

Probability and Conditional Probability: R functions

Introduction to Quantitative Social Science

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Why & How to write your R function?

Efficiency: avoid repetitive operations using a single command

To define:

```
name <- function(...args...) {...body...}
```

To call

```
name(...value...)
```

Why & How to write your R function?

Example: **How to convert UK shoe size into centimeters?**

Known:

- conversion formula: $3 \times \text{foot in inches} - 22.5 = \text{UK size}$
- $1 \text{ inch} = 2.4 \text{ cm}$

```
uksize_cm <- function(uksize) {  
  cm <- (uksize + 22.5) * 2.4 / 3  
  return(cm)  
}
```

```
uksize_cm(9)
```

Basic arithmetics (log)

Functions

seq()

lchoose()

lfactorial()