One feature of R (could be positive, could be negative) is that there are many ways to do the same thing. In this post, I list out the different ways we can get certain results from a linear regression model. Feel free to comment if you know more ways other than those listed!

In what follows, we will use the linear regression object lmfit:

data(mtcars)

lmfit <- lm(mpg ~ hp + cyl, data = mtcars)

**Extracting coefficients of the linear model**

# print the lm object to screen

lmfit

# part of the summary output

summary(lmfit)

# extract from summary output

summary(lmfit)$coefficients[, 1]

# use the coef function

coef(lmfit)

# extract using list syntax

lmfit$coefficients

**Getting fitted values for the training data set**

# use the predict function

predict(lmfit)

# extract from lm object

lmfit$fitted.values

**Getting residuals for the training data set**

# use the predict function

resid(lmfit)

# extract from lm object

lmfit$residuals

# extract from lm summary

summary(lmfit)$residuals