Code:

RGui (64-bit) - [R Console]

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```
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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 'q()' to quit R.

[Previously saved workspace restored]

> data <- c(23, 45, 67, 12, 89, 45, 23, 67, 34, 56)
> mean_value <- mean(data)
> median_value <- median(data)
> mode_value <- function(x) {
+
+   ux <- unique(x)
+
+   ux[which.max(tabulate(match(x, ux)))]
+
+ }
> mode_result <- mode_value(data)
> hist(data, main = "Histogram of Data", xlab = "Values", col = "lightblue", border = "black")
> abline(v = mean_value, col = "red", lwd = 2)
> abline(v = median_value, col = "blue", lwd = 2)
> abline(v = mode_result, col = "green", lwd = 2)
> legend("topright", legend = c("Mean", "Median", "Mode"), col = c("red", "blue", "green"), lwd = 2)
>
```

Output:

RGui (64-bit) - [R Graphics: Device 2 (ACTIVE)]

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