Data Manipulation - Dplyr

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Questions

Perform the following operations on the attached file using methods available in the dplyr library

1) Select the first three columns

2) Select all columns except the species column

3) Select all the rows where both diameter and height are greater than 20

4) Arrange the rows by height

5) Arrange the rows by Species and then by height

6) Create a new column by dividing the leafarea with branchmass

7) Find the average diameter for each species

8) Create a new data frame containing 10th to 35th rows of the data

Code

PRASHANTH S 19MID0020

dplyr_library.R | Allometry.csv

```
1  library(utils)
2  library(dplyr)
3
4  df=read.csv("Allometry.csv")
5
6  ## 1st 3 columns
7  ans1 <- data.frame(df %>% select(c(1:3)))
8  #head(ans1)
9
10 ## exclude the species column
11 ans2 <- data.frame(df %>% select(-species))
12 #head(ans2)
13
14 ## take out the rows where the (diameter and height) > 20
15 ans3 <- (df %>% filter(diameter > 20 & height > 20))
16 #ans3
17
18 ## arrange the rows by height
19 ans4 = df %>% arrange(height)
20 #ans4
21
22 ## arrange the rows by species and then by height
23 ans5 = df %>% select(c(1:5)) %>%
24       arrange(species, height)    ## give only arrange(species, height)
25 #ans5
26
27 ## leafarea_divide_branchmass = (leafarea) / (branchmass)
28 ans6 = df %>% mutate(leftarea_divide_branchmass = leafarea / branchmass)
29 #ans6
30
31 ## average diameter for each species
32 ans7 = df %>% group_by(species) %>% summarize(avg_diameter = mean(diameter))
33 #ans7
34
35 ## 10 to 35 row of the data
36 ans8 = df %>% slice(10:35)
37 #ans8
```

Description

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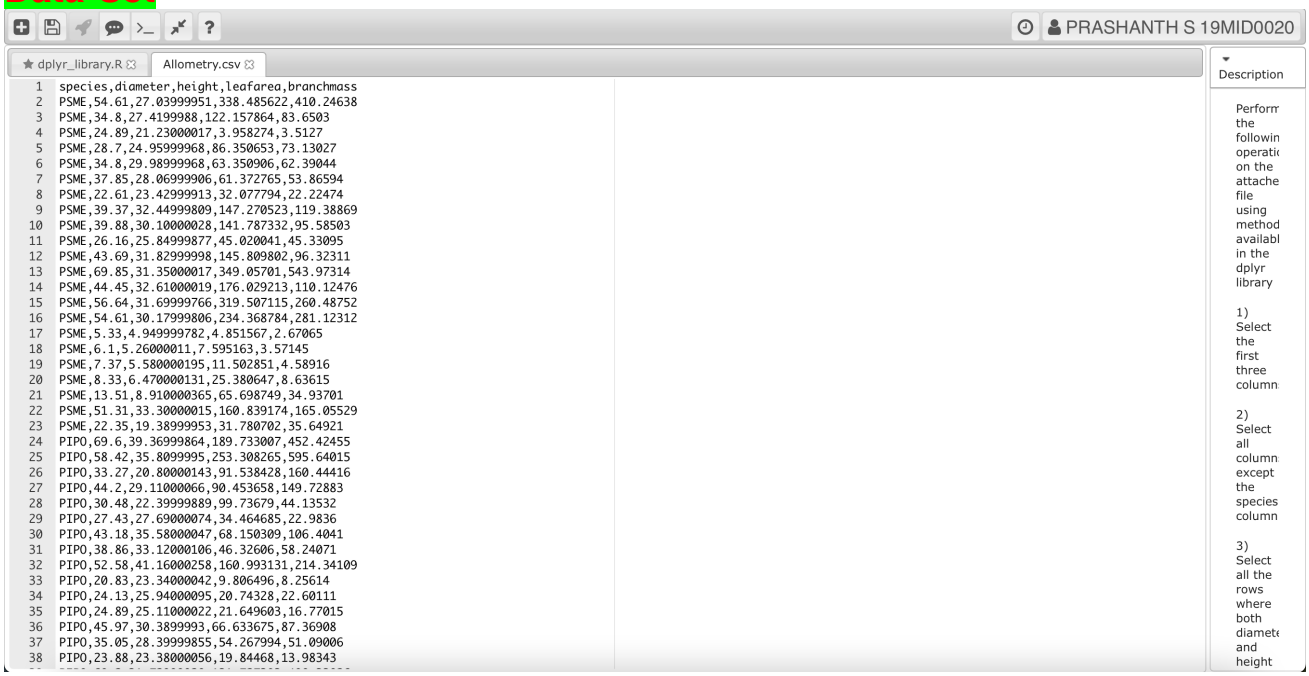
https://moovit.vit.ac.in/

Data-Set



Mam, I implemented the code in moodle as-well as in RStudio also.
In-order to avoid confusion with continuous output, I am including my implementation in RStudio also.