

read_csv(fname)

Role: Read a CSV file and convert it to a list of dictionaries (one dict per row).

INPUT: fname (string, filename like "penguins.csv")

OUTPUT: dl (list of dictionaries)

**calcavg(avgl)**

Role: Compute the mean of a list of numeric strings.

INPUT: list of strings representing numbers

OUTPUT: op (float, rounded to 2 decimals)

**Calculation1(cldt)**

Role: Average body mass (g) grouped by species and sex.

INPUT: cldt (cleaned list of dicts; each dict has species, sex, body_mass_g)

OUTPUT: opl (list of dicts with keys: species, sex, average body mass (g))

**calc_corr(fll, bll)**

Role: Compute Pearson correlation between two numeric lists (as strings): flipper length vs bill length.

INPUT: fll (list of strings: flipper lengths) bll (list of strings: bill lengths)

OUTPUT: r (float in [-1, 1], rounded to 4 decimals)

**Calculation2(cldt2)**

Role: Correlation between flipper length and bill length, grouped by species.

INPUT: cldt2 (cleaned list of dicts; each dict has species, flipper_length_mm, bill_length_mm)

OUTPUT: opl (list of dicts with keys: species, correlation between flipper length and bill length)

**write_outputs(res1, res2)**

Role: Write both calculations' results to two CSV files.

INPUT: res1 (output of Calculation1) res2 (output of Calculation2)

OUTPUT: None (side-effect: creates Calculation1_results.csv and Calculation2_results.csv)

**main()**

Role: Runs the whole program in order.

INPUT: None

OUTPUT: None (side-effect: creates two CSV files)