```
R ▾ R 4.3.2 · ~/ ⇗
> source("~/R program/R PROGRAM/Temp.R")
Average temperature for City A: 22.42857
Average temperature for City B: 19.28571
Average temperature for City C: 31.85714
City with the highest average temperature: City C
Highest average temperature value: 31.85714
Variance in temperature for City A: 2.952381
Variance in temperature for City B: 1.238095
Variance in temperature for City C: 1.809524
For City A, maximum temperature is 25 on Day 2
For City B, maximum temperature is 21 on Day 4
For City C, maximum temperature is 34 on Day 5
> |
```

Student Marks.R*   NameGender.R   EvenNum.R*   AdditionalMsg.R   Temp.R

Source on Save

```r
1  city_A <- c(22, 25, 21, 23, 24, 22, 20)
2  city_B <- c(18, 20, 19, 21, 20, 19, 18)
3  city_C <- c(30, 32, 31, 33, 34, 32, 31)
4
5  avg_A <- mean(city_A)
6  avg_B <- mean(city_B)
7  avg_C <- mean(city_C)
8
9  cat("Average temperature for City A:", avg_A, "\n")
10 cat("Average temperature for City B:", avg_B, "\n")
11 cat("Average temperature for City C:", avg_C, "\n")
12
13 avg_temps <- c(avg_A, avg_B, avg_C)
14 cities <- c("City A", "City B", "City C")
15 max_avg_temp_city <- cities[which.max(avg_temps)]
16 max_avg_temp_value <- max(avg_temps)
17
18 cat("City with the highest average temperature:", max_avg_temp_city, "\n")
19 cat("Highest average temperature value:", max_avg_temp_value, "\n")
20
21 var_A <- var(city_A)
22 var_B <- var(city_B)
23 var_C <- var(city_C)
24
25 cat("Variance in temperature for City A:", var_A, "\n")
26 cat("Variance in temperature for City B:", var_B, "\n")
27 cat("Variance in temperature for City C:", var_C, "\n")
28
29 max_temp_day_A <- which.max(city_A)
30 max_temp_day_B <- which.max(city_B)
31 max_temp_day_C <- which.max(city_C)
32
33 max_temp_A <- city_A[max_temp_day_A]
34 max_temp_B <- city_B[max_temp_day_B]
35 max_temp_C <- city_C[max_temp_day_C]
36
37 cat("For City A, maximum temperature is", max_temp_A, "on Day", max_temp_day_A, "\n")
38 cat("For City B, maximum temperature is", max_temp_B, "on Day", max_temp_day_B, "\n")
39 cat("For City C, maximum temperature is", max_temp_C, "on Day", max_temp_day_C, "\n")
40
```