

main()

Runs the program and calls the functions in order.

INPUT: None
OUTPUT: None

read_penguin_data(filename)

Reads the penguins CSV file and stores each row as a dictionary.

INPUT: filename (string)
OUTPUT: list of dictionaries
Note: Each dictionary represents one penguin's species, island, sex, and measurements.

calculate_avg_body_mass_by_species_and_sex(data)

Calculates the average body mass for each species and sex.

INPUT: list of dictionaries
OUTPUT: dictionary of averages

calculate_avg_flipper_length_by_island_and_species(data)

Calculates the average flipper length for each species on each island.

INPUT: list of dictionaries
OUTPUT: dictionary of averages

write_results_to_csv(filename, body_mass_data, flipper_data)

Writes both calculation results into an output CSV file.

INPUT: output filename (string), body_mass_data (dict), flipper_data (dict)
OUTPUT: None (outputs to a file)