

meat1.sas: Explanation of code

Goals of code:

- Fitting a regression line
- Estimating mean Y at a specified X

The initial commands read the meat.txt file and create a new variable called logtime.

Fitting a regression line: `lm()`

The `lm()` function is the workhorse R model fitting function. When the X variable (right hand side of the `~` **is not** a factor, `lm()` fits a regression line.

The command `meat.lm <- lm(ph~logtime, data=meat)` will fit a regression model to predict `y = ph` from `x = logtime`, where both variables are in the data frame called `meat`. The result is stored in the `meat.lm` object.

If you print the object (`meat.lm`), you see what was done to create `meat.lm` and the estimated coefficients. Intercept is the intercept (β_0) and `logtime` is the regression slope (β_1).

The rest of the code will be discussed after break.