Data Wrangling – Part 5

`arrange()`: is used to reorder the rows of a data frame based on one or more variables. The default order is from smallest to largest (or alphabetical for strings). To change the order from largest to smallest use "desc()".

Command Illustration

```
new_dataframe_name <- dataframe_name %>%
      arrange(column_name)
```

For the illustration examples, assume the dataframe is the following:

Illustration_Data

Name	Age	total_Income	var_1	var_2	var_3	zipcode	honesty	cat_total
Val	18	18000	apple	carrots	elephant	60001	agree	0
Derek	25	25000	grapes	carrots	tiger	60073	disagree	1
Whitney	30	30000	bananas	carrots	lion	60109	disagree	2
Sasha	40	40000	peaches	carrots	rabbit	60111	disagree	1
Daniella	45	45000	bananas	carrots	shark	60155	agree	1

Example 1: Arrange data by "cat_total" in ascending order (smallest to largest)

```
example_1<-Illustration_Data %>%
  arrange(cat_total)
```

Name	Age	total_Income	var_1	var_2	var_3	zipcode	honesty	cat_total
Val	18	18000	apple	carrots	elephant	60001	agree	0
Derek	25	25000	grapes	carrots	tiger	60073	disagree	1
Whitney	30	30000	bananas	carrots	lion	60109	disagree	2
Sasha	40	40000	peaches	carrots	rabbit	60111	disagree	1
Daniella	45	45000	bananas	carrots	shark	60155	agree	1

Output will be a dataframe that looks like:

Name	Age	total_Income	var_1	var_2	var_3	zipcode	honesty	cat_total
Val	18	18000	apple	carrots	elephant	60001	agree	0
Derek	25	25000	grapes	carrots	tiger	60073	disagree	1
Sasha	40	40000	peaches	carrots	rabbit	60111	disagree	1
Daniella	45	45000	bananas	carrots	shark	60155	agree	1
Whitney	30	30000	bananas	carrots	lion	60109	disagree	2

Example 2: Arrange data by "cat_total" in descending order (largest to smallest).

```
example_2<-Illustration_Data %>%
  arrange(desc(cat_total))
```

Name	Age	total_Income	var_1	var_2	var_3	zipcode	honesty	cat_total
Val	18	18000	apple	carrots	elephant	60001	agree	0
Derek	25	25000	grapes	carrots	tiger	60073	disagree	1
Whitney	30	30000	bananas	carrots	lion	60109	disagree	2
Sasha	40	40000	peaches	carrots	rabbit	60111	disagree	1
Daniella	45	45000	bananas	carrots	shark	60155	agree	1

Output will be a dataframe that looks like:

Name	Age	total_Income	var_1	var_2	var_3	zipcode	honesty	cat_total
Whitney	30	30000	bananas	carrots	lion	60109	disagree	2
Derek	25	25000	grapes	carrots	tiger	60073	disagree	1
Sasha	40	40000	peaches	carrots	rabbit	60111	disagree	1
Daniella	45	45000	bananas	carrots	shark	60155	agree	1
Val	18	18000	apple	carrots	elephant	60001	agree	0

Example 3: Arrange data in alphabetical order by name.

```
example_3<-Illustration_Data %>%
  arrange(Name)
```

Name	Age	total_Income	var_1	var_2	var_3	zipcode	honesty	cat_total
Val	18	18000	apple	carrots	elephant	60001	agree	0
Derek	25	25000	grapes	carrots	tiger	60073	disagree	1
Whitney	30	30000	bananas	carrots	lion	60109	disagree	2
Sasha	40	40000	peaches	carrots	rabbit	60111	disagree	1
Daniella	45	45000	bananas	carrots	shark	60155	agree	1

Output will be a dataframe that looks like:

Name	Age	total_Income	var_1	var_2	var_3	zipcode	honesty	cat_total
Daniella	45	45000	bananas	carrots	shark	60155	agree	1
Derek	25	25000	grapes	carrots	tiger	60073	disagree	1
Sasha	40	40000	peaches	carrots	rabbit	60111	disagree	1
Val	18	18000	apple	carrots	elephant	60001	agree	0
Whitney	30	30000	bananas	carrots	lion	60109	disagree	2

Example 4: Count the number of occurrences each fruit had in "var_1"

```
example_4<-Illustration_Data %>%
  group_by(var_1) %>%
  summarize(N = n())
```

Name	Age	total_Income	var_1	var_2	var_3	zipcode	honesty	cat_total
Val	18	18000	apple	carrots	elephant	60001	agree	0
Derek	25	25000	grapes	carrots	tiger	60073	disagree	1
Whitney	30	30000	bananas	carrots	lion	60109	disagree	2
Sasha	40	40000	peaches	carrots	rabbit	60111	disagree	1
Daniella	45	45000	bananas	carrots	shark	60155	agree	1

Output will be a dataframe that looks like:

Example 5: Arrange by honesty and within category of honesty, arrange by cat_total.

```
example_5 <- Illustration_Data %>%
  arrange(honesty, cat_total)
```

Name	Age	total_Income	var_1	var_2	var_3	zipcode	honesty	cat_total
Val	18	18000	apple	carrots	elephant	60001	agree	0
Derek	25	25000	grapes	carrots	tiger	60073	disagree	1
Whitney	30	30000	bananas	carrots	lion	60109	disagree	2
Sasha	40	40000	peaches	carrots	rabbit	60111	disagree	1
Daniella	45	45000	bananas	carrots	shark	60155	agree	1

Output will be a dataframe that looks like:

Name	Age	total_Income	var_1	var_2	var_3	zipcode	honesty	cat_total
Val	18	18000	apple	carrots	elephant	60001	agree	0
Daniella	45	45000	bananas	carrots	shark	60155	agree	1
Derek	25	25000	grapes	carrots	tiger	60073	disagree	1
Sasha	40	40000	peaches	carrots	rabbit	60111	disagree	1
Whitney	30	30000	bananas	carrots	lion	60109	disagree	2