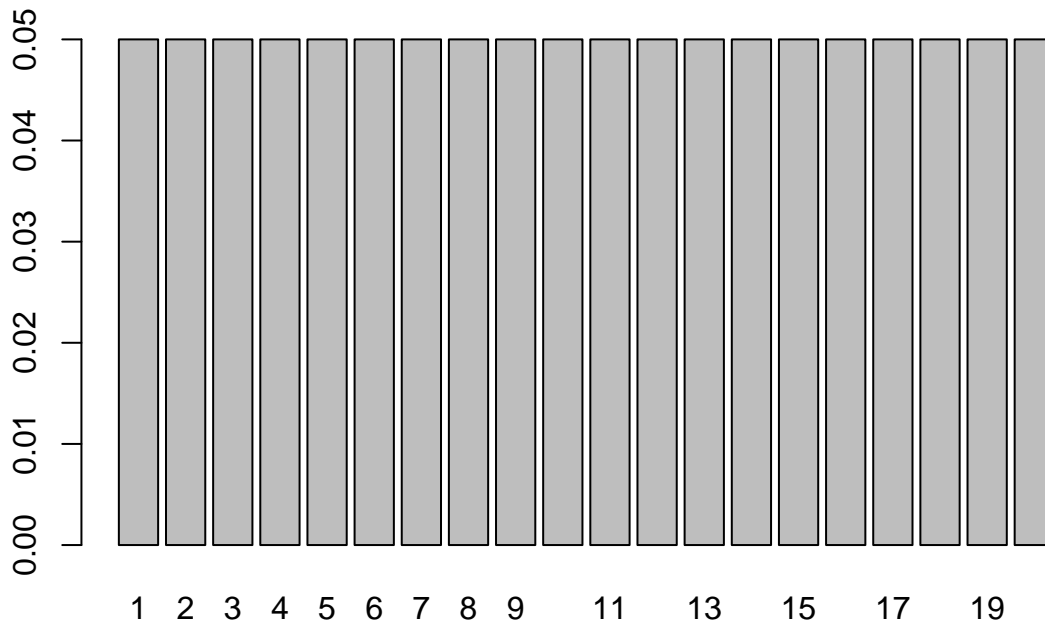


Visualizing probability distributions

Uniform distribution

Here is the probability mass function for a $\text{Unif}(\{1, \dots, 20\})$ random variable.

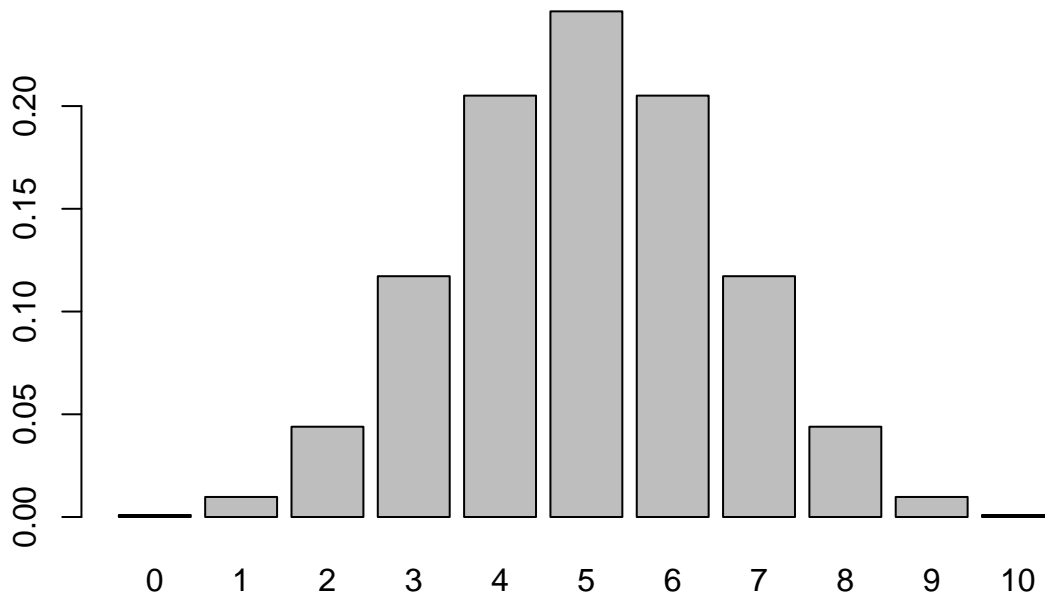
```
barplot(replicate(20,1/20), names.arg = 1:20)
```



Binomial distribution

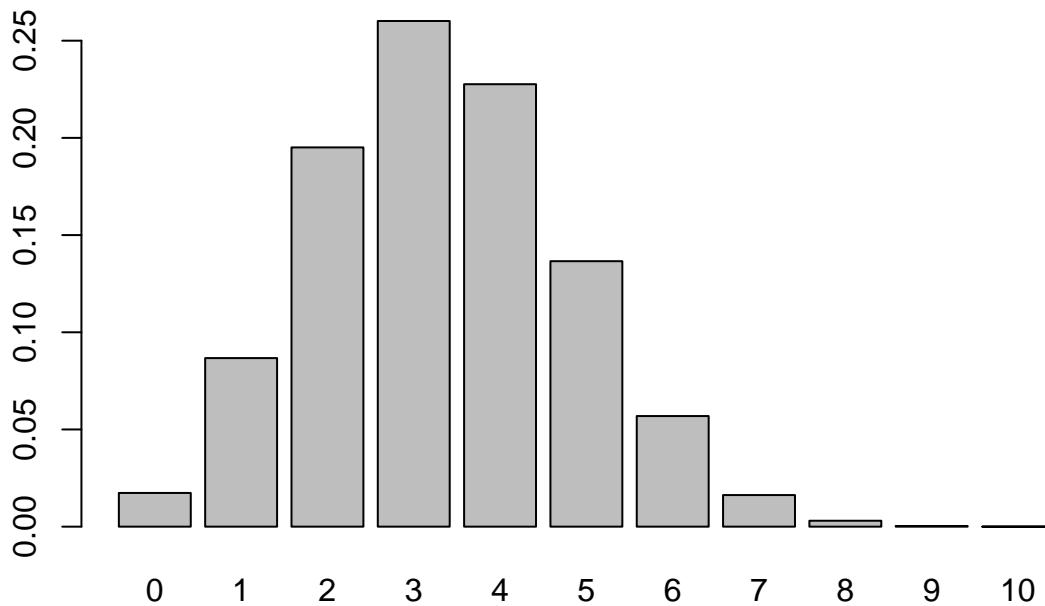
Here is the probability mass function for a $\text{Bin}(10, 1/2)$ random variable.

```
barplot(dbinom(0:10, 10, 1/2), names.arg = 0:10)
```



Here is the probability mass function for a $\text{Bin}(10, 1/3)$ random variable.

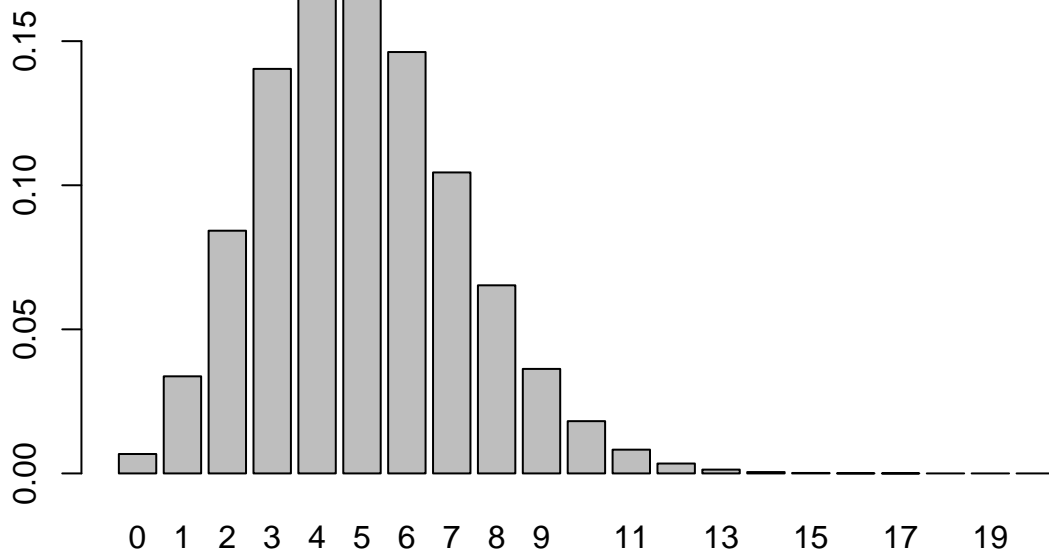
```
barplot(dbinom(0:10, 10, 1/3), names.arg = 0:10)
```



Poisson distribution

Here is the probability mass function for a $\text{Pois}(5)$ random variable. Well, not the whole probability function, just the first 21 values.

```
barplot(dpois(0:20, 5), names.arg = 0:20)
```



Here is the probability mass function for a $\text{Pois}(10)$ random variable. Well, not the whole probability function, just the first 101 values.

```
barplot(dpois(0:100, 10), names.arg = 0:100)
```

