# Iris Data Set

## TL

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## Description

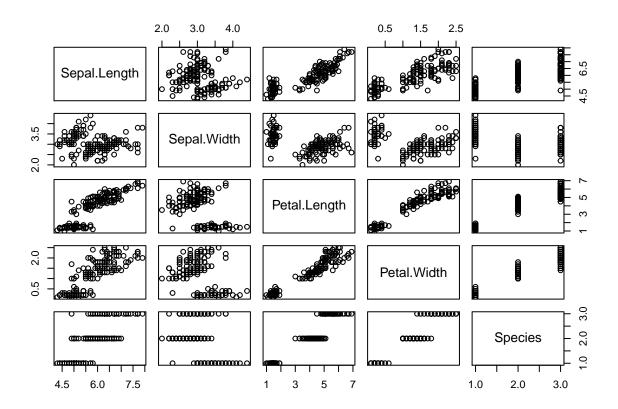
### summary(iris)

```
Sepal.Length
                     Sepal.Width
                                                      Petal.Width
##
                                      Petal.Length
##
    Min.
           :4.300
                    Min.
                            :2.000
                                     Min.
                                            :1.000
                                                     Min.
                                                             :0.100
    1st Qu.:5.100
                                     1st Qu.:1.600
##
                    1st Qu.:2.800
                                                     1st Qu.:0.300
##
    Median :5.800
                    Median :3.000
                                     Median :4.350
                                                     Median :1.300
           :5.843
##
    Mean
                    Mean
                           :3.057
                                     Mean
                                            :3.758
                                                     Mean
                                                            :1.199
##
    3rd Qu.:6.400
                    3rd Qu.:3.300
                                     3rd Qu.:5.100
                                                     3rd Qu.:1.800
          :7.900
                    Max.
                           :4.400
                                     Max.
                                            :6.900
                                                             :2.500
##
    Max.
                                                     Max.
##
          Species
##
    setosa
              :50
    versicolor:50
##
    virginica:50
##
##
##
```

	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
1	Min. :4.300	Min. :2.000	Min. :1.000	Min. :0.100	setosa:50
2	1st Qu.:5.100	1st Qu.:2.800	1st Qu.:1.600	1st Qu.:0.300	versicolor:50
3	Median $:5.800$	Median $:3.000$	Median $:4.350$	Median $:1.300$	virginica:50
4	Mean: 5.843	Mean $: 3.057$	Mean $: 3.758$	Mean $:1.199$	
5	3rd Qu.:6.400	3rd Qu.:3.300	3rd Qu.:5.100	3rd Qu.:1.800	
6	Max. $:7.900$	Max. $:4.400$	Max. $:6.900$	Max. $:2.500$	

Table 1: Summary of the data set

## Scatterplot Matrix



```
iris[['Is.Versicolor']] <- as.numeric(iris[['Species']] == 'versicolor')
iris[['Is.Virginica']] <- as.numeric(iris[['Species']] == 'virginica')
fit.1 <- glm(Is.Versicolor ~ Petal.Length + Sepal.Length, data = iris)
fit.2 <- glm(Is.Virginica ~ Petal.Length + Sepal.Length, data = iris)
#summary(fit)
output <- capture.output(stargazer(fit.1, fit.2, title = 'Regression Results', summary=FALSE, header=F.cat(output)</pre>
```

Table 2: Regression Results

	$Dependent\ variable:$		
	Is.Versicolor	Is.Virginica	
	(1)	(2)	
Petal.Length	0.148***	0.184***	
	(0.043)	(0.031)	
Sepal.Length	-0.230**	0.023	
	(0.092)	(0.067)	
Constant	1.119***	$-0.490^{*}$	
	(0.407)	(0.294)	
Observations	150	150	
Log Likelihood	-94.823	-45.951	
Akaike Inf. Crit.	195.646	97.902	
<b>λ</b> 7 - 4	* <0 1. ** <0	0.05. *** <0.01	

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01