

## HW 5, STAT 450

Due: Wednesday, December 1

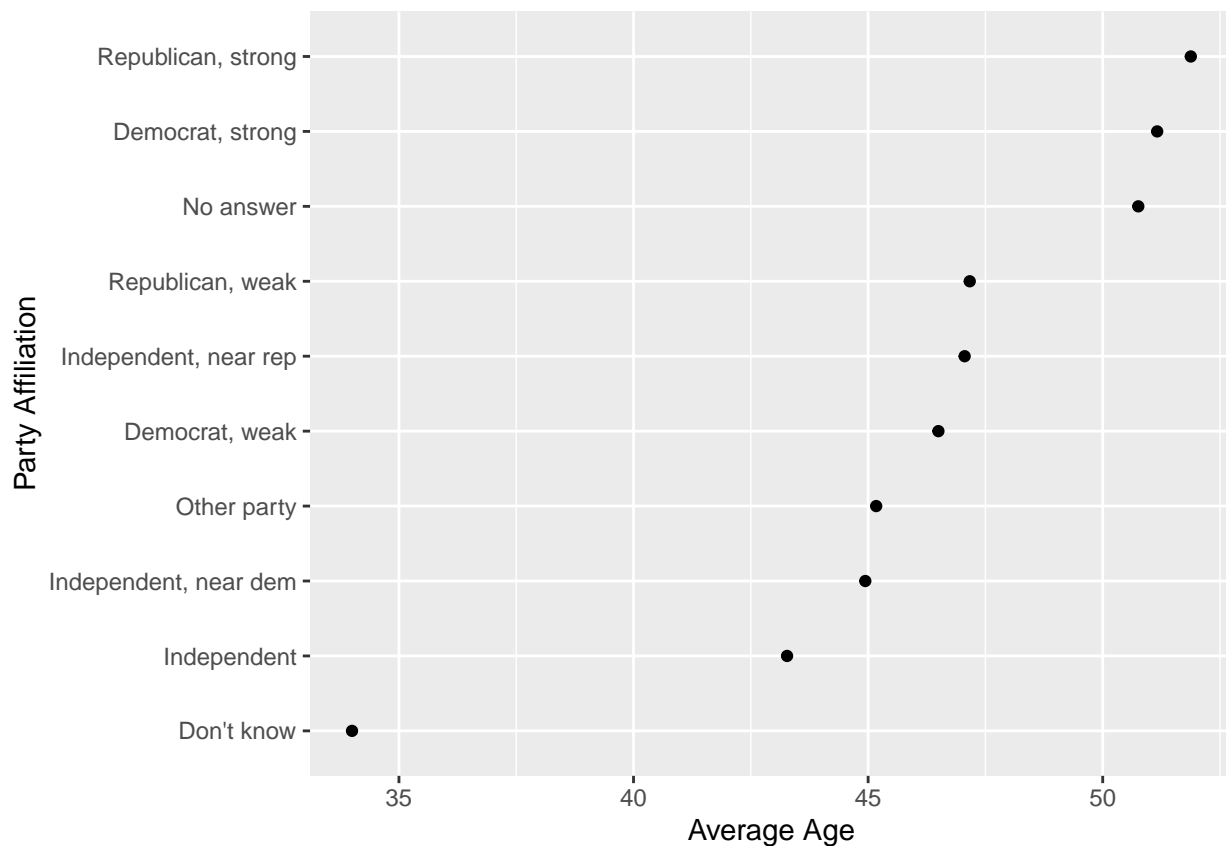
**Reading:** Chapter 15 from *R for Data Science*

```
library(tidyverse)
```

**Exercise 1.** Run the following code to update the factor `partyid` with better names for the levels:

```
gss_cat2 <- gss_cat %>%  
  mutate(partyid = fct_recode(partyid,  
    "Republican, strong"    = "Strong republican",  
    "Republican, weak"     = "Not str republican",  
    "Independent, near rep" = "Ind,near rep",  
    "Independent, near dem" = "Ind,near dem",  
    "Democrat, weak"       = "Not str democrat",  
    "Democrat, strong"     = "Strong democrat"  
  ))
```

Next use `group_by()` and `summarise()` to compute the average age for each category of `partyid`. Then recreate the R code that makes the graph below.



**Exercise 2.** Recreate the R code that makes the graph below. When creating this graph use the data frame `gss_cat2` which has the updated names for the levels of `partyid`.

