

HW1

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```
x <- c(2, 5, 8, 11, 13, 15, 16, 18)
y <- c(-10, -9, -4, 0, 4, 5, 6, 8)
```

```
df <- data.frame(x, y)
head(df)
```

```
##      x      y
## 1  2 -10
## 2  5  -9
## 3  8  -4
## 4 11   0
## 5 13   4
## 6 15   5
```

```
dflm <- lm(y ~ x, df)
summary(dflm)
```

```
##
## Call:
## lm(formula = y ~ x, data = df)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1.63636 -0.38636 -0.06818  0.32955  1.54545
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -13.50000    0.86405  -15.62 4.35e-06 ***
## x              1.22727    0.07091   17.31 2.38e-06 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.052 on 6 degrees of freedom
## Multiple R-squared:  0.9804, Adjusted R-squared:  0.9771
## F-statistic: 299.6 on 1 and 6 DF, p-value: 2.383e-06
```