

# Warmup: functions

## Group members:

**Instructions:** Work with a neighbor on the following activity. I will collect the handout at the end of class, and it will be part of your class participation grade. You will be graded only on effort – it is ok if you don't finish all the questions, or get them all correct.

## diamonds data

The `diamonds` dataset in the `ggplot2` package contains information on over 50000 rough cut diamonds.

Your friend is working with the `diamonds` data, and sends you the following code:

```
library(tidyverse)

z_score <- function(x) {
  (x - mean(x, na.rm = TRUE)) / sd(x, na.rm = TRUE)
}

diamonds_new <- diamonds |>
  mutate(carat_z = z_score(carat))
```

1. Explain what the code is doing.
2. The `diamonds` dataset has 53940 rows and 10 columns. What will be the dimensions of the `diamonds_new` dataset?