Regression tables with Stargazer

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Installing Stargazer

Make sure to install the package first!

```
install.packages("stargazer")
```

The stargazer package helps you to print out nicely edited tables from your regressions.

Step 1. Let's produce some results from a linear model

```
fit <- lm(iris$Sepal.Length ~ iris$Sepal.Width + iris$Petal.Width)
```

You can get a summary of the regression statistics with

```
summary(fit)
```

```
##
## Call:
## lm(formula = iris$Sepal.Length ~ iris$Sepal.Width + iris$Petal.Width)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.2076 -0.2288 -0.0450  0.2266  1.1810
##
## Coefficients:
##                  Estimate Std. Error t value Pr(>|t|)
## (Intercept)       3.45733    0.30919   11.18  < 2e-16 ***
## iris$Sepal.Width  0.39907    0.09111    4.38 2.24e-05 ***
## iris$Petal.Width  0.97213    0.05210   18.66  < 2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.4511 on 147 degrees of freedom
## Multiple R-squared:  0.7072, Adjusted R-squared:  0.7033
## F-statistic: 177.6 on 2 and 147 DF,  p-value: < 2.2e-16
```

Step 2a. Let's present the results in a nice table (in a PDF)

Let's load the package first...

```
library(stargazer)
```

```
##
## Please cite as:

##  Hlavac, Marek (2022). stargazer: Well-Formatted Regression and Summary Statistics Tables.

##  R package version 5.2.3. https://CRAN.R-project.org/package=stargazer
```

... now we can use the function `stargazer()` with our `lm` object named `fit`.

(You won't see any output if you are not reading this from a PDF)

```
stargazer(fit, header = FALSE, type='latex')
```

Table 1:

	Dependent variable:
	Sepal.Length
Sepal.Width	0.399***
	(0.091)
Petal.Width	0.972***
	(0.052)
Constant	3.457***
	(0.309)
Observations	150
R^2	0.707
Adjusted R^2	0.703
Residual Std. Error	0.451 (df = 147)
F Statistic	177.556*** (df = 2; 147)
Note:	*p<0.1; **p<0.05; ***p<0.01

Notes

We need to specify two options/arguments for this to run properly.

1. We need to specify the option `results = 'asis'` for our code chunk: `{r results = 'asis'}`. This writes "the raw text results directly into the output document without any markups" (see here for details).
2. We need to set the argument `header = FALSE` in the `stargazer()` function, so to avoid adding the name and version of the package just before the table.
3. We can specify the type of output with want. In this case, we need a `type='latex'` as the engine to produce the PDF will need a LaTeXformatted document.

Step 2b. Let's present the results in a nice table (in a HTML document)

(The output looks good only if you are reading this in a browser)

```
stargazer(fit, header = FALSE, type='html')
```

Dependent variable:

Sepal.Length

Sepal.Width

0.399***

(0.091)

Petal.Width

0.972***

(0.052)

Constant

3.457***

(0.309)

Observations

150

R2

0.707

Adjusted R2

0.703

Residual Std. Error

0.451 (df = 147)

F Statistic

177.556*** (df = 2; 147)

Note:

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

1. Just change to `type='html'` and then Knit an HTML file (in RStudio "Knit" and then "Knit to HTML").

Step 2c. Let's present the results in a nice table (for a Word document)

Unfortunately you can't directly produce the table in a Word document created using the "Knit" command. But there is a workaround.

1. Create the table in an HTML document (previous step).
2. Open the HTML in your browser.
3. Copy the table and paste it into a Word document (or a PowerPoint).