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RGui (64-bit) - [R Console]
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R version 4.3.2 (2023-10-31 ucrt) -- "Eye Holes"
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Platform: x86_64-w64-mingw32/x64 (64-bit)

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Natural language support but running in an English locale

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Type 'contributors()' for more information and
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Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[Previously saved workspace restored]

> theoretical_probs <- rep(1/6, 6)
>
> num_simulations <- 10000
> simulated_rolls <- sample(1:6, num_simulations, replace = TRUE)
> empirical_probs <- table(simulated_rolls) / num_simulations
> cat("Theoretical Probabilities:", theoretical_probs, "\n")
Theoretical Probabilities: 0.1666667 0.1666667 0.1666667 0.1666667 0.1666667 0.1666667
> cat("Empirical Probabilities:", empirical_probs, "\n")
Empirical Probabilities: 0.1632 0.1663 0.1714 0.1672 0.1667 0.1652
> barplot(rbind(Theoretical = theoretical_probs, Empirical = empirical_probs), beside = TRUE, col = c("green", "pink"), names.arg = 1:6, legend.text$
> |
```

