

```

> set.seed(3) # setting seed for reproducibility
> i <- 1
> N <- 10^5 - 1 # N = number of simulations
> N2mat <- matrix(0, N, 2) # initialize N*2 matrix to all 0's
> repeat {
+   N2mat[i, ] <- sample(1:6, 2, replace = TRUE)
+   if (i == N)
+     break
+   i <- i + 1
+ }
> means <- apply(N2mat, 1, mean)
> T3 <- table(means)
> T3

```

```

means
      1   1.5    2   2.5    3   3.5    4   4.5    5   5.5    6
2802  5523  8394 11138 13938 16552 13876 11202  8287  5576 2711

```

The function `plot()` is applied to `T3` after dividing its contents by `N`. The result, with a few embellishments, is presented in Figure 1.

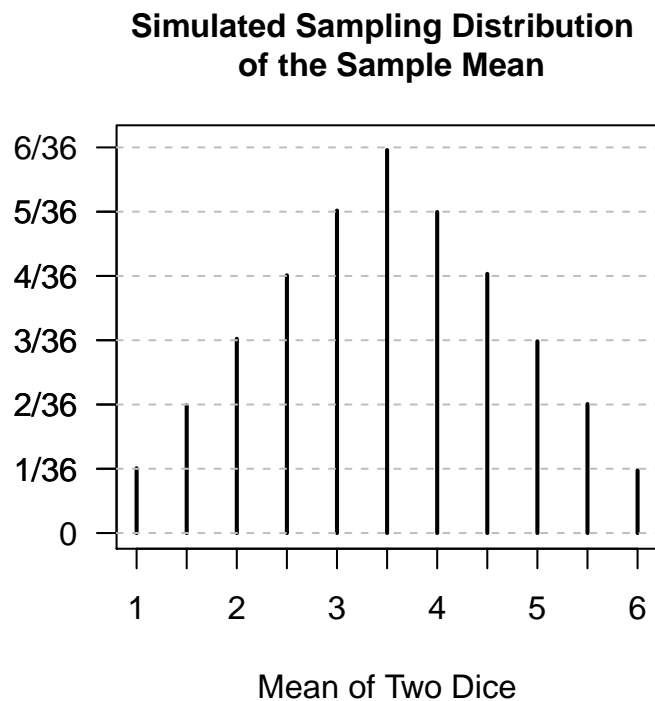


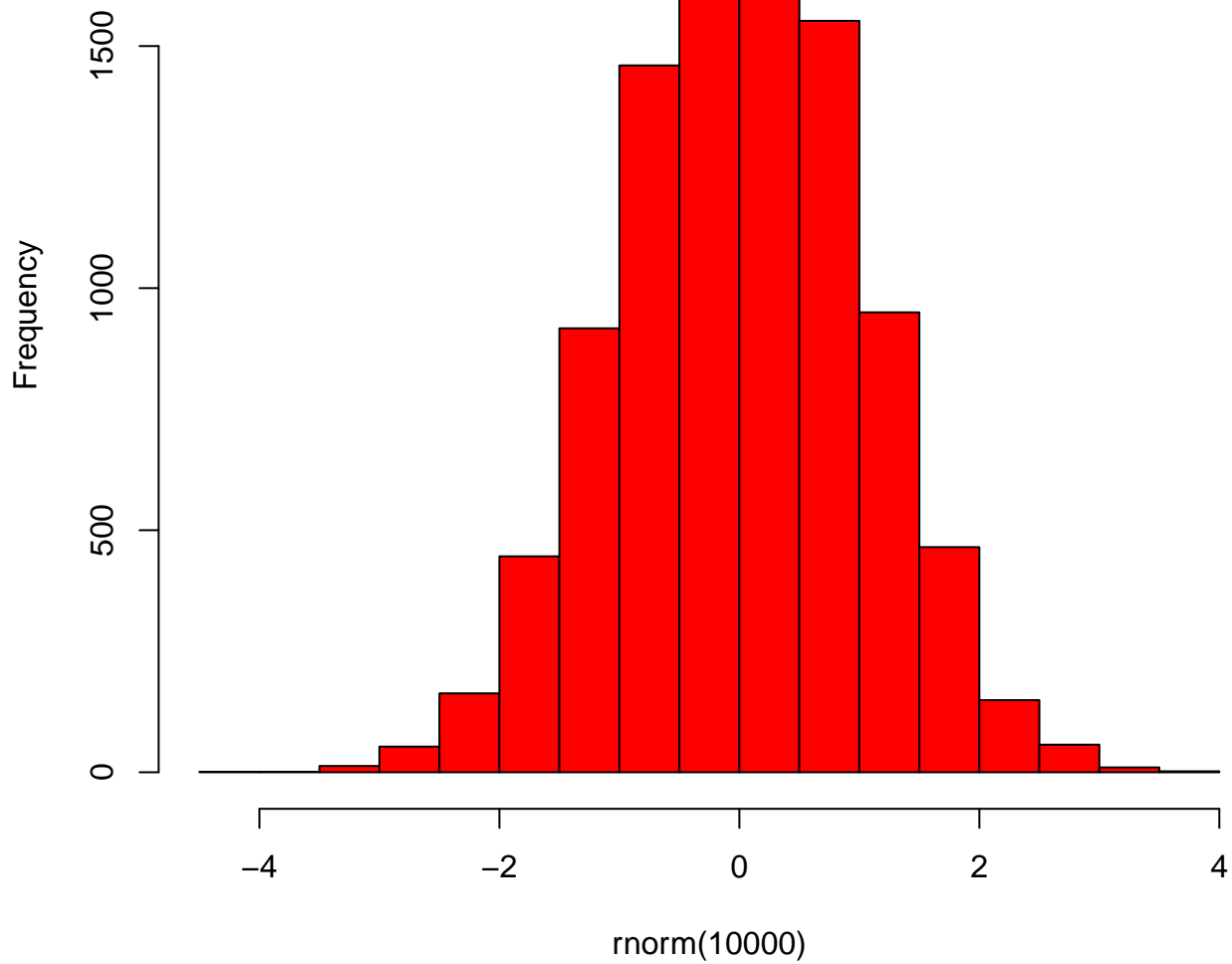
Figure 1: Graphical representation of the relative frequency of each of the possible means from a simulation of throwing two dice 99,999 times

```

> hist(rnorm(10000), col = "red")

```

Histogram of rnorm(10000)



Green now:

```
> hist(rnorm(10000), col = "green")
```

Histogram of rnorm(10000)

