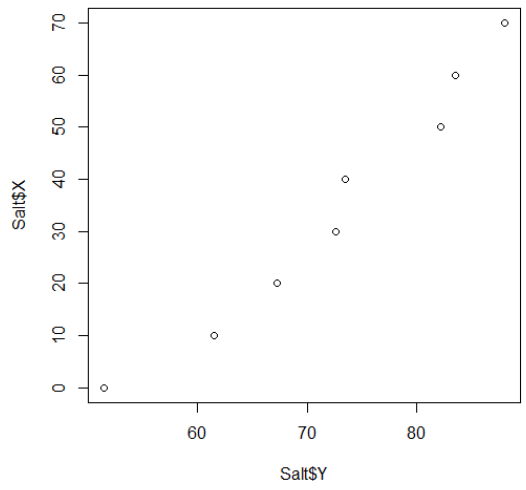
Practical week 1-Solutions

```
temp=lm(Y~X,data=Salt)

summary(temp)


Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) 55.35833    1.64570   33.64 4.59e-08 ***
X            0.48976    0.03934   12.45 1.64e-05 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 2.55 on 6 degrees of freedom
Multiple R-squared:  0.9627,   Adjusted R-squared:  0.9565
F-statistic:   155 on 1 and 6 DF,  p-value: 1.641e-05
```

```
anova(temp)

Analysis of Variance Table

Response: Y
          Df Sum Sq Mean Sq F value    Pr(>F)
X          1 1007.4  1007.4  154.99 1.641e-05 ***
Residuals  6   39.0     6.5
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
plot(Salt$Y,Salt$X)
```



Descriptive Statistics

	Mean	Std. Deviation	N
Y	72.500	12.2267	8
X	35.00	24.495	8

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.981[a]	.963	.957	2.5495

a. Predictors: (Constant), X

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1007.440	1	1007.440	154.992	.000[b]
	Residual	39.000	6	6.500		
	Total	1046.440	7			

a. Dependent Variable: Y

b. Predictors: (Constant), X

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	55.358	1.646		33.638	.000
	X	.490	.039	.981	12.450	.000

a. Dependent Variable: Y