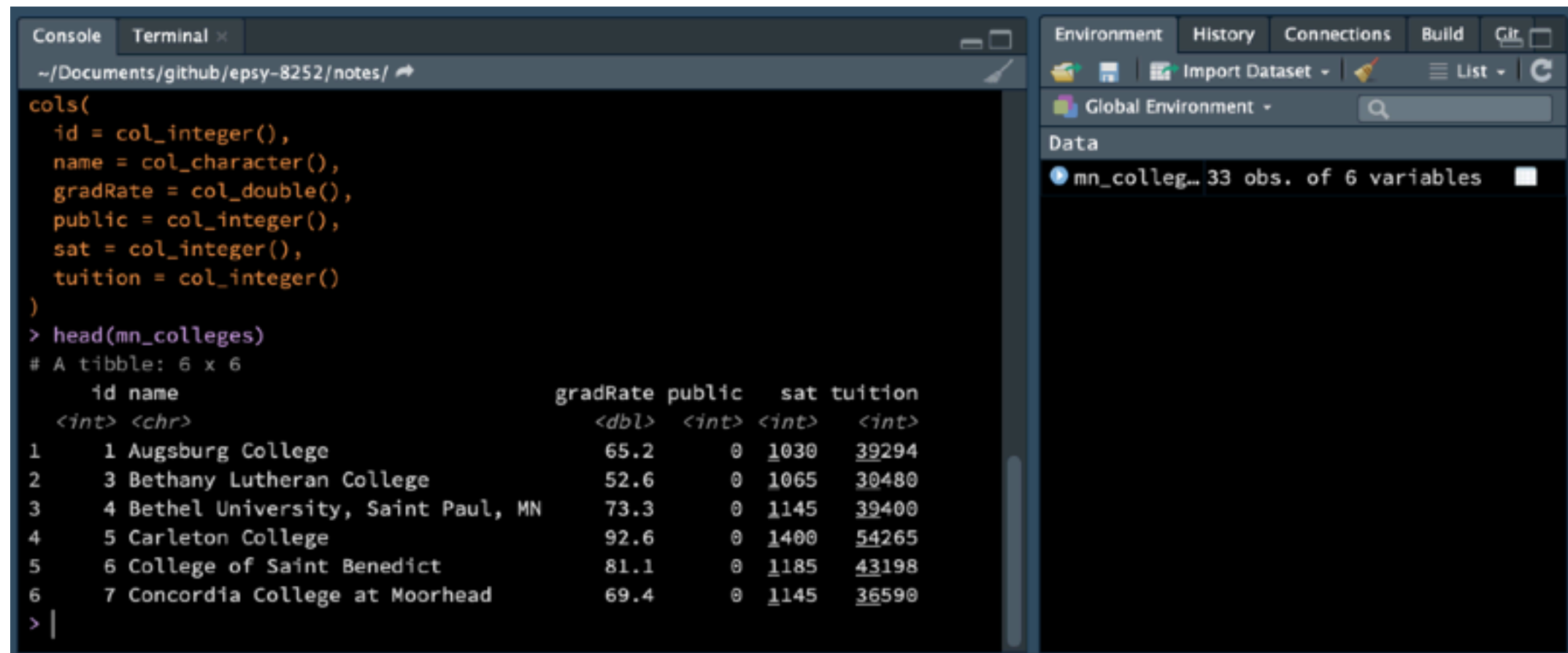


# Environment and Markdown Document Independence



The screenshot shows the RStudio interface. The left pane is a terminal window with the following R code and output:

```
cols(  
  id = col_integer(),  
  name = col_character(),  
  gradRate = col_double(),  
  public = col_integer(),  
  sat = col_integer(),  
  tuition = col_integer()  
)  
> head(mn_colleges)  
# A tibble: 6 x 6  
   id name                                gradRate public  sat tuition  
  <int> <chr>                                <dbl>   <int> <int>   <int>  
1     1 Augsburg College                  65.2     0  1030   39294  
2     3 Bethany Lutheran College          52.6     0  1065   30480  
3     4 Bethel University, Saint Paul, MN  73.3     0  1145   39400  
4     5 Carleton College                   92.6     0  1400   54265  
5     6 College of Saint Benedict           81.1     0  1185   43198  
6     7 Concordia College at Moorhead      69.4     0  1145   36590  
> |
```

The right pane shows the Environment tab with the following content:

Environment History Connections Build Git

Import Dataset

Global Environment

Data

mn\_colleg... 33 obs. of 6 variables

When we create objects, they are stored in the R environment and we can operate on those objects. For example, here we read in some data and assigned it to `mn_colleges`. We then used the `head()` function on `mn_colleges` to display the data.

The screenshot shows the RStudio IDE with a file named 'Untitled.Rmd' open. The editor displays the following R Markdown code:

```
1 ---
2 title: "Hello World"
3 author: "Andrew Zieffler"
4 date: "January 22, 2019"
5 output: html_document
6 ---
7
8 ## R Markdown Fail
9
10 Trying to operate on an object that we created in the R environment, but do not create in our
11 document will lead to an error.
12 ```{r}
13 head(mn_colleges)
14 ```
15
16
```

The status bar at the bottom indicates the current line is 8:1, the document title is '# R Markdown Fail', and the file type is 'R Markdown'.

Below the editor, the 'Console' tab is active, showing the following error message:

```
.../my-first-markdown/Untitled.Rmd
✖ Line 13 Error in head(mn_colleges) : object 'mn_colleges' not found Calls: <Anonymous> ...
  withCallingHandlers -> withVisible -> eval -> eval -> head Execution halted
```

Trying to operate on an object that we created in the R environment, but do not create in our document will lead to an error.