Boring stuff as usual:

The LA City Controller data under analysis includes 82328 distinct payments, whose mean size is  $1.4448947 \times 10^6$ , with a median size of  $2.809747 \times 10^4$ . The standard deviation is  $1.6078357 \times 10^7$ .

```
set.seed(123)
x = runif(10)
sd(x) # standard deviation

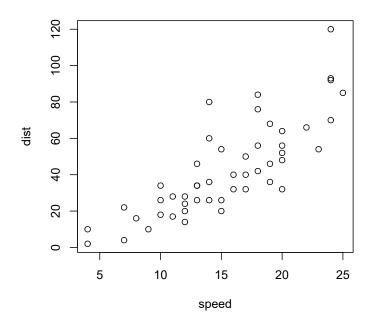
## [1] 0.29474

Sys.sleep(10) # test cache
```

Now we know the first element of x is 0.2875775. And we also know the 26 letters are A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z. An expression that returns a value of length 0 will be removed from the output, but it was indeed evaluated, e.g. now the first element of x becomes 2011.

How about figures? Let's use the Cairo PDF device (assumes  $R \ge 2.14.0$ ).

```
plot(cars) # a scatter plot
```



Warnings, messages and errors are preserved by default.

```
sqrt(-1) # here is a warning!

## Warning in sqrt(-1): NaNs produced

## [1] NaN

message('this is a message you should know')

## this is a message you should know

1+'a' # impossible

## Error in 1 + "a": non-numeric argument to binary operator
```