Analyzing Roll Call Votes from the US Senate

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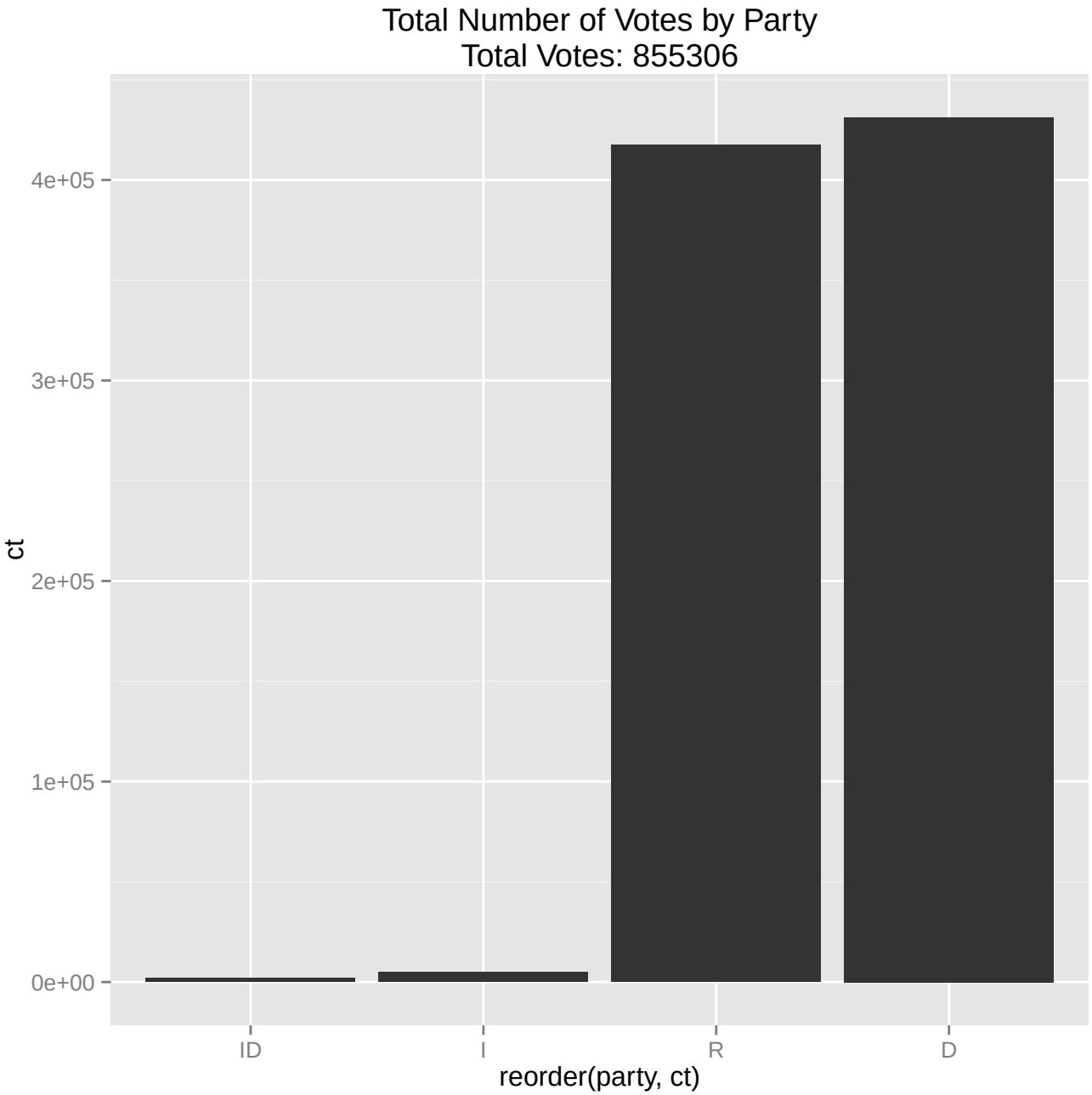
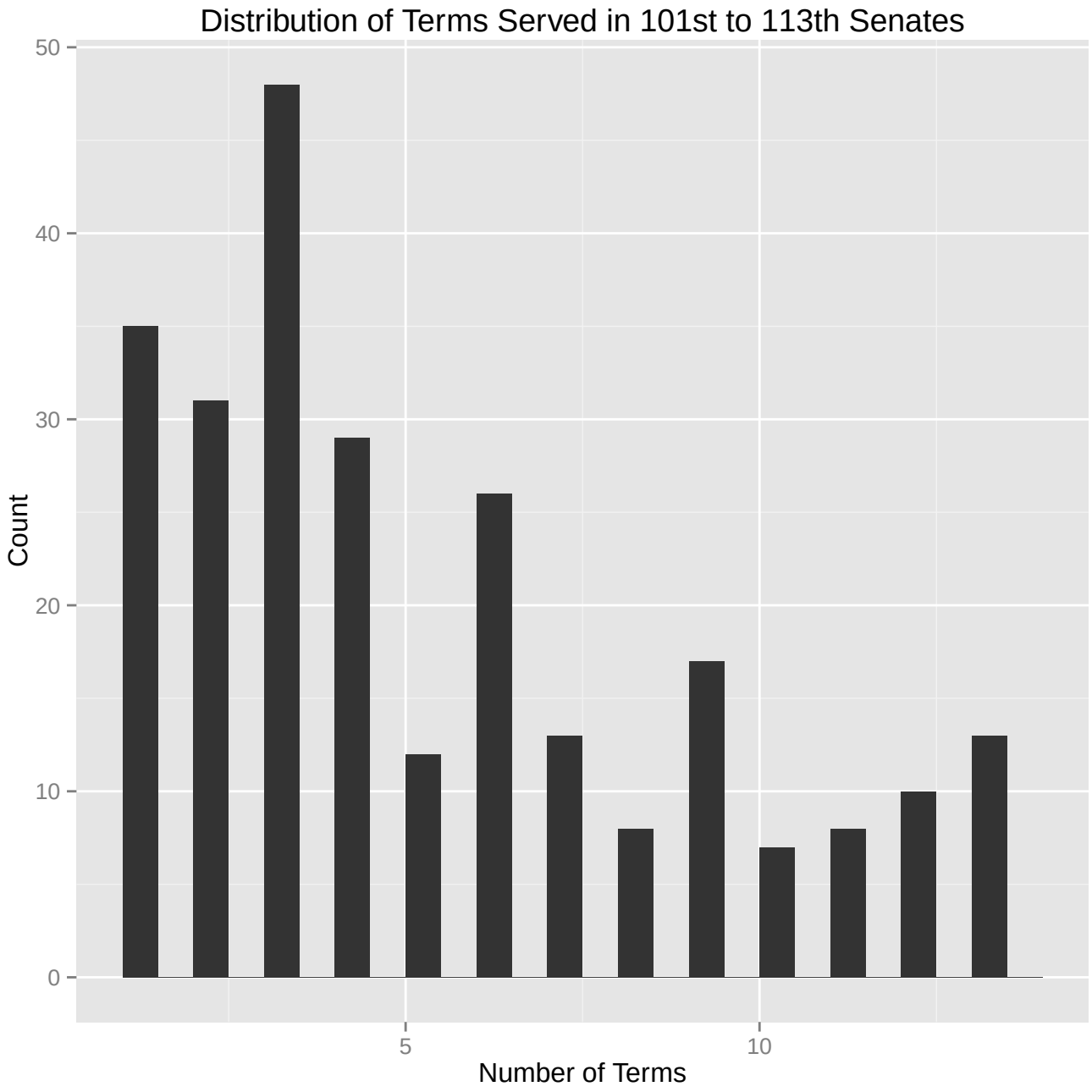
```
#Setting up libraries and imports
  require(RSQLite)

## Loading required package:  RSQLite
## Loading required package:  DBI

  require(ggplot2)

## Loading required package:  ggplot2

  source("../config.R")
  source("../voteAnalysis.R")
```

```
query = "SELECT party, count(*) as ct FROM votes GROUP BY party"
partyVoteTotals = queryDB(query, "data.sqlite")
ggplot(partyVoteTotals, aes(x = reorder(party, ct), y = ct)) + geom_bar(stat = "identity") +
    ggtitle(sprintf("Total Number of Votes by Party\nTotal Votes: %s", sum(partyVoteTotals$ct)))
```



```
query = "SELECT id, first_name, last_name, party, seniority, count(*) AS ct FROM members GROUP BY id ORDER BY ct
senatorTotals = queryDB(query, "data.sqlite")
ggplot(senatorTotals, aes(x = ct)) + xlim(1, 14) + geom_bar(binwidth = 0.5) +
    xlab("Number of Terms") + ylab("Count") + ggtitle("Distribution of Terms Served in 101st to 113th Senates")
```



```
query = "SELECT yeas, nays, (yeas+nays) as total, (100*(yeas-nays)/(yeas+nays)) as voteDiff, congressNumber, ses
rollCallStats = queryDB(query, "data.sqlite")
rollCallStats$year = apply(rollCallStats, 1, function(x) {
    congressToYear(x["congressNumber"], x["sessionNumber"])
})
ggplot(rollCallStats, aes(x = as.factor(year), y = voteDiff)) + geom_boxplot() +
    geom_smooth(aes(group = 1), method = "lm") + geom_point(alpha = 0.1) + ggtitle("Roll-call Vote Disagreement
    xlab("\nYear") + ylab("Percentage Difference\n100*(Yea-Nay)/Total")
```