Week_1_Intuition_and_probability

Cici

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LO:

1. Draw random numbers in R.

2. Write loops in R.

3. Visualise data in R.

4. Estimate a number or probability.

Functions:

head()

table()

sample(x, size, replace = FALSE, prob = NULL)

test <- rnorm(x, mean = 0, sd = 1)

boxplot()

min(),max(),mean(),sd(),sum()

length()

unique()

round(): si she wu ru

hist(x, col, main, xlab, ylab)

plot()

choose()

Notes:

- How to randomly choose numbers?

```
index <- sample(85,10,replace=FALSE)
random10 <- chicago[index,]
```

- How to generate for loop?

```
df <- data.frame()
for (n in 1:50) {
  m <- c()
  for (i in 1:10000) {
birth <- sample(365,n,replace = TRUE)
```

```
if (length(unique(birth))!=n) {
  m <- c(m,1)
} else {
  m <- c(m,0)
}
  }
  sum <- sum(m)
  prob <- sum/10000
  df <- rbind(df,c(n,prob))
}
```

- How to use "or" operator?

A | B