

Warmup: summary statistics

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.

Calculating summary statistics

The `diamonds` dataset from the `ggplot2` package contains information on a variety of characteristics of different diamonds (cut, color, clarity, price, etc.). Here are the first few rows:

	carat	cut	color	clarity	depth	table	price	x	y	z
1	0.23	Ideal	E	SI2	61.5	55	326	3.95	3.98	2.43
2	0.21	Premium	E	SI1	59.8	61	326	3.89	3.84	2.31
3	0.23	Good	E	VS1	56.9	65	327	4.05	4.07	2.31
4	0.29	Premium	I	VS2	62.4	58	334	4.20	4.23	2.63
5	0.31	Good	J	SI2	63.3	58	335	4.34	4.35	2.75
6	0.24	Very Good	J	VVS2	62.8	57	336	3.94	3.96	2.48

1. Write code using `dplyr` functions to calculate the mean and standard deviation of the `carat`, `depth`, and `price` columns, producing the output shown below:

```
# A tibble: 1 x 6
  mean_carat sd_carat mean_depth sd_depth mean_price sd_price
    <dbl>    <dbl>    <dbl>    <dbl>    <dbl>    <dbl>
1     0.798     0.474      61.7      1.43     3933.     3989.
```