# regression

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## Using Regression to a report

When you want to use R as a data analysis tool, you must be writing a paper for some propose (for example, a term paper, report ..etc). In this exercise, you firstly conduct a simple regression analysis by using the built in iris data set . Next, you will wrap up an analyzed data and write a paper on LaTex format by using stargaizer.

## Questions

- Regress Sepal.Length with Sepal.Width, Petal.Length and Petal.Width
- Use stargaizer your result to a latex format
- convert latex to pdf

## Sample Answer

#### Iris Data

```
R already has Iris data set. You can check it by
iris #
.
```

If you want to see Sepal.Length of iris data, you can access it by

```
iris["Sepal.Length"]
```

#### Regression

```
R provide regression function lm()

lm(dependent variable ~ independent variable0 + independent variable1 + ... , data="Data Frame" )

In this case, Data Frame is iris. The regression analysis we are supposed to conduct is

result <- lm (Sepal.Length ~ Sepal.Width + Petal.Length + Petal.Width , data=iris)

summary(result)
```

### Stargayzer

Stargayzer makes your result attractive. If you do not have stargayzer library, you can get and load it via

```
install.packages('stargayzer')
library(stargazer)
```

.

It convert result to latex format.

```
stargazer(result)
```

It also provides a text format

```
stargazer(result, type="text")
```