# InClassMarkdown

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#### First Few Rows of Credit Data

```
library(ISLR)
data("Credit")
credit <- Credit
head(credit)
     ID Income Limit Rating Cards Age Education Gender Student Married
## 1 1 14.891
                3606
                         283
                                    34
                                                    Male
                                              11
## 2 2 106.025
                 6645
                         483
                                 3 82
                                              15 Female
                                                             Yes
                                                                     Yes
## 3 3 104.593
                 7075
                         514
                                 4 71
                                                   Male
                                                             No
                                                                     No
## 4 4 148.924
                                 3 36
                 9504
                         681
                                              11 Female
                                                             No
                                                                     No
## 5
     5 55.882
                 4897
                         357
                                 2
                                    68
                                              16
                                                   Male
                                                             No
                                                                     Yes
## 6 6 80.180
                                 4 77
                                              10
                                                   Male
                                                                     No
                 8047
                         569
                                                             No
    Ethnicity Balance
## 1 Caucasian
                   333
## 2
         Asian
                   903
## 3
                   580
         Asian
## 4
         Asian
                   964
## 5 Caucasian
                   331
## 6 Caucasian
                  1151
```

### **Dimensions of Data**

```
dim(credit)
## [1] 400 12
```

### Structure of Credit Data

```
## 'data.frame': 400 obs. of 12 variables:
## $ ID : int 1 2 3 4 5 6 7 8 9 10 ...
## $ Income : num 14 9 106 104 6 148 9 55 9
```

```
$ Income
             : num 14.9 106 104.6 148.9 55.9 ...
              : int 3606 6645 7075 9504 4897 8047 3388 7114 3300 6819 ...
   $ Limit
                     283 483 514 681 357 569 259 512 266 491 ...
   $ Rating
              : int
                     2 3 4 3 2 4 2 2 5 3 ...
##
   $ Cards
              : int
              : int 34 82 71 36 68 77 37 87 66 41 ...
##
   $ Age
  $ Education: int 11 15 11 11 16 10 12 9 13 19 ...
  $ Gender : Factor w/ 2 levels " Male", "Female": 1 2 1 2 1 1 2 1 2 2 ...
##
   $ Student : Factor w/ 2 levels "No", "Yes": 1 2 1 1 1 1 1 1 1 2 ...
  $ Married : Factor w/ 2 levels "No", "Yes": 2 2 1 1 2 1 1 1 2 ...
## $ Ethnicity: Factor w/ 3 levels "African American",..: 3 2 2 2 3 3 1 2 3 1 ...
## $ Balance : int 333 903 580 964 331 1151 203 872 279 1350 ...
```

### Names of Variables

```
names(credit)

## [1] "ID"     "Income"     "Limit"     "Rating"     "Cards"

## [6] "Age"     "Education" "Gender"     "Student"     "Married"

## [11] "Ethnicity" "Balance"
```

## **Education Column**

```
education <- credit$Education
```

# All Columns except id

```
allButId <-credit[,-1]
```

# First Three Rows for Age and Cards

```
ageCards<-credit[1:3,c(6,5)]
```

## **Ethnicity Sample**

```
ethnicSample <- sample(credit[,11],5)</pre>
```