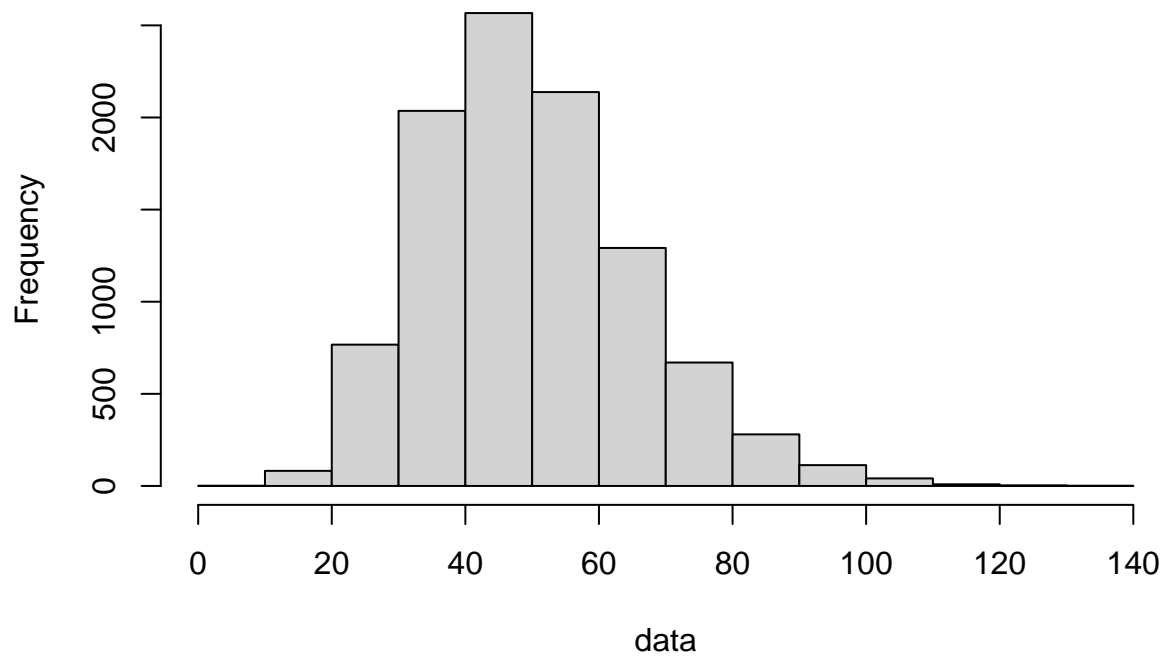# Problem4

Ida Hönigmann

2022-04-25

a replicate

```
data = replicate(10000, sum(rexp(10, 0.2)))
hist(data)
```

Histogram of data

looks similar to binomial distribution

b coin toss

```
data = replicate(10000, max(rle(rbinom(50, 1, 0.5))$lengths))
mean(data)
```

```
## [1] 5.9872
```