Assignment 1

Tuan Doğukan TEKEŞ

2025-10-06

```
# Installing necessary package(s)
install.packages("ggplot2")
```

```
## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.5'
## (as 'lib' is unspecified)
```

```
library(ggplot2)
```

Dataset

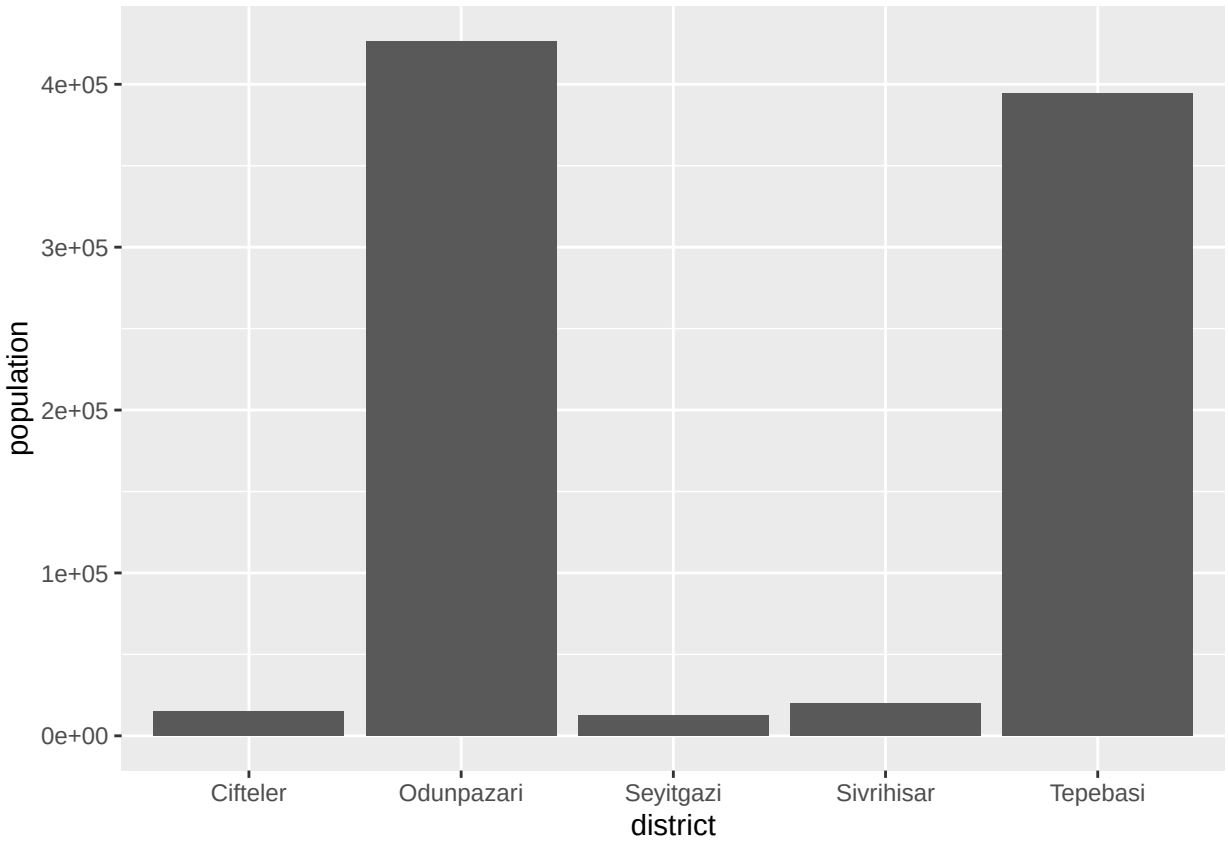
The dataset `eskisehir` contains the total population for the top-5 crowded districts of Eskisehir in 2024.

```
eskisehir <- data.frame(
  district   = c("Odunpazari", "Tepebasi", "Sivrihisar", "Cifteler", "Seyitgazi"),
  population = c(426581, 394734, 20258, 14814, 12878))
```

Drawing a barplot

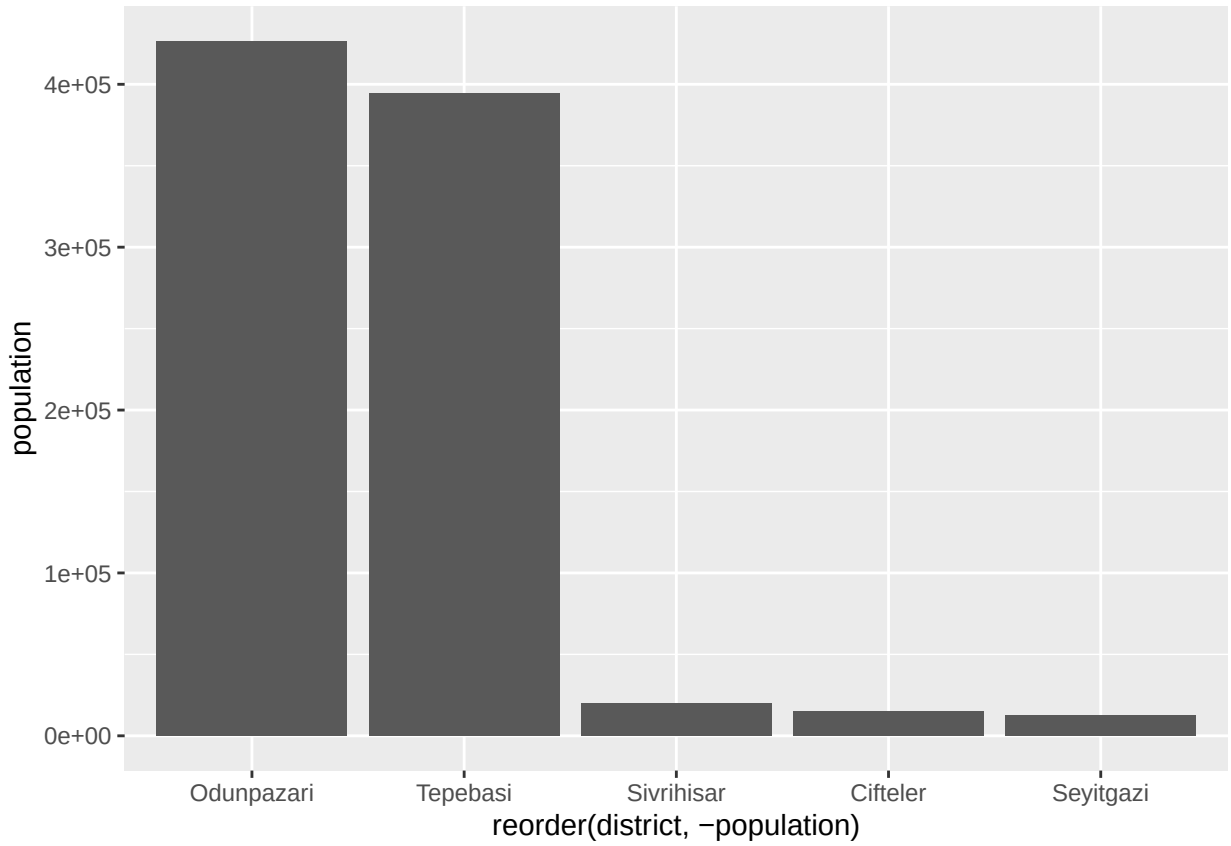
1. Please draw a boxplot to visualize the population of districts (20 pts).

```
ggplot(eskisehir, aes(x = district, y = population)) +
  geom_bar(stat = "identity")
```



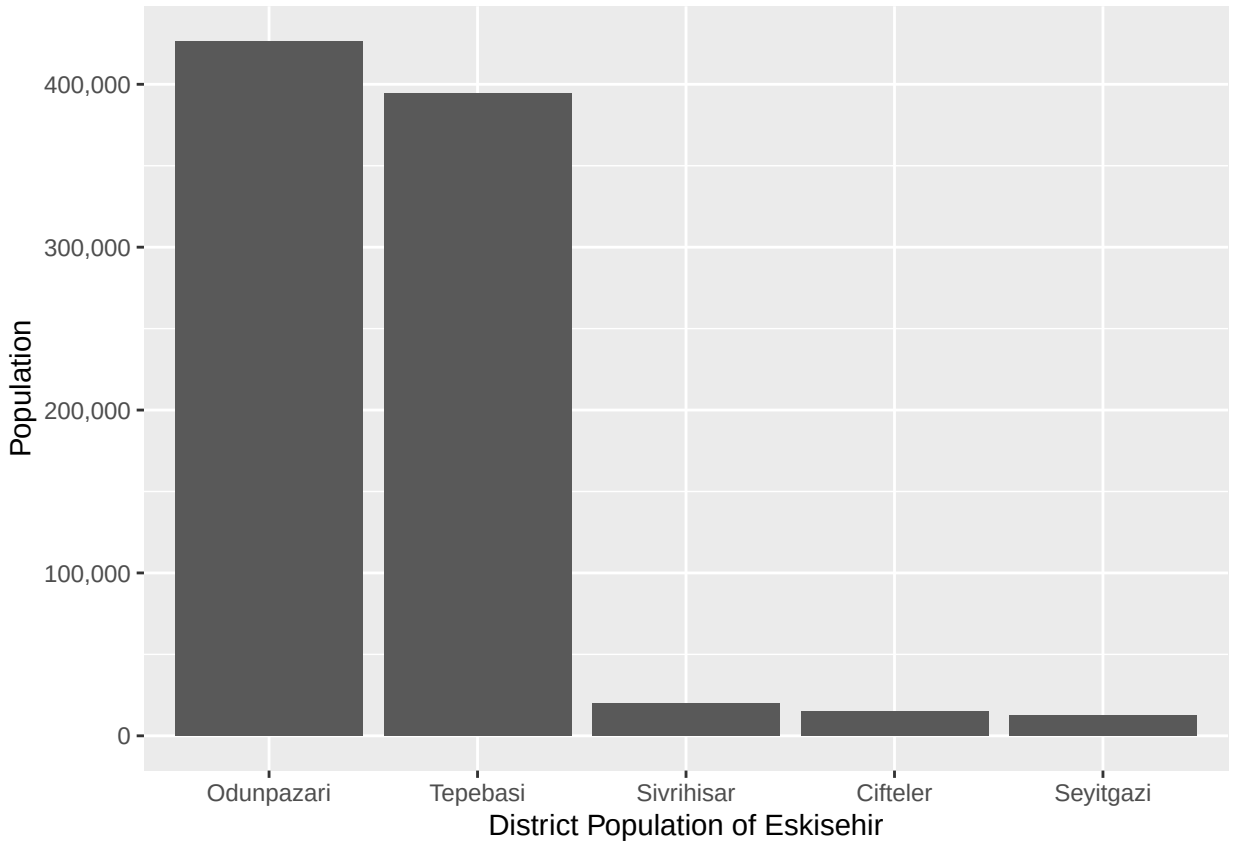
2. Please solve the problems in the plot to make it better (20 pts).

```
ggplot(eskisehir, aes(x = reorder(district,-population), y = population)) +
  geom_bar(stat = "identity")
```



3. Then configure the plot to present it in a better way (40 pts). You can use the tricks that you learned in the lecture.

```
ggplot(eskisehir, aes(x = reorder(district,-population), y = population)) +
  geom_bar(stat = "identity") +
  scale_y_continuous(labels = scales::comma) +
  labs(x = "District Population of Eskisehir",
       y = "Population")
```



4. Interpret the plot (20 pts). It must be about the information of the district populations not the technical part of the plot.

This data show us the total population for the top-5 crowded districts of Eskisehir in 2024.The crowdest district is Odunpazarı, and the least crowdest one Seyitgazi. Odunpazarı more than 400,000 people, and the Seyitgazi less than 100,000 people.

. . .