

Recap 2024-04-15

①

- Goal : Understand Output of $\text{lm}()$
- Contrasts used in R
- Data on the influence of breed on body weight
- Model : Expected body weight y_{ij} of animal j from breed i is modelled as:

$$E(y_{ij}) = \mu + \alpha_i$$

μ is labeled "Intercept" with a red arrow pointing to it.
 α_i is labeled "effect of breed i on body weight" with a red arrow pointing to it.

$$\rightarrow y = Xb + e$$

□ Contrasts in R:

- function $\text{contrasts}()$
- Result : matrix with as many rows, as there are levels in the factor variable. Columns are new variables assigned by R to the data