

Assignment 2

Emily Zhao

6/19/2022

Section 1

```
#Description of the data
```

```
#The dataset I am using is to measure whether voters want democrats or republicans in congress in 2022.
```

```
library(ggplot2)
library(dplyr)
```

```
##
```

```
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
```

```
##
```

```
## filter, lag
```

```
## The following objects are masked from 'package:base':
```

```
##
```

```
## intersect, setdiff, setequal, union
```

```
library(tidyr)
library(dplyr)
library(readr)
```

Section 2

```
#I used the read csv function from readr package
```

```
data<-read.csv("C:\\Users\\emily.zhao\\Documents\\generic_ballot_polls.csv")
```

Section 3

```
#I leave the columns I want to keep as only channels, sponsors, date and numbers of voters
```

```
data_selected<-data%>%select(pollster,sponsors,fte_grade,start_date,end_date,created_at,dem,rep,sample_
```

```
#rename some columns
```

```
data_selected <- data_selected %>% rename(sponsor = sponsors, grade = fte_grade)
```

Section 4

#This dataframe has 367 rows and 10 columns. The names of the columns and a brief description of each a

```
#install.packages("knitr")
library(knitr)
kable(data_selected)
```

pollster	sponsor	grade	start_date	end_date	created_at	tem rep	sample_size	methodology	
Rasmussen (Pulse Opinion Research)	Miranda Devine's LAPTOP FROM HELL	B	6/12/2021	6/21/2022	17/2022 12:44	41.00	46.00	2500	IVR/Online
Suffolk	USA Today	B+	6/12/2021	6/21/2022	17/2022 9:18	40.00	40.00	1000	Live Phone
YouGov	Economist	B+	6/11/2021	6/21/2022	15/2022 9:37	42.00	46.00	749	Online
Beacon Research/Shaw & Company	FOX News	A	6/10/2021	6/21/2022	15/2022 20:12	44.00	47.00	1002	Live Phone
YouGov	Yahoo News	B+	6/10/2021	6/21/2022	17/2022 12:44	38.00	34.00	1541	Online
YouGov	Yahoo News	B+	6/10/2021	6/21/2022	17/2022 12:44	43.00	39.00	1246	Online
Morning Consult	Politico	B	6/10/2021	6/21/2022	15/2022 9:20	44.00	42.00	2005	Online
Rasmussen (Pulse Opinion Research)	Miranda Devine's LAPTOP FROM HELL	B	6/5/2021	6/9/2022	10/2022 10:45	39.00	48.00	2500	IVR/Online
Ipsos	Reuters	B-	6/6/2021	6/7/2022	8/2022 14:34	39.00	37.00	1005	Online
YouGov	Economist	B+	6/4/2021	6/7/2022	8/2022 9:39	43.00	45.00	821	Online
Quinnipiac		A-	6/3/2021	6/6/2022	8/2022 14:09	40.00	44.00	1576	Live Phone
Quinnipiac		A-	6/3/2021	6/6/2022	8/2022 14:09	41.00	46.00	1413	Live Phone
Ipsos	FiveThirtyEight	B-	5/26/2021	6/26/2022	14/2022 13:17	27.00	29.00	1691	Online
Morning Consult	Politico	B	6/4/2021	6/5/2022	8/2022 8:47	42.00	42.00	2006	Online
Engine Insights		B	6/1/2021	6/3/2022	6/2022 9:18	37.40	38.00	1004	Online
Engine Insights		B	6/1/2021	6/3/2022	6/2022 9:18	43.00	43.80	822	Online
Rasmussen (Pulse Opinion Research)	Miranda Devine's LAPTOP FROM HELL	B	5/29/2021	6/22/2022	3/2022 10:50	40.00	48.00	2500	IVR/Online
YouGov	Economist	B+	5/28/2021	6/21/2022	21/2022 9:55	43.00	43.00	776	Online
Rasmussen (Pulse Opinion Research)	Miranda Devine's LAPTOP FROM HELL	B	5/22/2021	6/26/2022	27/2022 12:17	41.00	47.00	2500	IVR/Online
Emerson College Polling Society		A-	5/24/2021	6/25/2022	26/2022 21:08	42.30	45.20	1148	IVR/Online

pollster	sponsor	grade	start_date	end_date	created_at	item rep	sample_size	methodology
YouGov	Economist	B+	5/21/2022	5/24/2022	9:24	22241.00	45.00 908	Online
Echelon Insights		B/C	5/20/2022	5/23/2022	13:20	22246.00	43.00 1020	Online
Echelon Insights		B/C	5/20/2022	5/23/2022	13:20	22245.00	45.00 1020	Online
Morning Consult	Politico	B	5/20/2022	5/22/2022	9:15	22245.00	41.00 2005	Online
YouGov	Yahoo News	B+	5/19/2022	5/22/2022	9:39	22242.00	38.00 1369	Online
YouGov	Yahoo News	B+	5/19/2022	5/22/2022	19:05	22230.00	38.00 1573	Online
Engine Insights		B	5/18/2022	5/20/2022	11:47	22237.30	37.60 1011	Online
Engine Insights		B	5/18/2022	5/20/2022	11:47	22242.90	43.20 825	Online
NewsNation/Decision Desk HQ			5/18/2022	5/19/2022	20:51	22241.15	43.27 1009	Online
Harris Poll	Harvard CAPS	B+	5/18/2022	5/19/2022	20:25	22249.00	51.00 1963	Online
Rasmussen (Pulse Opinion Research)	Miranda Devine's LAPTOP FROM HELL	B	5/15/2022	5/19/2022	11:34	22239.00	48.00 2500	IVR/Online
YouGov	Economist	B+	5/15/2022	5/17/2022	10:09	22243.00	40.00 952	Online
Morning Consult	Politico	B	5/13/2022	5/16/2022	9:37	22244.00	42.00 2005	Online
Bullfinch			5/12/2022	5/16/2022	20:07	22242.00	41.00 1200	Online
Bullfinch			5/12/2022	5/16/2022	20:07	22244.00	42.00 1000	Online
Quinnipiac		A-	5/12/2022	5/16/2022	14:09	22242.00	47.00 1586	Live Phone
Quinnipiac		A-	5/12/2022	5/16/2022	14:09	22243.00	47.00 1421	Live Phone
Cygnal Political		B+	5/13/2022	5/15/2022	13:28	22245.10	47.80 5765	Online
Marist	NPR PBS NewsHour	A	5/9/2022	5/13/2022	9:38	22247.00	42.00 1213	Live Phone
YouGov	Economist	B+	5/8/2022	5/10/2022	9:33	22251.00	49.00 1361	Online
Hart Research Associates/Public Opinion Strategies	NBC News	B+	5/5/2022	5/10/2022	13:33	22246.00	46.00 790	Live Phone
Morning Consult	Politico	B	5/6/2022	5/9/2022	8:51	22244.00	42.00 2005	Online
Monmouth U.		A	5/5/2022	5/9/2022	11:10	22244.00	48.00 807	Live Phone
Monmouth U.		A	5/5/2022	5/9/2022	11:10	22243.00	50.00 751	Live Phone
YouGov	UMass Amherst WCVB-TV	B+	5/5/2022	5/9/2022	9:01	22244.00	38.00 1000	Online

pollster	sponsor	grade	start_date	end_date	created_at	item rep	sample size	methodology
OnMessage Inc.	Senate Opportunity Fund	B/C	5/4/2021	5/6/2021	5/9/2022 11:29	44.0045.00	800	Online
Engine Insights		B	5/4/2021	5/6/2021	5/9/2022 12:49	39.2036.80	1008	Online
Engine Insights		B	5/4/2021	5/6/2021	5/9/2022 12:49	45.3042.00	833	Online
TIPP	James Golden	A+	5/4/2021	5/6/2021	5/12/2022 12:51	242.0043.00	1043	Online
YouGov	Yahoo News	B+	5/3/2021	5/6/2021	5/6/2022 20:23	43.0039.00	1215	Online
YouGov	Yahoo News	B+	5/3/2021	5/6/2021	5/11/2022 10:16	237.0033.00	1577	Online
SSRS	CNN	C	5/3/2021	5/5/2021	5/6/2022 16:26	42.0049.00	645	Live Phone/Online
Ipsos	FiveThirtyEight	B-	4/27/2021	5/25/2021	5/17/2022 10:22	227.0029.00	2006	Online
Morning Consult	Politico	B	5/3/2021	5/3/2021	5/4/2022 9:35	43.0043.00	1955	Online
YouGov	Economist	B+	4/30/2021	5/23/2021	5/4/2022 9:45	53.0047.00	1303	Online
Morning Consult	Politico	B	4/29/2021	5/22/2021	5/4/2022 9:28	43.0043.00	2000	Online
Beacon Research/Shaw & Company	FOX News	A	4/28/2021	5/21/2021	5/3/2022 20:06	39.0046.00	1003	Live Phone
SSRS	CNN	C	4/28/2021	5/21/2021	5/6/2022 16:26	44.0045.00	806	Live Phone/Online
Winston	Winning the Issues	A/B	4/26/2021	5/28/2021	5/21/2022 9:26	44.0045.00	1000	Online
ABC/Washington Post		A+	4/24/2021	5/28/2021	5/21/2022 13:24	46.0045.00	907	Live Phone
YouGov	Economist	B+	4/26/2021	5/27/2021	5/27/2022 19:36	242.0039.00	1331	Online
Susquehanna	The Federalist	B+	4/19/2021	5/27/2021	5/28/2022 15:09	239.0049.00	800	Live Phone
Emerson College Polling Society		A-	4/25/2021	5/26/2021	5/28/2022 14:54	240.6046.80	1000	IVR/Online
McLaughlin		C/D	4/22/2021	5/26/2021	5/29/2022 10:22	243.0048.00	1000	Online
Marist	NPR PBS NewsHour	A	4/19/2021	5/26/2021	5/29/2022 10:07	244.0047.00	1162	Live Phone
Morning Consult	Politico	B	4/22/2021	5/25/2021	5/27/2022 9:21	243.0042.00	2004	Online
Quinnipiac		A-	4/21/2021	5/25/2021	5/27/2022 14:14	240.0044.00	1554	Live Phone
Quinnipiac		A-	4/21/2021	5/25/2021	5/27/2022 14:14	242.0045.00	1409	Live Phone
InsiderAdvantage	Center for American Greatness	B	4/21/2021	5/23/2021	5/25/2022 20:37	239.0051.00	750	

pollster	sponsor	grade	start_date	end_date	created_at	item rep	sample_size	methodology
Morning Consult		B	4/20/2022	4/23/2022	2022	42.0036.00	4410	Online
				10:14				
Engine Insights		B	4/20/2022	4/26/2022	2022	37.0037.10	1005	Online
				19:46				
Engine Insights		B	4/20/2022	4/26/2022	2022	44.2042.20	817	Online
				19:46				
YouGov	Yahoo News	B+	4/19/2022	4/26/2022	2022	37.0034.00	1605	Online
				20:13				
YouGov	Yahoo News	B+	4/19/2022	4/26/2022	2022	44.0040.00	1187	Online
				20:13				
Harris Poll	Harvard CAPS	B+	4/20/2021	4/25/2022	2022	50.0050.00	1966	Online
				9:27				
Trafalgar Group		A-	4/18/2022	4/21/2022	2022	39.4048.10	1077	IVR/Online/Text/Live
				13:21				Phone
Echelon Insights		B/C	4/18/2022	4/22/2022	2022	45.0047.00	1001	Online
				14:40				
Echelon Insights		B/C	4/18/2022	4/22/2022	2022	46.0046.00	1001	Online
				14:40				
YouGov	Economist	B+	4/16/2021	4/20/2022	2022	43.0038.00	1258	Online
				9:13				
NewsNation/Decision			4/17/2021	4/20/2022	2022	39.7040.70	1038	Online
Desk HQ				9:47				
Cygnal Political		B+	4/15/2021	4/22/2022	2022	45.0047.40	5846	Online
				13:25				
POS	Americans for Prosperity	A-	4/12/2021	4/21/2022	2022	49.0051.00	1500	Online
				20:58				
Morning Consult	Politico	B	4/15/2021	4/19/2022	2022	43.0042.00	2005	Online
				9:58				
Rasmussen (Pulse Opinion Research)	Miranda Devine's LAPTOP FROM HELL	B	4/10/2021	4/21/2022	2022	39.0047.00	2500	IVR/Online
				15:18				
YouGov	Economist	B+	4/9/2021	4/12/2022	2022	42.0039.00	1303	Online
				15:39				
Morning Consult	Politico	B	4/8/2021	4/11/2022	2022	40.0043.00	2005	Online
				8:36				
Engine Insights		B	4/6/2021	4/26/2022	2022	40.7035.90	1013	Online
				19:46				
Engine Insights		B	4/6/2021	4/26/2022	2022	44.0043.10	814	Online
				19:46				
YouGov	Economist	B+	4/2/2021	4/5/2022	2022	42.0038.00	1287	Online
				10:59				
Morning Consult	Politico	B	4/1/2021	4/6/2022	2022	43.0043.00	2003	Online
				7:46				
YouGov	Yahoo News	B+	3/31/2021	4/11/2022	2022	36.0034.00	1618	Online
				12:31				
YouGov	Yahoo News	B+	3/31/2021	4/11/2022	2022	44.0041.00	1233	Online
				12:31				
Quinnipiac		A-	3/31/2021	4/6/2022	2022	43.0044.00	1436	Live Phone
				16:30				
Quinnipiac		A-	3/31/2021	4/6/2022	2022	43.0047.00	1280	Live Phone
				16:30				

pollster	sponsor	grade	start_date	end_date	created_at	tem_rep	sample_size	methodology
OnMessage Inc.	Senate Opportunity Fund	B/C	3/29/2022	3/31/2022	3/26/2022 7:46	43.0046.00	800	Online
YouGov	Economist	B+	3/26/2022	3/29/2022	3/23/2022 9:06	241.0039.00	1313	Online
Morning Consult	Politico	B	3/25/2022	3/27/2022	3/23/2022 8:46	242.0041.00	2006	Online
Engine Insights		B	3/25/2022	3/27/2022	3/26/2022 19:46	237.8038.40	1024	Online
Engine Insights		B	3/25/2022	3/27/2022	3/26/2022 19:46	245.0042.30	839	Online
co/efficient		B/C	3/25/2022	3/25/2022	3/28/2022 20:06	234.0040.00	963	Text
Harris Poll	Harvard CAPS	B+	3/23/2022	3/24/2022	3/29/2022 11:16	247.0053.00	1990	Online
NewsNation/Decision Desk HQ			3/21/2022	3/22/2022	3/24/2022 9:31	239.3140.96	1086	Online
YouGov	Economist	B+	3/19/2022	3/22/2022	3/23/2022 11:19	243.0039.00	1270	Online
Hart Research Associates/Public Opinion Strategies	NBC News	B+	3/18/2022	3/22/2022	3/27/2022 13:01	244.0046.00	1000	Live Phone
McLaughlin		C/D	3/17/2022	3/22/2022	3/24/2022 12:51	244.0048.00	1000	Online
Morning Consult	Politico	B	3/18/2022	3/21/2022	3/23/2022 7:56	242.0041.00	2005	Online
Echelon Insights		B/C	3/18/2022	3/21/2022	3/22/2022 14:48	245.0045.00	1050	Online
Echelon Insights		B/C	3/18/2022	3/21/2022	3/23/2022 16:10	245.0044.00	1050	Online
Beacon Research/Shaw & Company	FOX News	A	3/18/2022	3/21/2022	3/23/2022 20:19	241.0043.00	1004	Live Phone
U. Massachusetts - Lowell		B+	3/15/2022	3/21/2022	3/24/2022 9:31	242.0040.00	873	Online
Hofstra University		B/C	3/11/2022	3/21/2022	3/30/2022 11:55	250.6349.28	2000	Online
Emerson College Polling Society		A-	3/18/2022	3/20/2022	3/22/2022 9:31	241.8047.10	1023	IVR/Online
Cygnal Political		B+	3/17/2022	3/21/2022	3/28/2022 19:48	245.9046.70	5645	Online
OnMessage Inc.	Senate Opportunity Fund	B/C	3/15/2022	3/21/2022	3/23/2022 7:57	244.0047.00	800	Online
Rasmussen (Pulse Opinion Research)	Miranda Devine's LAPTOP FROM HELL	B	3/13/2022	3/21/2022	3/28/2022 11:12	239.0050.00	2500	IVR/Online
Winston	Winning the Issues	A/B	3/12/2022	3/21/2022	3/27/2022 19:51	244.0045.00	1000	Online
Morning Consult	Politico	B	3/11/2022	3/21/2022	3/26/2022 9:32	242.0043.00	2005	Online

pollster	sponsor	grade	start_date	end_date	created_at	item rep	sample_size	methodology
YouGov	Yahoo News	B+	3/10/2021	3/24/2022	2/15/2022	36.00	33.00 1623	Online
					9:52			
YouGov	Yahoo News	B+	3/10/2021	3/24/2022	2/15/2022	42.00	38.00 1225	Online
					9:52			
Monmouth U.		A	3/10/2021	3/24/2022	2/17/2022	46.00	45.00 809	Live Phone
					14:35			
Monmouth U.		A	3/10/2021	3/24/2022	2/17/2022	46.00	46.00 746	Live Phone
					14:36			
SocialSphere	Murmuration	B/C	3/6/2021	3/14/2022	2/25/2022	40.00	41.00 6565	Online
					20:53			
Pew		B/C	3/7/2021	3/13/2022	2/24/2022	43.00	43.00 9021	Online
					15:01			
Engine Insights		B	3/9/2021	3/11/2022	2/26/2022	36.50	38.50 1009	Online
					19:46			
Engine Insights		B	3/9/2021	3/11/2022	2/26/2022	41.90	44.40 823	Online
					19:46			
InsiderAdvantage	Center for American Greatness	B	3/7/2021	3/8/2022	2/15/2022	40.00	48.00 750	IVR/Live Phone
					14:01			
YouGov	Economist	B+	3/5/2021	3/8/2022	2/9/2022	44.00	39.00 1227	Online
					8:35			
Fabrizio/Impact	Wall Street Journal		3/2/2021	3/7/2022	2/11/2022	41.00	46.00 1500	Live Phone/Online
					9:51			
Morning Consult	Politico	B	3/4/2021	3/6/2022	2/9/2022	43.00	41.00 2005	Online
					8:09			
Cor Services, Inc.	Foundation for Government Accountability		3/1/2021	3/3/2022	2/29/2022	42.00	43.00 524	IVR
					20:17			
YouGov	Economist	B+	2/26/2021	3/21/2022	2/2/2022	42.00	38.00 1205	Online
					9:59			
Morning Consult	Politico	B	2/25/2021	3/27/2022	2/2/2022	42.00	41.00 2004	Online
					9:59			
YouGov	Yahoo News	B+	2/24/2021	3/27/2022	2/21/2022	36.00	33.00 1532	Online
					9:33			
YouGov	Yahoo News	B+	2/24/2021	3/27/2022	2/21/2022	42.00	39.00 1169	Online
					9:33			
Engine Insights		B	2/23/2021	3/25/2022	2/26/2022	38.50	36.70 1007	Online
					19:46			
Engine Insights		B	2/23/2021	3/25/2022	2/26/2022	44.50	41.20 811	Online
					19:46			
Harris Poll	Harvard CAPS	B+	2/23/2021	3/24/2022	2/25/2022	49.00	51.00 2026	Online
					21:06			
NewsNation/Decision Desk HQ			2/23/2021	3/24/2022	2/28/2022	38.92	41.94 1046	Online
					9:44			
OnMessage Inc.	Senate Opportunity Fund	B/C	2/23/2021	3/24/2022	2/21/2022	45.00	43.00 802	Online
					13:17			
ABC/Washington Post		A+	2/20/2021	3/24/2022	2/27/2022	42.00	49.00 904	Live Phone
					12:57			
Echelon Insights		B/C	2/19/2021	3/23/2022	2/24/2022	45.00	44.00 1078	Online
					15:14			

pollster	sponsor	grade	start_date	end_date	created_at	item rep	sample_size	methodology
Bullfinch			2/19/2022	2/23/2022	20225/2022	39.00	40.00 1247	Online
					21:06			
Bullfinch			2/19/2022	2/23/2022	20225/2022	41.00	42.00 1044	Online
					21:06			
YouGov	Economist	B+	2/19/2022	2/22/2022	20223/2022	44.00	38.00 1290	Online
					9:31			
Beacon Research/Shaw & Company McLaughlin	FOX News	A	2/19/2022	2/22/2022	20225/2022	45.00	49.00 1001	Live Phone
					21:06			
		C/D	2/16/2022	2/22/2022	20224/2022	45.00	47.00 1000	Online
					14:58			
Morning Consult	Politico	B	2/19/2022	2/21/2022	20223/2022	45.00	41.00 2005	Online
					9:18			
Emerson College Polling Society Suffolk		A-	2/19/2022	2/20/2022	20222/2022	41.40	49.90 1138	IVR/Online/Text
					9:05			
	USA Today	B+	2/16/2022	2/20/2022	20228/2022	38.90	37.30 1000	Live Phone
					9:26			
Rasmussen (Pulse Opinion Research)	Miranda Devine's LAPTOP FROM HELL	B	2/13/2022	2/17/2022	20218/2022	37.00	50.00 2500	IVR/Online
					10:37			
Winston	Winning the Issues	A/B	2/15/2022	2/16/2022	20227/2022	44.00	44.00 1000	Online
					19:51			
YouGov	Economist	B+	2/12/2022	2/15/2022	20216/2022	42.00	37.00 1231	Online
					10:36			
Quinnipiac		A-	2/10/2022	2/14/2022	20216/2022	43.00	45.00 1321	Live Phone
					14:02			
Quinnipiac		A-	2/10/2022	2/14/2022	20216/2022	44.00	46.00 1172	Live Phone
					14:02			
Morning Consult	Politico	B	2/12/2022	2/13/2022	20216/2022	41.00	43.00 2005	Online
					8:10			
Engine Insights		B	2/9/2022	2/11/2022	20226/2022	39.20	35.50 1007	Online
					19:46			
Engine Insights		B	2/9/2022	2/11/2022	20226/2022	44.50	41.50 813	Online
					19:46			
OnMessage Inc.	Senate Opportunity Fund	B/C	2/8/2022	2/10/2022	20215/2022	42.00	45.00 800	Online
					20:48			
Susquehanna	The Federalist	B+	2/3/2022	2/9/2022	20211/2022	41.00	47.00 800	Live Phone
					13:22			
YouGov	Economist	B+	2/5/2022	2/8/2022	20229/2022	43.00	39.00 1255	Online
					10:36			
POS	Citizens for Responsible Energy Solutions	A-	2/4/2022	2/8/2022	20221/2022	43.00	41.00 1000	Online
					10:34			
Ipsos	Reuters	B-	1/31/2022	2/27/2022	20217/2022	42.00	34.00 4404	Online
					9:21			
Morning Consult	Politico	B	2/5/2022	2/6/2022	20229/2022	42.00	43.00 2005	Online
					8:09			
Trafalgar Group	Convention of States Action	A-	2/2/2022	2/6/2022	20214/2022	41.90	54.40 1073	IVR/Online/Text/Live Phone
					20:34			
SSRS	CNN	C	1/10/2022	2/6/2022	20211/2022	43.00	44.00 1257	Live Phone/Online
					9:41			

pollster	sponsor	grade	start_date	end_date	created_at	item rep	sample size	methodology
YouGov	Economist	B+	1/29/2022	2/2/2022	10:34	44.0038.00	1273	Online
Morning Consult	Politico	B	1/28/2022	2/2/2022	7:52	44.0041.00	2005	Online
Engine Insights		B	1/26/2022	2/26/2022	19:46	238.1037.40	1003	Online
Engine Insights		B	1/26/2022	2/26/2022	19:46	244.1043.80	808	Online
OnMessage Inc.	Senate Opportunity Fund	B/C	1/25/2022	2/2/2022	7:52	43.0047.00	800	Online
Cygnal Political		B+	1/25/2022	2/8/2022	16:05	44.8047.10	5837	Online
YouGov	Economist	B+	1/22/2022	2/26/2022	10:05	242.0038.00	1249	Online
Zogby		B-	1/21/2022	2/23/2022	9:39	43.7041.90	897	Online
Monmouth U.		A	1/20/2022	2/26/2022	11:10	243.0050.00	794	Live Phone
Monmouth U.		A	1/20/2022	2/26/2022	11:10	243.0051.00	735	Live Phone
Morning Consult	Politico	B	1/22/2022	2/26/2022	10:05	242.0042.00	2005	Online
InsiderAdvantage	Center for American Greatness	B	1/21/2022	2/25/2022	10:27	242.0049.00	850	IVR/Live Phone
Echelon Insights		B/C	1/21/2022	2/26/2022	18:47	246.0041.00	1029	Online
Harris Poll	Harvard CAPS	B+	1/19/2022	2/24/2022	19:48	247.0053.00	1815	Online
Beacon Research/Shaw & Company	FOX News	A	1/16/2022	2/23/2022	12:42	243.0044.00	1001	Live Phone
YouGov	Economist	B+	1/15/2022	2/19/2022	9:17	243.0039.00	1153	Online
Hart Research Associates/Public Opinion Strategies	NBC News	B+	1/14/2022	2/23/2022	12:42	247.0046.00	790	Live Phone
McLaughlin		C/D	1/13/2022	2/19/2022	17:32	243.0048.00	1000	Online
Echelon Insights	NetChoice	B/C	1/14/2022	2/20/2022	16:42	243.0044.00	1000	Online
Morning Consult	Politico	B	1/15/2022	2/19/2022	9:17	241.0042.00	2005	Online
Trafalgar Group		A-	1/12/2022	2/20/2022	12:52	242.4055.60	1077	IVR/Online/Text/Live Phone
Engine Insights		B	1/12/2022	2/26/2022	19:46	239.8034.70	1014	Online
Engine Insights		B	1/12/2022	2/26/2022	19:46	242.5041.60	831	Online
Rasmussen (Pulse Opinion Research)		B	1/9/2022	2/13/2022	12:54	239.0048.00	2500	IVR/Online

pollster	sponsor	grade	start_date	end_date	created_at	item rep	sample_size	methodology
YouGov	Economist	B+	1/8/2022	11/20/2022	12/22/2022	42.00	37.00 1258	Online
				9:21				
NewsNation/Decision Desk HQ			1/10/2022	10/20/2022	11/30/2022	39.70	45.20 1013	Online
				9:25				
Quinnipiac		A-	1/7/2022	10/20/2022	12/22/2022	42.00	43.00 1313	Live Phone
				14:18				
Quinnipiac		A-	1/7/2022	10/20/2022	12/22/2022	43.00	44.00 1178	Live Phone
				14:18				
Morning Consult	Politico	B	1/8/2022	10/9/2022	12/22/2022	44.00	41.00 2000	Online
				8:56				
RMG Research		B-	1/3/2022	10/4/2022	12/10/2022	40.00	42.00 1200	IVR/Online/Text
				14:53				
YouGov	Economist	B+	1/2/2022	10/4/2022	12/5/2022	42.00	38.00 1201	Online
				9:26				
Winston	Winning the Issues	A/B	1/2/2022	10/4/2022	12/31/2022	44.00	46.00 1000	Online
				13:06				
Suffolk	USA Today	B+	12/27/2021	130/20/2022	1/24/2022	38.50	37.30 1000	Live Phone
				9:10				
Zogby		B-	12/21/2021	122/20/2022	12/23/2022	42.50	42.80 1311	Online
				9:45				
YouGov	Economist	B+	12/19/2021	121/20/2022	12/22/2022	43.00	36.00 1315	Online
				9:12				
Morning Consult	Politico	B	12/18/2021	120/20/2022	12/22/2022	41.00	41.00 1998	Online
				8:42				
Change Research	CNBC	B-	12/17/2021	120/20/2022	12/24/2022	45.00	44.00 1895	Online
				9:10				
YouGov	UMass Amherst	B+	12/14/2021	120/20/2022	12/23/2022	42.00	37.00 1000	Online
				12:00				
YouGov	UMass Amherst	B+	12/14/2021	120/20/2022	12/23/2022	42.00	40.00 900	Online
				12:00				
InsiderAdvantage	Center for American Greatness	B	12/17/2021	119/20/2022	12/20/2022	43.00	48.00 750	
				13:14				
John Zogby Strategies		B/C	12/17/2021	117/20/2022	12/22/2022	43.50	39.60 777	Online
				11:46				
Ipsos	Reuters	B-	12/13/2021	117/20/2022	12/30/2022	40.00	33.00 4407	Online
				9:27				
YouGov	Economist	B+	12/12/2021	114/20/2022	12/15/2022	42.00	38.00 1267	Online
				9:04				
Beacon Research/Shaw & Company	Fox Business	A	12/11/2021	114/20/2022	12/15/2022	39.00	43.00 1002	Live Phone
				20:26				
Rasmussen (Pulse Opinion Research)		B	12/8/2021	114/20/2022	12/16/2022	39.00	48.00 2500	IVR/Online
				13:02				
Morning Consult	Politico	B	12/11/2021	113/20/2022	12/15/2022	43.00	42.00 1998	Online
				9:04				
Echelon Insights		B/C	12/9/2021	113/20/2022	12/14/2022	47.00	45.00 1020	Online
				14:03				
YouGov	Yahoo News	B+	12/9/2021	113/20/2022	12/27/2022	39.00	31.00 1558	Online
				9:01				
YouGov	Yahoo News	B+	12/9/2021	113/20/2022	12/27/2022	44.00	35.00 1163	Online
				9:01				

pollster	sponsor	grade	start_date	end_date	created_at	item_rep	sample_size	methodology
RMG Research		B-	12/8/2021	11/20/2021	11/20/2021 10:22	38.00	44.00	1200 IVR/Online/Text
Schoen Cooperman		B/C	12/2/2021	9/20/2021	9/21/2021 20:00	15.00	48.00	800 Online/Text
YouGov	Economist	B+	12/4/2021	7/20/2021	7/21/2021 9:13	142.00	39.00	1265 Online
Morning Consult	Politico	B	12/4/2021	6/20/2021	6/21/2021 9:34	144.00	41.00	2000 Online
Hart Research Associates/Public Opinion Strategies	CNBC	B+	12/1/2021	4/20/2021	4/21/2021 9:42	134.00	44.00	800 Live Phone
Harris Poll	Harvard CAPS	B+	11/30/2021	12/20/2021	12/21/2021 20:29	150.00	50.00	1989 Online
Cor Services, Inc.	Foundation for Government Accountability		11/29/2021	11/20/2021	11/26/2021 14:28	237.00	45.00	523 IVR
RMG Research		B-	11/29/2021	130/2021	10/20/2021 14:58	235.00	38.00	1200 IVR/Online/Text
YouGov	Economist	B+	11/27/2021	130/2021	11/20/2021 9:13	142.00	37.00	1272 Online
YouGov	Economist	B+	11/20/2021	123/2021	124/2021 9:15	140.00	40.00	1249 Online
Fabrizio/Impact	Wall Street Journal		11/16/2021	122/2021	12/17/2021 13:43	141.00	44.00	1500 Live Phone/Online
POS	Conservative Energy Network	A-	11/18/2021	121/2021	12/18/2021 9:13	142.00	40.00	1000 Online
YouGov	Yahoo News	B+	11/17/2021	119/2021	11/20/2021 13:15	138.00	32.00	1696 Online
YouGov	Yahoo News	B+	11/17/2021	119/2021	11/20/2021 13:15	143.00	39.00	1307 Online
Marist	NPR	A	11/16/2021	119/2021	124/2021 8:30	146.00	41.00	969 Live Phone
Echelon Insights		B/C	11/12/2021	118/2021	11/19/2021 14:55	146.00	44.00	1013 Online
Echelon Insights		B/C	11/12/2021	118/2021	11/19/2021 14:55	149.00	44.00	839 Online
YouGov	Economist	B+	11/14/2021	116/2021	11/17/2021 9:18	142.00	38.00	1299 Online
McLaughlin		C/D	11/11/2021	116/2021	11/19/2021 14:55	144.00	48.00	1000 Online
Morning Consult	Politico	B	11/13/2021	115/2021	11/17/2021 8:37	143.00	43.00	1998 Online
Quinnipiac		A-	11/11/2021	115/2021	11/18/2021 9:02	138.00	46.00	1378 Live Phone
Quinnipiac		A-	11/11/2021	115/2021	11/18/2021 9:02	141.00	46.00	1262 Live Phone
Rasmussen (Pulse Opinion Research)		B	11/8/2021	11/20/2021	11/21/2021 12:06	138.00	51.00	2500 IVR/Online
ABC/Washington Post		A+	11/7/2021	11/20/2021	11/24/2021 13:13	143.00	46.00	1001 Live Phone
ABC/Washington Post		A+	11/7/2021	11/20/2021	11/24/2021 13:13	141.00	51.00	882 Live Phone

pollster	sponsor	grade	start_date	end_date	created_at	tem_rep	sample_size	methodology
YouGov	Economist	B+	11/6/2021	9/2021/10/2021	14.00	37.00	1258	Online
Susquehanna	The Federalist	B+	11/1/2021	9/2021/10/2021	32.00	29.00	800	Live Phone
YouGov	Yahoo News	B+	11/4/2021	8/2021/10/2021	36.00	33.00	1673	Online
Morning Consult	Politico	B	11/5/2021	7/2021/10/2021	44.00	42.00	1998	Online
Suffolk	USA Today	B+	11/3/2021	5/2021/7/2021	37.70	45.90	1000	Live Phone
Emerson College Polling Society SSRS		A-	11/3/2021	4/2021/5/2021	42.00	48.70	1000	IVR/Online/Text
SSRS	CNN	C	11/1/2021	4/2021/8/2021	50.00	40.00	1004	Live Phone/Online
SSRS	CNN	C	11/1/2021	4/2021/8/2021	49.00	44.00	859	Live Phone/Online
YouGov	Economist	B+	10/30/2021	12/2021/3/2021	44.00	37.00	1303	Online
Morning Consult	Politico	B	10/29/2021	11/2021/2/2021	42.00	42.00	1996	Online
RMG Research		B-	10/28/2021	130/2021/9/2021	40.00	41.00	1200	IVR/Online/Text
Harris Poll	Harvard CAPS	B+	10/27/2021	128/2021/3/2021	42.00	45.00	1688	Online
YouGov	Economist	B+	10/24/2021	126/2021/27/2021	44.00	38.00	1261	Online
Hart Research Associates/Public Opinion Strategies	NBC News	B+	10/23/2021	126/2021/31/2021	47.00	45.00	820	Live Phone
Echelon Insights	Center for Election Innovation & Research	B/C	10/20/2021	126/2021/18/2021	43.00	43.00	1600	Online
Morning Consult	Politico	B	10/22/2021	124/2021/27/2021	44.00	42.00	1999	Online
Marist	NPR PBS NewsHour	A	10/18/2021	122/2021/1/2021	44.00	41.00	1032	Live Phone
YouGov	Yahoo News	B+	10/19/2021	121/2021/25/2021	37.00	32.00	1704	Online
YouGov	Economist	B+	10/16/2021	119/2021/20/2021	42.00	37.00	1268	Online
Echelon Insights		B/C	10/15/2021	119/2021/20/2021	46.00	42.00	1098	Online
Echelon Insights		B/C	10/15/2021	119/2021/20/2021	46.00	45.00	915	Online
Morning Consult	Politico	B	10/16/2021	118/2021/20/2021	45.00	40.00	1998	Online
McLaughlin		C/D	10/14/2021	118/2021/20/2021	47.00	48.00	1000	Online
Hart Research Associates/Public Opinion Strategies	CNBC	B+	10/14/2021	117/2021/21/2021	43.00	41.00	800	Live Phone

pollster	sponsor	grade	start_date	end_date	created_at	item rep	sample_size	methodology
Cor Services, Inc.	Foundation for Government Accountability		10/12/2021	11/4/2021	2021/10/26 14:28	239.00	49.00 508	IVR
RMG Research		B-	10/11/2021	11/3/2021	10/15/2021 10:51	40.00	41.00 1200	IVR/Online/Text
YouGov	Economist	B+	10/9/2021	11/12/2021	10/13/2021 9:47	45.00	37.00 1266	Online
RMG Research		B-	10/10/2021	11/11/2021	10/21/2021 14:53	40.00	40.00 1200	IVR/Online/Text
Morning Consult	Politico	B	10/8/2021	11/11/2021	10/13/2021 9:03	43.00	41.00 1999	Online
RMG Research		B-	10/6/2021	11/9/2021	10/10/2021 14:53	40.00	41.00 1200	IVR/Online/Text
YouGov	Economist	B+	10/3/2021	11/5/2021	10/6/2021 9:30	43.00	36.00 1261	Online
Morning Consult	Politico	B	10/2/2021	11/4/2021	10/6/2021 8:59	43.00	42.00 1998	Online
Quinnipiac		A-	10/1/2021	11/4/2021	10/5/2021 15:58	43.00	46.00 1326	Live Phone
Quinnipiac		A-	10/1/2021	11/4/2021	10/5/2021 15:58	44.00	47.00 1177	Live Phone
YouGov	Yahoo News	B+	10/1/2021	11/4/2021	10/8/2021 13:58	37.00	31.00 1640	Online
Public Religion Research Institute		A/B	9/16/2021	11/29/2021	10/1/2021 9:37	37.00	29.00 2508	Online
YouGov	Economist	B+	9/26/2021	11/28/2021	10/29/2021 9:52	52.00	48.00 1246	Online
Morning Consult	Politico	B	9/24/2021	11/27/2021	10/29/2021 8:55	45.00	41.00 1999	Online
Marist	NPR PBS NewsHour	A	9/20/2021	11/26/2021	10/30/2021 12:08	46.00	38.00 1029	Live Phone
Lake Research/Emerson College	All in Together		9/22/2021	11/24/2021	10/4/2021 10:39	45.00	41.00 1000	IVR/Online/Text
Echelon Insights		B/C	9/17/2021	11/23/2021	10/24/2021 14:47	47.00	40.00 1005	Online
Echelon Insights		B/C	9/17/2021	11/23/2021	10/24/2021 14:47	50.00	40.00 829	Online
RMG Research		B-	9/22/2021	11/22/2021	10/10/2021 14:53	41.00	40.00 1200	IVR/Online/Text
YouGov	Economist	B+	9/18/2021	11/21/2021	10/22/2021 9:25	52.00	48.00 1281	Online
Morning Consult	Politico	B	9/18/2021	11/20/2021	10/22/2021 8:29	44.00	40.00 1998	Online
Pew		B/C	9/13/2021	11/19/2021	11/12/2021 8:40	45.00	40.00 10371	Online
McLaughlin		C/D	9/9/2021	11/14/2021	10/15/2021 10:41	46.00	47.00 1000	Online
Morning Consult	Politico	B	9/10/2021	11/13/2021	10/15/2021 7:55	43.00	39.00 1997	Online
Quinnipiac		A-	9/10/2021	11/13/2021	10/14/2021 14:56	45.00	42.00 1210	Live Phone

pollster	sponsor	grade	start_date	end_date	created_at	item rep	sample_size	methodology
Quinnipiac		A-	9/10/2020	11/3/2021	11/4/2021	147.00	43.00 1079	Live Phone
					14:56			
YouGov		B+	9/10/2020	11/3/2021	11/5/2021	143.00	37.00 1153	Online
					10:49			
RMG Research		B-	9/10/2020	11/11/2021	11/3/2021	140.00	40.00 1200	IVR/Online/Text
					8:54			
Winston	Winning the Issues	A/B	9/4/2020	11/8/2021	11/22/2021	146.00	43.00 1000	Online
					17:25			
POS		A-	9/1/2020	11/8/2021	11/10/2021	142.00	42.00 800	Live Phone
					14:59			
YouGov	Economist	B+	9/4/2020	11/7/2021	11/8/2021	43.00	37.00 1158	Online
					13:17			
SSRS	CNN	C	8/3/2020	11/7/2021	11/12/2021	145.00	40.00 2119	Live Phone/Online
					12:57			
SSRS	CNN	C	8/3/2020	11/7/2021	11/12/2021	145.00	44.00 1838	Live Phone/Online
					12:57			
Change Research	CNBC	B-	8/30/2020	11/12/2021	11/22/2021	146.00	45.00 1775	Online
					12:48			
Change Research	CNBC	B-	8/30/2020	11/12/2021	11/22/2021	149.00	45.00 1571	Online
					12:48			
YouGov	Economist	B+	8/28/2020	11/31/2021	11/1/2021	45.00	38.00 1171	Online
					9:35			
RMG Research		B-	8/26/2020	11/29/2021	11/1/2021	40.00	40.00 1200	IVR/Online/Text
					8:24			
YouGov	Economist	B+	8/21/2020	11/24/2021	11/26/2021	144.00	37.00 1162	Online
					8:28			
Echelon Insights		B/C	8/13/2020	11/18/2021	11/20/2021	150.00	40.00 1016	Online
					17:25			
Susquehanna	The Federalist	B+	8/12/2020	11/18/2021	11/20/2021	138.00	39.00 800	Live Phone
					8:08			
Schoen Cooperman		B/C	8/10/2020	11/18/2021	11/1/2021	46.00	48.00 750	Online/Text
					13:14			
YouGov	Economist	B+	8/14/2020	11/17/2021	11/26/2021	143.00	38.00 1159	Online
					8:28			
Hart Research Associates/Public Opinion Strategies	NBC News	B+	8/14/2020	11/17/2021	11/22/2021	147.00	46.00 790	Live Phone
					9:12			
Ipsos	Reuters	B-	8/16/2020	11/16/2021	11/18/2021	140.00	37.00 947	Online
					9:29			
YouGov	Economist	B+	8/7/2020	11/10/2021	11/26/2021	145.00	37.00 2306	Online
					8:27			
RMG Research		B-	8/5/2020	11/7/2021	11/11/2021	142.00	40.00 1200	IVR/Online/Text
					11:46			
YouGov	Economist	B+	7/31/2020	11/13/2021	11/26/2021	145.00	37.00 1174	Online
					8:27			
McLaughlin		C/D	7/29/2020	11/13/2021	11/3/2021	146.00	48.00 1000	Online
					15:07			
Quinnipiac		A-	7/27/2020	11/12/2021	11/4/2021	45.00	42.00 1290	Live Phone
					14:11			
Quinnipiac		A-	7/27/2020	11/12/2021	11/4/2021	45.00	44.00 1145	Live Phone
					14:11			

pollster	sponsor	grade	start_date	end_date	created_at	item rep	sample_size	methodology
WPA Intelligence	Club for Growth	B/C	7/20/2021	7/28/2021	7/15/2021	144.00	42.00	1000 Online
YouGov	Economist	B+	7/24/2021	7/27/2021	7/26/2021	143.00	36.00	1178 Online
RMG Research		B-	7/22/2021	7/24/2021	7/27/2021	141.00	38.00	1200 IVR/Online/Text
Echelon Insights		B/C	7/19/2021	7/23/2021	7/26/2021	148.00	41.00	1143 Online
YouGov	Economist	B+	7/17/2021	7/20/2021	7/26/2021	144.00	35.00	1187 Online
YouGov	Economist	B+	7/10/2021	7/13/2021	7/26/2021	144.00	37.00	1159 Online
PEM Management Corporation	John Bolton Super PAC		7/8/2021	7/8/2021	7/20/2021	141.70	42.10	1000 Live Phone
YouGov	Economist	B+	7/3/2021	7/6/2021	7/26/2021	143.00	37.00	1176 Online
YouGov	Economist	B+	6/26/2021	6/29/2021	7/26/2021	144.00	36.00	1198 Online
RMG Research		B-	6/22/2021	6/24/2021	7/30/2021	141.00	38.00	1200 IVR/Online/Text
YouGov		B+	6/19/2021	6/22/2021	7/26/2021	144.00	37.00	1157 Online
Echelon Insights		B/C	6/18/2021	6/22/2021	7/24/2021	146.00	42.00	1001 Online
GQR / Democracy Corps	Democracy Corps	B	6/14/2021	6/21/2021	7/12/2021	46.00	44.00	2000 Online
McLaughlin		C/D	6/16/2021	6/20/2021	7/24/2021	146.00	47.00	1000 Online
Ipsos	Reuters	B-	6/11/2021	6/17/2021	7/18/2021	37.00	30.00	4420 Online
YouGov		B+	6/12/2021	6/15/2021	7/26/2021	141.00	34.00	1196 Online
Winston	Winning the Issues	A/B	6/7/2021	6/10/2021	7/16/2021	46.00	42.00	1000 Online
YouGov		B+	6/5/2021	6/8/2021	7/26/2021	146.00	37.00	1189 Online
Anzalone Liszt Grove	Third Way	B/C	6/2/2021	6/8/2021	7/30/2021	146.00	46.00	1000 Online/Text
Cor Services, Inc.	Foundation for Government Accountability		6/2/2021	6/5/2021	7/26/2021	241.00	37.00	519 IVR
YouGov	Economist	B+	5/29/2021	6/11/2021	7/26/2021	143.00	35.00	1187 Online
YouGov	Economist	B+	5/22/2021	5/25/2021	7/26/2021	146.00	37.00	1135 Online
ALG Research/Hart Research Associates	Americans for Tax Fairness Action Fund		5/20/2021	5/25/2021	7/17/2021	39.00	37.00	805 Online
Quinnipiac		A-	5/18/2021	5/24/2021	7/26/2021	149.00	40.00	1316 Live Phone
Quinnipiac		A-	5/18/2021	5/24/2021	7/26/2021	150.00	41.00	1174 Live Phone

pollster	sponsor	grade	start_date	end_date	created_at	item rep	sample_size	methodology
YouGov	Economist	B+	5/15/2021	5/18/2021	8:26	147.00	38.00 1141	Online
McLaughlin		C/D	5/12/2021	5/18/2021	16:42	146.00	47.00 1000	Online
Echelon Insights		B/C	5/14/2021	5/17/2021	12:19	150.00	40.00 1132	Online
YouGov	Economist	B+	5/8/2021	5/11/2021	8:26	145.00	39.00 1138	Online
Redfield & Wilton Strategies		B/C	5/8/2021	5/9/2021	10:40	141.00	36.00 1500	Online
Redfield & Wilton Strategies		B/C	5/8/2021	5/9/2021	10:40	144.00	37.00 1189	Online
Cygnal Political		B+	5/5/2021	5/9/2021	9:06	143.90	41.40 1030	Online
RMG Research		B-	5/6/2021	5/8/2021	11:01	141.00	40.00 1000	IVR/Online/Text
YouGov		B+	4/24/2021	4/27/2021	8:26	143.00	38.00 1138	Online
YouGov	UMass Amherst WCVB-TV	B+	4/21/2021	4/23/2021	9:19	145.00	38.00 1000	Online
Echelon Insights		B/C	4/16/2021	4/23/2021	12:53	146.00	42.00 1043	Online
YouGov	Economist	B+	4/17/2021	4/20/2021	8:26	145.00	37.00 1168	Online
Hart Research Associates/Public Opinion Strategies	NBC News	B+	4/17/2021	4/20/2021	22:09	147.00	42.00 790	Live Phone
Change Research		B-	4/15/2021	4/20/2021	10:27	148.00	43.00 1025	Online/Text
RMG Research		B-	4/15/2021	4/17/2021	17:21	143.00	39.00 1200	IVR/Online/Text
Ipsos		B-	4/12/2021	4/16/2021	8:47	139.00	31.00 4423	Online
McLaughlin		C/D	4/8/2021	4/13/2021	9:39	146.00	46.40 1000	Online
Winston	Winning the Issues	A/B	4/7/2021	4/11/2021	20:56	45.00	41.00 1000	Online
PEM Management Corporation	John Bolton Super PAC		4/3/2021	4/7/2021	22:33	139.80	42.70 1000	Live Phone
Echelon Insights		B/C	3/15/2021	3/21/2021	13:14	146.00	42.00 1008	Online
LÃ©ger	The Canadian Press	B/C	2/26/2021	2/28/2021	10:49	39.00	31.00 1002	Online
McLaughlin		C/D	2/24/2021	2/28/2021	15:30	46.00	46.00 1000	Online
NRSC	NRSC		2/22/2021	2/25/2021	10:33	139.00	38.00 1200	
GQR / Democracy Corps	Democracy Corps	B	2/18/2021	2/23/2021	13:43	148.00	42.00 1000	Live Phone
GQR / Democracy Corps	Democracy Corps	B	2/18/2021	2/23/2021	13:44	148.00	42.00 1000	Live Phone

pollster	sponsor	grade	start_date	end_date	created_at	dem	rep	sample_size	methodology
GQR / Democracy Corps	Democracy Corps	B	2/18/2021	2/23/2021	10/21/2021	147.00	43.00	1000	Live Phone
Echelon Insights		B/C	2/12/2021	2/18/2021	2/24/2021	144.00	44.00	1005	Online
McLaughlin		C/D	12/9/2020	12/13/2020	2/20/2021	146.00	48.00	1000	
McLaughlin	Newsmax	C/D	11/21/2020	12/23/2020	2/20/2021	145.00	47.00	1000	Online

```
data<-read.csv("C:\\Users\\emily.zhao\\Documents\\generic_ballot_polls.csv")
description<-read.csv("C:\\Users\\emily.zhao\\Documents\\Description.csv")
description <- description %>% rename(Columns = i..Columns)
kable(description)
```

Columns	Description
pollster	the poll name
sponsor	the media sponsor name
grade	FTE grade of voters
start_date	the start date of poll
end_date	the end date of poll
created_at	the poll result is posted
dem	the number of voters voting for democrats
rep	the number of voters voting for republicans
sample_size	The participants of the poll
methodology	which channel participants use to join the poll

Section 5

```
data_selected<-data_selected%>%select(pollster,dem,rep)
summary(data_selected$dem)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  27.00  41.00   43.00   42.81  45.00   53.00
```

```
summary(data_selected$rep)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  29.00  39.00   42.00   42.04  45.95   55.60
```

Visualization 1- Summary plot This provides the summary stats of column in my data like mean, min, max values.

```
# Basic plot
library(ggpubr)

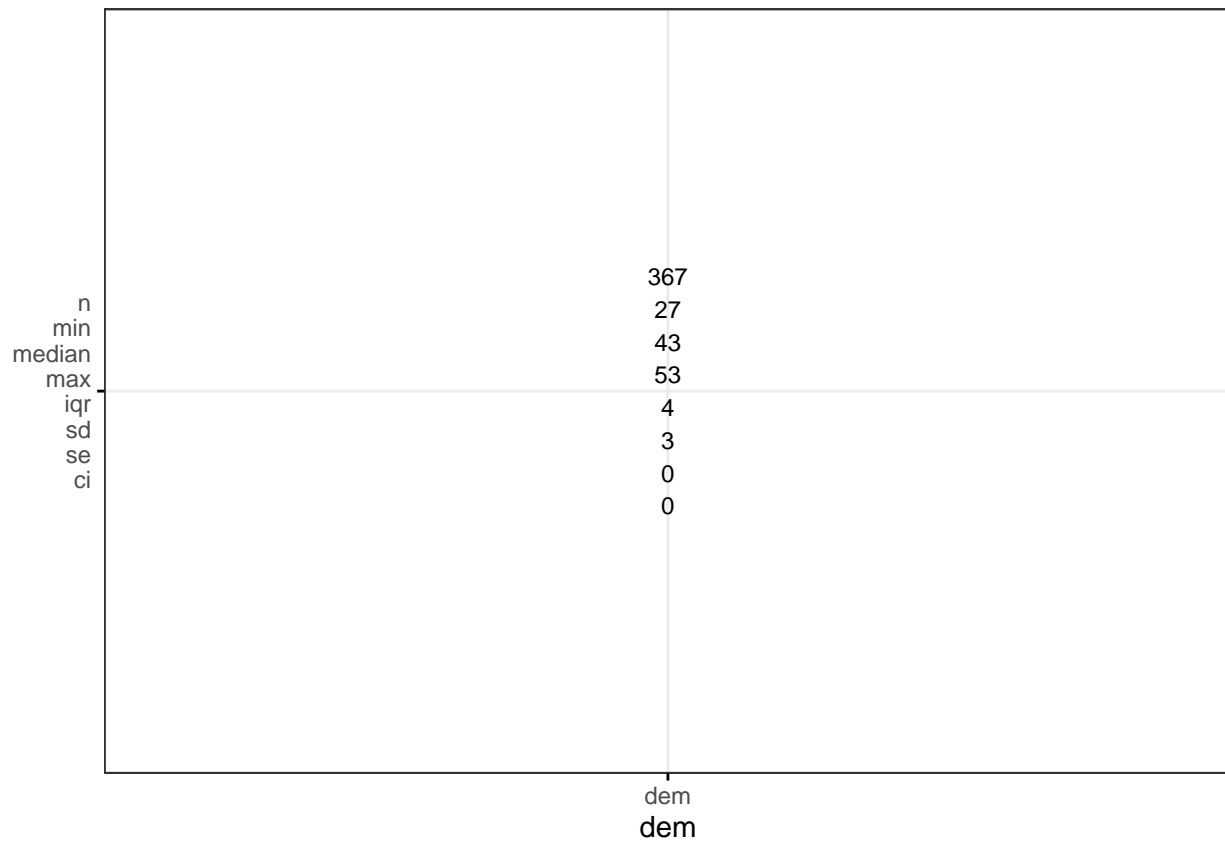
summary.stats <- data_selected %>%select(dem,pollster)%>%
```

```

get_summary_stats(type = "common")

ggsummarytable(
  summary.stats, x = "dem", y = c("n", "min", "median", "max", "iqr", "sd", "se", "ci"),
  ggtheme = theme_bw()
)

```



Group by pollster to see rankings and data summary

```

data_group <- data_selected %>% group_by(pollster) %>%
  summarise(democrat = sum(dem), republican = sum(rep))

summary(data_group$democrat)

```

```

##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   34.00   50.63  166.00  320.64  291.00 3545.00

```

```

sum(is.na(data_group$democrat))

```

```
## [1] 0
```

```
summary(data_group$republican)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    29.00  49.28  174.00  314.90  290.00 3145.00
```

```
sum(is.na(data_group$republican))
```

```
## [1] 0
```

```
democrat_summary<- c(34,3545,320.64,0)
republican_summary<- c(29,3145,314.90,0)
```

```
democrat_summary
```

```
## [1] 34.00 3545.00 320.64 0.00
```

```
republican_summary
```

```
## [1] 29.0 3145.0 314.9 0.0
```

```
data_group$democrat<-round(data_group$democrat, digits = 0)
data_group$republican<-round(data_group$republican, digits = 0)
```

```
kable(data_group)
```

pollster	democrat	republican
ABC/Washington Post	172	191
ALG Research/Hart Research Associates	39	37
Anzalone Liszt Grove	46	46
Beacon Research/Shaw & Company	251	272
Bullfinch	166	165
Change Research	188	177
co/efficient	34	40
Cor Services, Inc.	159	174
Cygnal Political	225	230
Echelon Insights	1110	1033
Emerson College Polling Society	208	238
Engine Insights	903	876
Fabrizio/Impact	82	90
GQR / Democracy Corps	189	171
Harris Poll	334	353
Hart Research Associates/Public Opinion Strategies	355	356
Hofstra University	51	49
InsiderAdvantage	164	196
Ipsos	291	260
John Zogby Strategies	44	40
LÄ©ger	39	31
Lake Research/Emerson College	45	41

pollster	democrat	republican
Marist	227	209
McLaughlin	633	663
Monmouth U.	265	290
Morning Consult	1590	1537
NewsNation/Decision Desk HQ	199	212
NRSC	39	38
OnMessage Inc.	261	273
PEM Management Corporation	82	85
Pew	88	83
POS	176	174
Public Religion Research Institute	37	29
Quinnipiac	953	979
Rasmussen (Pulse Opinion Research)	431	531
Redfield & Wilton Strategies	85	73
RMG Research	602	602
Schoen Cooperman	91	96
SocialSphere	40	41
SSRS	318	306
Suffolk	155	160
Susquehanna	150	164
TIPP	42	43
Trafalgar Group	124	158
U. Massachusetts - Lowell	42	40
Winston	313	306
WPA Intelligence	44	42
YouGov	3545	3145
Zogby	86	85

Visualization 2- Bar Plot This shows the numbers of voters by channel by party.

```
#data_group$democrat<-as.factor(data_group$democrat)
#data_group$democrat<-desc(data_group$democrat)
```

```
data_group%>%
  ggplot(aes(x=democrat,y=pollster))+
  geom_col()
```

