Simple Beamer example with knitr

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Before using knitr for Beamer slides

Install the knitr R package.
Change Tools > Options > Sweave from Sweave to knitr.
Using R code chunks

To show code verbatim, need the option \[fragile\] when you begin the frame.

Generate data as $y = x + \epsilon$, with $\epsilon \sim N(0, 1)$ and plot it:

```r
par(mar = c(4, 4, 0.1, 0.1))
x = 1:30
e = rnorm(30)
y = x + e
plot(x, y)
abline(lm(y ~ x))
```

![Plot](image-url)
Referencing R results in text; printing tables

```r
summary(lm(y ~ x))$coefficients
```

|            | Estimate | Std. Error | t value | Pr(>|t|)  |
|------------|----------|------------|---------|-----------|
| (Intercept)| -0.691   | 0.35711    | -1.935  | 6.317e-02 |
| x          | 1.007    | 0.02012    | 50.053  | 6.101e-29 |

In the linear regression we just performed, the slope was 1.0068. Use the `xtable` package to print nice \( \text{\LaTeX} \) tables:

|            | Estimate | Std. Error | t value | Pr(>|t|)  |
|------------|----------|------------|---------|-----------|
| (Intercept)| -0.69    | 0.36       | -1.93   | 0.06      |
| x          | 1.01     | 0.02       | 50.05   | 0.00      |

Table: Regression results