	TEAM	QB	TOTAL	CONF	
1	49ERS	900	17256	NFC	2
2	BEARS	3000	23074	NFC	2
3	BENGALS	1050	20666	AFC	1
4	BILLS	650	24249	AFC	1
5	BRONCOS	500	21992	AFC	1
6	BROWNS	967	19413	AFC	

```
NFL.data          28 obs. of 4 variables
  TEAM : Factor w/ 28 levels "49ERS","BEARS",..: 1 2 3 4 5 6 7 8 9…
  QB : int 900 3000 1050 650 500 967 675 1450 1200 1100 ...
  TOTAL: int 17256 23074 20666 24249 21992 19413 19545 20397 18698…
  CONF : Factor w/ 2 levels "AFC","NFC": 2 2 1 1 1 1 2 2 1 1 ...
Values
  dCONF          num [1:28] 1 1 0 0 0 0 1 1 0 0 ...
```

(y)

x

AFC is a baseline!

Total Salary by Conference

I

Total Salary ($1,000s)

AFC   NFC

Conference
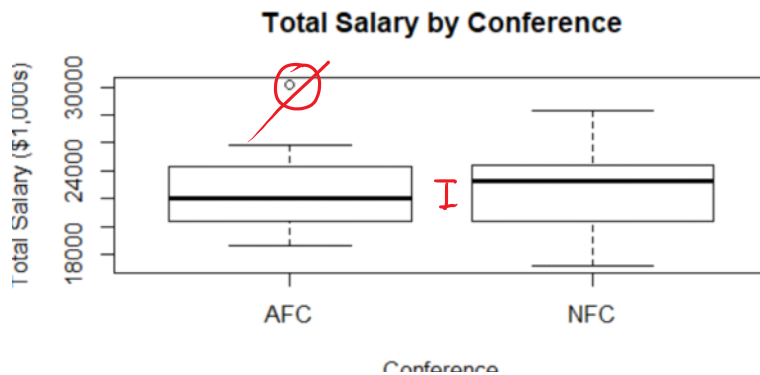
```
Call:
lm(formula = TOTAL ~ dCONF)

Residuals:
    Min      1Q  Median      3Q     Max
-5375.0 -2208.6   528.5  1680.9  7540.9

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) 22590.14     807.16  27.987   <2e-16 ***
dCONF          40.86    1141.50   0.036    0.972
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 3020 on 26 degrees of freedom
Multiple R-squared:  4.927e-05,  Adjusted R-squared:  -0.03841
F-statistic: 0.001281 on 1 and 26 DF,  p-value: 0.9717
```

```
lm(formula = TOTAL ~ CONF)

Residuals:
    Min      1Q  Median      3Q     Max
-5375.0 -2208.6   528.5  1680.9  7540.9

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) 22590.14     807.16  27.987   <2e-16 ***
CONFNFC        40.86    1141.50   0.036    0.972
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 3020 on 26 degrees of freedom
Multiple R-squared:  4.927e-05,  Adjusted R-squared:  -0.03841
F-statistic: 0.001281 on 1 and 26 DF,  p-value: 0.9717
```

$\hat{\beta}_0$: average team salary of AFC is $22590.14.

$\hat{\beta}_1$: average difference in salary between AFC an BFC is $40.86.