PPGCOMP - FURG | 23148P - Data Visualization and Exploratory Data Analysis | 02/2024

This notebook contains the solution for Task 05 of the course 23148P - Data Visualization and Exploratory Data Analysis - 02/2024 of the Graduate Program in Computing at FURG (PPGCOMP-FURG).

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The repository with the notebooks can be accessed here!

Solutions:

Verify the installation of necessary packages.

In [1]:
```
if (!requireNamespace("readr", quietly = TRUE)) install.packages("readr")
if (!requireNamespace("ggplot2", quietly = TRUE)) install.packages("ggplot2")
if (!requireNamespace("RColorBrewer", quietly = TRUE)) install.packages("RColorBrewer")
if (!requireNamespace("scales", quietly = TRUE)) install.packages("scales")
```

Load necessary packages.

In [2]:
```
library(readr)
library(ggplot2)
library(RColorBrewer)
library(scales)
```

```
Anexando pacote: ‘scales’


O seguinte objeto é mascarado por ‘package:readr’:

    col_factor


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    col_factor
```
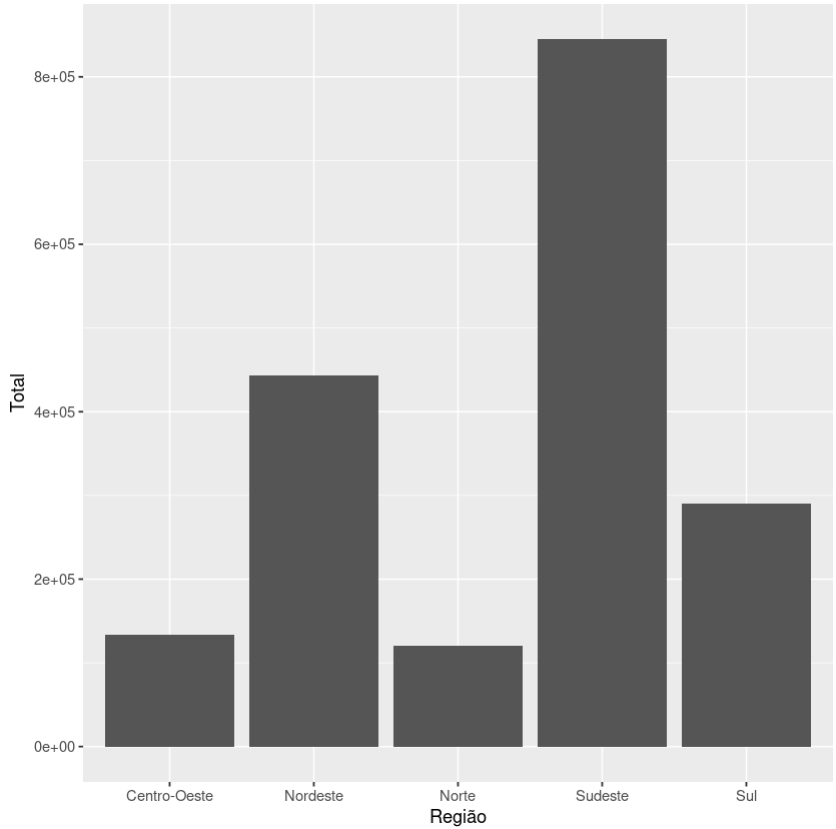

Reading the Data:

In [3]:
```
my.data <- data.frame(read.csv("./data_mortalidade_Regiao.csv"))
linha<-c(6)
my.data.novo <- my.data[-linha,]
```

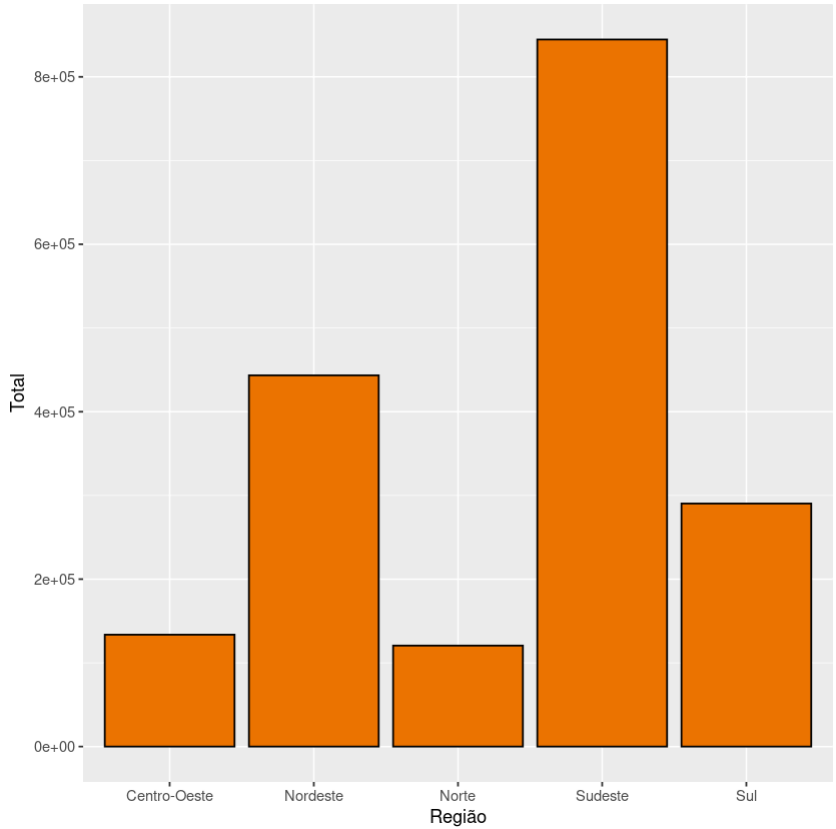
Exercise 1:

In [4]:
```
ggplot(my.data.novo, aes(x=Região, y=Total)) +
  geom_bar(stat = "identity")
```



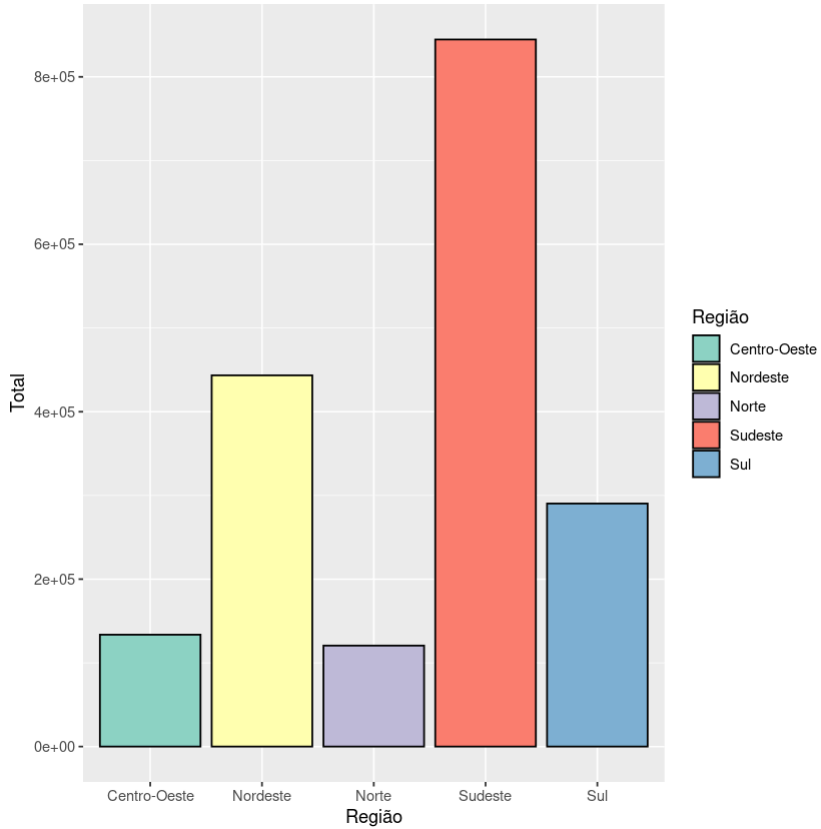
Exercise 2:

In [5]:
```
ggplot(my.data.novo, aes(x=Região, y=Total)) +
  geom_bar(stat = "identity",color="black", fill="darkorange2")
```



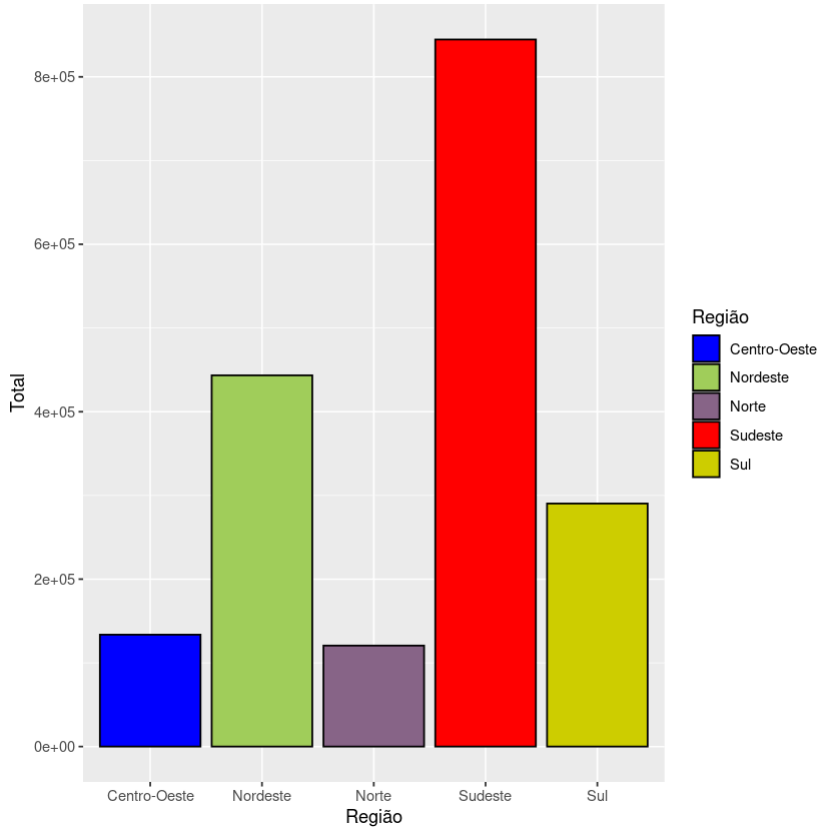
Exercise 3:

In [6]:
```
ggplot(my.data.novo, aes(x=Região, y=Total, fill=Região)) +
  geom_bar(stat = "identity",color="black")+
  scale_fill_brewer(palette = "Set3")
```



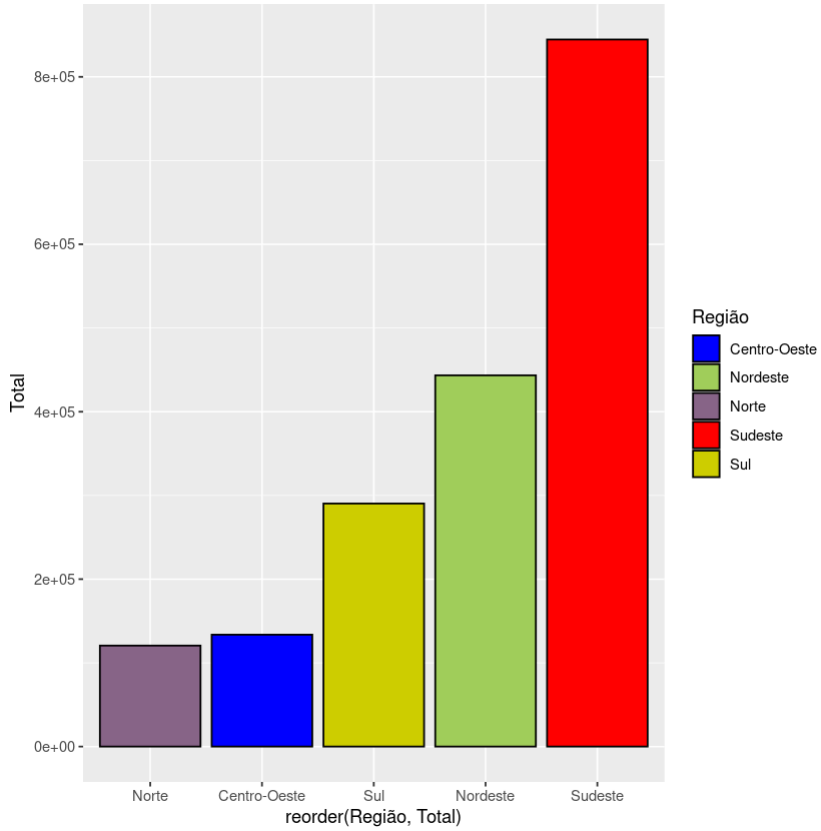
Exercise 4:

In [7]:
```
ggplot(my.data.novo, aes(x=Região, y=Total, fill=Região)) +
  geom_bar(stat = "identity",color="black") +
    scale_fill_manual(values =c('blue', 'darkolivegreen3', 'plum4', 'red', 'yellow3'))
```



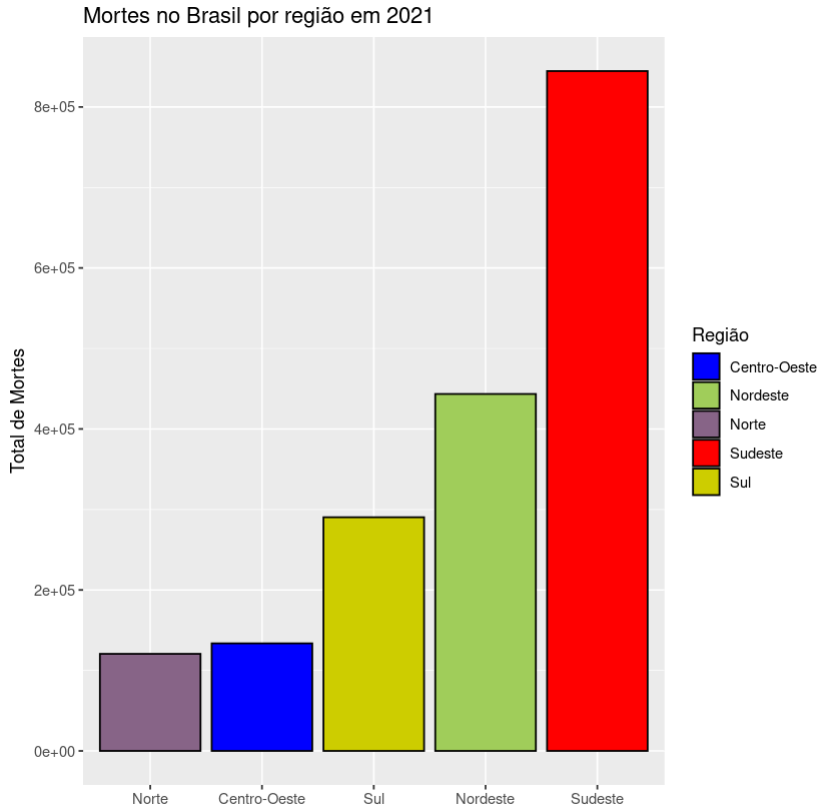
Exercise 5:

In [8]:
```
ggplot(my.data.novo, aes(x=reorder(Região, Total), y=Total, fill=Região)) +
  geom_bar(stat = "identity",color="black") +
  scale_fill_manual(values =c('blue', 'darkolivegreen3', 'plum4', 'red', 'yellow3'))
```



Exercise 7:

In [9]:
```
ggplot(my.data.novo, aes(x=reorder(Região, Total), y=Total, fill=Região)) +
  geom_bar(stat = "identity",color="black") +
  scale_fill_manual(values =c('blue', 'darkolivegreen3', 'plum4', 'red', 'yellow3'))+
  labs(title= "Mortes no Brasil por região em 2021",x = "", y = "Total de Mortes")
```



Exercise 8:

In [10]:

```
ggplot(my.data.novo, aes(x=reorder(Região, Total), y=Total, fill=Região)) +
  geom_bar(stat = "identity",color="black") +
  coord_flip()+
  scale_fill_manual(values =c('blue', 'darkolivegreen3', 'plum4', 'red', 'yellow3'))+
  labs(title= "Mortes no Brasil por região em 2021",x = "", y = "Total de Mortes")+
  scale_y_continuous(labels = comma_format(big.mark = ".",
                                           decimal.mark = ","))+  theme_light()+
  theme(
    text = element_text(size = 12),
    panel.grid.major.y = element_blank(),
```

```
    panel.grid.minor.y = element_blank()
    )
```