleetwood"
[16] "AMC Javelin"

```
- Environment Pane:** Shows the current environment with variables:

Variable	Value
m	10
my_vector	int [1:10] 1 2 3 4 5 6 7 8 9 10
my_veector	int [1:10] 1 2 3 4 5 6 7 8 9 10
n	10
v1	num [1:4] 9 5 6 8
v2	num [1:2] 10 5
vec1	chr [1:15] "Mazda RX4" "Mazda RX4 wag" "Datsun 710"...
x	chr [1:15] "Mazda RX4" "Mazda RX4 wag" "Datsun 710"...
y	chr [1:16] "Merc 280" "Merc 280C" "Merc 450SE" "Mer..."
- Files Pane:** Shows a list of files in the project directory:

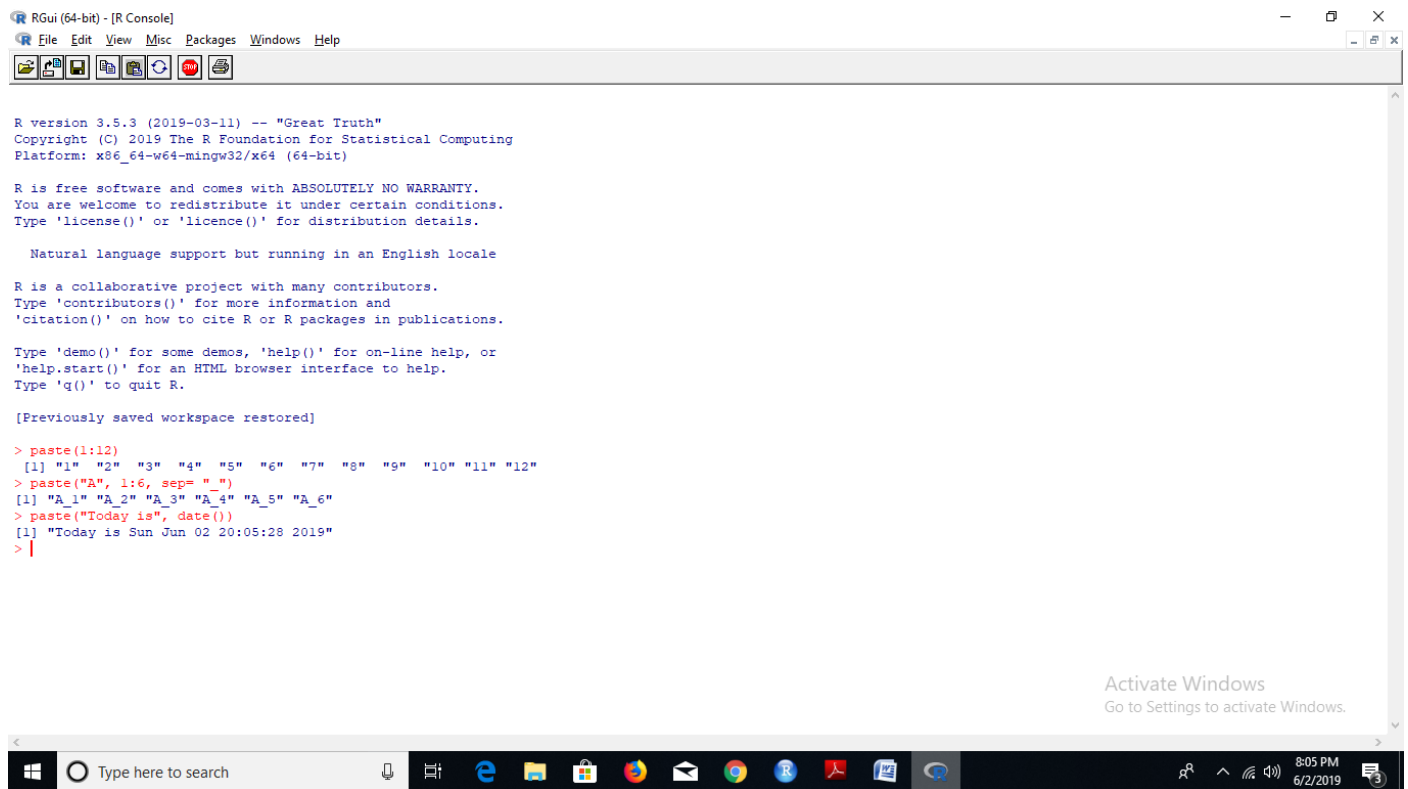
Name	Size	Modified
.RData	6.7 KB	May 26, 2019, 9:09 PM
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Q3

`str_c(..., sep = "", collapse = NULL)` is equivalent to `paste()`, which means you do have the option to customize your desired separator. The difference is for `str_c()` the default is no separator, so it acts just like `paste0()` as a default.

`Paste ()` and `paste0 ()` are both functions from the base package, whereas `str_c()` comes from the string package.

Q4



```
RGui (64-bit) - [R Console]
File Edit View Misc Packages Windows Help

R version 3.5.3 (2019-03-11) -- "Great Truth"
Copyright (C) 2019 The R Foundation for Statistical Computing
Platform: x86_64-w64-mingw32/x64 (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.
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Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[Previously saved workspace restored]

> paste(1:12)
[1] "1" "2" "3" "4" "5" "6" "7" "8" "9" "10" "11" "12"
> paste("A", 1:6, sep= "_")
[1] "A_1" "A_2" "A_3" "A_4" "A_5" "A_6"
> paste("Today is", date())
[1] "Today is Sun Jun 02 20:05:28 2019"
> |
```

Activate Windows
Go to Settings to activate Windows.

Type here to search

8:05 PM
6/2/2019