Econ 673 Lecture 3, 2017-01-10

January 10, 2017 11:01 AM

Chunk

<<name, echo=FALSE, fig.height=5, fig.width=6>>=

@

e.g. figure environment.

\begin{figure}\caption{My Title}\label{fig1}.

<<fig. .... >>=

plot(...)

@

\end{figure}.

eg use \ref{fig1}.

eg. \clearpage.

eg. use <<name, eval=FALSE>>=

@

prints chunk with "name".

Tables: (xtable, stargazer)

add message=FALSE, warning=FALSE.

```
<<result='asis', echo=FALSE>>=.

x<-rnorm(100)

y<-1+x+rnorm(100)

reg<-lm(y~x)

library(xtable)

xtable(res)

library(stargazer)

w<-rnorm(100)

res2<-lm(y~x+w)

stargazer(res, res2)
```

Creating Objects and Methods

ex. res<-lm(y~x)

↳ object class "lm".

⇓

S3-type of object.

Also, it's a list.

names(res), res$coefficient.

res $ fitted.

res → print.lm(res).

methods

from stats package.

stats ::: print.lm.

package. function.

Cat:

cat("the mean of x is ", mean(x), "\n", sep="").

change line.

~Creating a particular Dataset.

~make it an object.

```
CreateData <- function(n)
    { x <- rnorm(n)
      z <- rt(n, 3)
      y <- x + z + rf(n, 3, 10)
```

```
    data <- list(x=x, y=y, z=z).
    class(data) <- "mySimDat".
    data.
    }.

print.mySimData <- function(x).
    { n <- length (x$x).
    mx <- mean (x$x)
    my <- mean (x$y)
    mz <- mean (x$z).
    m <- c(x=mx, y=my, z=mz)
    cat("Sim Data with", n, "observations \n").
    cat("mean of x is", mx, "\n")
    cat( .. .. my...)
    cat( ... ... mz ...)
    }.
```

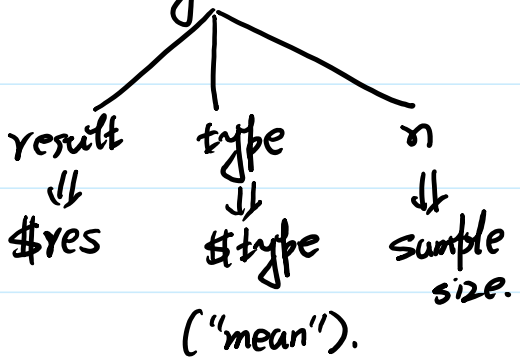
eg

```
print.myData <- function(x) cat("This is my data.",
 data
```

⇒ "This is my data".

template.rmw

objects of class "my stats"



⇒ myMean → "my stats"

⇒ myVar → ....

⇒ myMedan → ....

digits=3 ⇒ limit decimal.

n%%2 ⇒ reminder of %.

n%%2L == 1L

suuing integer.

is(2L) ⇒ "interger"

is(2) ⇒ "numeric".