

MVLU COLLEGE

AIM: Sorting data using arrange() in R.

INPUT:

```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
practica no.4.R x practical.no.5.R x Student.Mental.health x
1 library(dplyr)
2 library(readr)
3
4 my_data <- read_csv("C:/Users/mvluc/OneDrive/Desktop/ankita tiwari/python/Student Mental Health.csv")
5
6 my_data <- my_data[, -1]
7
8 head(my_data)
9
10 students_sorted_age <- my_data %>%
11   arrange(Age)
12   cat("Top 5 youngest students:\n")
13   head(students_sorted_age, 5)
14
15 students_sorted_cgpa_desc <- my_data %>%
16   arrange(desc("what is your CGPA?"))
17   cat("Top 5 students with highest CGPA:\n")
18   head(students_sorted_cgpa_desc, 5)
19
20 students_multi_sort <- my_data %>%
21   arrange("Your current year of Study", Age)
22   cat("Top 10 students sorted by year and age:\n")
23   head(students_multi_sort, 10)
24
25 high_risk_students <- my_data %>%
26   filter("Do you have Anxiety?" == "Yes", "Do you have Panic attack?" == "Yes") %>%
27   arrange(Age)
28   cat("Top 5 students with Anxiety and Panic attacks, youngest first:\n")
29   print(high_risk_students %>%
30     select("Choose your gender", Age, "Your current year of Study", "Do you have Anxiety?", "Do you have Panic attack?") %>%
31     head(5))
32 |
```

OUTPUT:

```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Source
Console Terminal Background Jobs x
R - R 4.1.2 - ~/R
> library(dplyr)
> library(readr)
>
> my_data <- read_csv("C:/Users/mvluc/OneDrive/Desktop/ankita tiwari/python/Student Mental Health.csv")
Rows: 101 Columns: 11
Column specification
Delimiter: ","
chr (10): Timestamp, Choose your gender, what is your course?, Your current year of Study, what is your CGPA?, Marital status, Do you have Depression?, Do you have Anxiety?, Do you ha...
dbl (1): Age
|
| Use 'spec()' to retrieve the full column specification for this data.
| Specify the column types or set 'show_col_types = FALSE' to quiet this message.
|
> my_data <- my_data[, -1]
>
> head(my_data)
# A tibble: 6 x 10
  Choose your gender Age what is your course? Your current year of Study what is your CGPA? Marital status Do you have Depression? Do you have Anxiety? Do you have Panic at-2
  <chr> <dbl> <chr> <chr> <chr> <chr> <chr> <chr> <chr>
1 Female 18 Engineering year 1 3.00 - 3.49 No Yes No Yes Yes
2 Male 21 Islamic education year 2 3.00 - 3.49 No No Yes No No
3 Male 19 BIT year 1 3.00 - 3.49 No No Yes Yes Yes
4 Female 22 Laws year 3 3.00 - 3.49 Yes Yes No No No
5 Male 23 Mathematics year 4 3.00 - 3.49 No No No No No
6 Male 19 Engineering Year 2 3.50 - 4.00 No No No No Yes
# 1 abbreviated names: 1: "Do you have Depression?", 2: "Do you have Panic attack?"
# 1 more variable: "Did you seek any specialist for a treatment?" <chr>
>
> students_sorted_age <- my_data %>%
+   arrange(Age)
> cat("Top 5 youngest students:\n")
Top 5 youngest students:
> head(students_sorted_age, 5)
# A tibble: 5 x 10
  Choose your gender Age what is your course? Your current year of Study what is your CGPA? Marital status Do you have Depression? Do you have Anxiety? Do you have Panic at-2
  <chr> <dbl> <chr> <chr> <chr> <chr> <chr> <chr> <chr>
1 Female 18 Engineering year 1 3.00 - 3.49 No Yes No Yes Yes
2 Female 18 BCS year 1 3.50 - 4.00 No No Yes No No
3 Male 18 Irkhs year 1 3.50 - 4.00 No No Yes Yes Yes
4 Female 18 BCS year 1 3.00 - 3.49 No Yes No No No
5 Female 18 KENMS Year 2 3.50 - 4.00 No No Yes No No
# 1 abbreviated names: 1: "Do you have Depression?", 2: "Do you have Panic attack?"
# 1 more variable: "Did you seek any specialist for a treatment?" <chr>
```

ANKITA TIWARI

SYCS

S122

Data Analysis with SAS / SPSS / R PRACTICAL NO.5

MVLU COLLEGE

The image displays two screenshots of the RStudio interface, showing R code and its execution output in the console.

Top Screenshot:

```
R - R4.1.2 - ~/R
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function Addins Project: (None)

Source
Console Terminal Background Jobs

# R - R4.1.2 - ~/R
# 1 abbreviated names: 1: 'Do you have Depression?', 2: 'Do you have Panic attack?'
# 1 more variable: 'Did you seek any specialist for a treatment?' <chr>
>
> students_sorted_age <- my_data %>%
+   arrange(Age)
> cat("Top 5 youngest students:\n")
Top 5 youngest students:
> head(students_sorted_age, 5)
# A tibble: 5 x 10
  'Choose your gender' Age 'what is your course?' 'Your current year of Study' 'what is your CGPA?' 'Marital status' Do you have Depressi-1 'Do you have Anxiety?' Do you have Panic at-2
  <chr> <dbl> <chr> <chr> <chr> <chr> <chr> <chr> <chr>
1 Female 18 Engineering year 1 3.00 - 3.49 No Yes No Yes Yes
2 Female 18 BCS year 1 3.00 - 3.49 No Yes No Yes Yes
3 Male 18 Irkhs year 1 3.50 - 4.00 No No Yes Yes Yes
4 Female 18 BCS year 1 3.00 - 3.49 No Yes No Yes No
5 Female 18 KENMS year 2 3.50 - 4.00 No No Yes Yes No
# 1 abbreviated names: 1: 'Do you have Depression?', 2: 'Do you have Panic attack?'
# 1 more variable: 'Did you seek any specialist for a treatment?' <chr>
>
> students_sorted_cgpa_desc <- my_data %>%
+   arrange(desc('what is your CGPA?'))
> cat("Top 5 students with highest CGPA:\n")
Top 5 students with highest CGPA:
> head(students_sorted_cgpa_desc, 5)
# A tibble: 5 x 10
  'Choose your gender' Age 'what is your course?' 'Your current year of Study' 'what is your CGPA?' 'Marital status' Do you have Depressi-1 'Do you have Anxiety?' Do you have Panic at-2
  <chr> <dbl> <chr> <chr> <chr> <chr> <chr> <chr> <chr>
1 Male 19 Engineering year 2 3.50 - 4.00 No No No Yes Yes
2 Female 23 Pendidikan islam year 2 3.50 - 4.00 Yes Yes No Yes Yes
3 Female 18 BCS year 1 3.50 - 4.00 No No Yes Yes No
4 Male 18 Irkhs year 1 3.50 - 4.00 No No Yes Yes Yes
5 Female 20 Psychology year 1 3.50 - 4.00 No No No No No
# 1 abbreviated names: 1: 'Do you have Depression?', 2: 'Do you have Panic attack?'
# 1 more variable: 'Did you seek any specialist for a treatment?' <chr>
>
> students_multi_sort <- my_data %>%
+   arrange('Your current year of Study', Age)
> cat("Top 10 students sorted by year and age:\n")
Top 10 students sorted by year and age:
> head(students_multi_sort, 10)
# A tibble: 10 x 10
  'Choose your gender' Age 'what is your course?' 'Your current year of Study' 'what is your CGPA?' 'Marital status' Do you have Depressi-1 'Do you have Anxiety?' Do you have Panic at-2
  <chr> <dbl> <chr> <chr> <chr> <chr> <chr> <chr> <chr>
1 Female 18 CTS year 1 3.50 - 4.00 No No No Yes Yes
2 Male 19 BIT year 1 3.00 - 3.49 No Yes Yes Yes Yes
3 Female 18 KENMS year 2 3.50 - 4.00 No No Yes Yes No
4 Female 18 KOE year 2 3.00 - 3.49 No No No Yes No
5 Male 18 Engineering year 2 3.00 - 3.49 Yes Yes Yes Yes No
6 Male 18 BCS year 2 3.50 - 4.00 Yes Yes Yes Yes No
7 Female 18 Human Sciences year 2 3.00 - 3.49 No No No Yes Yes
8 Male 18 koe year 2 3.00 - 3.49 No No Yes Yes No
9 Male 18 Engineering year 2 3.00 - 3.49 No Yes No Yes No
10 Male 19 Engineering year 2 3.50 - 4.00 No No No Yes Yes
# 1 abbreviated names: 1: 'Your current year of Study', 2: 'Do you have Depression?', 3: 'Do you have Panic attack?'
# 1 more variable: 'Did you seek any specialist for a treatment?' <chr>
>
> high_risk_students <- my_data %>%
+   filter('Do you have Anxiety?' == "Yes", 'Do you have Panic attack?' == "Yes") %>%
+   arrange(Age)
> cat("Top 5 students with Anxiety and Panic attacks, youngest first:\n")
Top 5 students with Anxiety and Panic attacks, youngest first:
> print(high_risk_students %>%
+   select('Choose your gender', Age, 'Your current year of Study', 'Do you have Anxiety?', 'Do you have Panic attack?') %>%
+   head(5))
# A tibble: 5 x 5
  'Choose your gender' Age 'Your current year of Study' 'Do you have Anxiety?' 'Do you have Panic attack?'
  <chr> <dbl> <chr> <chr> <chr>
1 Male 18 year 1 Yes Yes
2 Female 18 year 2 Yes Yes
3 Male 18 year 1 Yes Yes
4 Female 18 year 1 Yes Yes
5 Male 19 Year 1 Yes Yes
> |
```

Bottom Screenshot:

```
R - R4.1.2 - ~/R
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function Addins Project: (None)

Source
Console Terminal Background Jobs

# R - R4.1.2 - ~/R
# 1 abbreviated names: 1: 'Do you have Depression?', 2: 'Do you have Panic attack?'
# 1 more variable: 'Did you seek any specialist for a treatment?' <chr>
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> students_multi_sort <- my_data %>%
+   arrange('Your current year of Study', Age)
> cat("Top 10 students sorted by year and age:\n")
Top 10 students sorted by year and age:
> head(students_multi_sort, 10)
# A tibble: 10 x 10
  'Choose your gender' Age 'what is your course?' 'Your current year of Study' 'what is your CGPA?' 'Marital status' Do you have Depressi-1 'Do you have Anxiety?' Do you have Panic at-2
  <chr> <dbl> <chr> <chr> <chr> <chr> <chr> <chr> <chr>
1 Female 18 CTS year 1 3.50 - 4.00 No No No Yes Yes
2 Male 19 BIT year 1 3.00 - 3.49 No Yes Yes Yes Yes
3 Female 18 KENMS year 2 3.50 - 4.00 No No Yes Yes No
4 Female 18 KOE year 2 3.00 - 3.49 No No No Yes No
5 Male 18 Engineering year 2 3.00 - 3.49 Yes Yes Yes Yes No
6 Male 18 BCS year 2 3.50 - 4.00 Yes Yes Yes Yes No
7 Female 18 Human Sciences year 2 3.00 - 3.49 No No No Yes Yes
8 Male 18 koe year 2 3.00 - 3.49 No No Yes Yes No
9 Male 18 Engineering year 2 3.00 - 3.49 No Yes No Yes No
10 Male 19 Engineering year 2 3.50 - 4.00 No No No Yes Yes
# 1 abbreviated names: 1: 'Your current year of Study', 2: 'Do you have Depression?', 3: 'Do you have Panic attack?'
# 1 more variable: 'Did you seek any specialist for a treatment?' <chr>
>
> high_risk_students <- my_data %>%
+   filter('Do you have Anxiety?' == "Yes", 'Do you have Panic attack?' == "Yes") %>%
+   arrange(Age)
> cat("Top 5 students with Anxiety and Panic attacks, youngest first:\n")
Top 5 students with Anxiety and Panic attacks, youngest first:
> print(high_risk_students %>%
+   select('Choose your gender', Age, 'Your current year of Study', 'Do you have Anxiety?', 'Do you have Panic attack?') %>%
+   head(5))
# A tibble: 5 x 5
  'Choose your gender' Age 'Your current year of Study' 'Do you have Anxiety?' 'Do you have Panic attack?'
  <chr> <dbl> <chr> <chr> <chr>
1 Male 18 year 1 Yes Yes
2 Female 18 year 2 Yes Yes
3 Male 18 year 1 Yes Yes
4 Female 18 year 1 Yes Yes
5 Male 19 Year 1 Yes Yes
> |
```

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