R Skills - data2pdf

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Introduction

The objective is to show the work flow from data collection through output and rendering.

Data

Data is from FRED.

Variable	Description	Units
rate	Weighted-Average Effective Loan Rate by Time that Pric-	percent
	ing Terms Were Set and by Commitment, Before Sur-	
	vey Week, More than 365 Days, All Commercial Banks	
	(EETP365PDNQ)	
prepay	Percent of Value of Loans Subject to Prepayment Penalty	percent
	by Time that Pricing Terms Were Set and by Commitment,	
	Before Survey Week, More than 365 Days, All Commercial	
	Banks (EPTP365PDNQ)	
maturity	Weighted-Average Maturity/Repricing Interval in Days by	days
	Time that Pricing Terms Were Set and by Commitment,	
	Before Survey Week, More than 365 Days, All Commercial	
	Banks (EITP365PDNQ)	
size	Average Loan Size by Time that Pricing Terms Were Set	thousandsUSD
	and by Commitment, Before Survey Week, More than 365	
	Days, All Commercial Banks (EATP365PDNQ)	
volume	Total Value of Loans by Time that Pricing Terms Were Set	millionsUSD
	and by Commitment, Before Survey Week, More than 365	
	Days, All Commercial Banks (EVTP365PDNQ)	

Data Exploration

Read in the data.

```
x.data <- read.csv("data/commloans.csv")
head(x.data)
## date prepaypenalty maturity rate size volume</pre>
```

```
## 1 4/1/2003
                       16.5
                                  124 3.77
                                            449
                                                 11406
## 2 7/1/2003
                        18.1
                                  70 3.09
                                           356
                                                14586
## 3 10/1/2003
                        44.9
                                   48 2.83
                                            532
                                                 21022
## 4 1/1/2004
                        30.4
                                   87 3.06
                                            602
                                                 21472
## 5 4/1/2004
                        23.5
                                   68 2.97
                                            600
                                                 22359
## 6 7/1/2004
                        20.0
                                   80 3.36
                                           593
                                                23780
tail(x.data)
```

```
## date prepaypenalty maturity rate size volume ## 49 4/1/2015 17.8 65 2.47 1151 24620
```

```
## 50 7/1/2015
                          16.9
                                     76 2.30 1405
                                                    30586
## 51 10/1/2015
                                     77 2.31 1534
                                                    36840
                          11.7
## 52 1/1/2016
                          13.6
                                     66 2.43 1317
                                                    36316
## 53 4/1/2016
                                     93 2.63 1227
                          20.6
                                                    24803
## 54 7/1/2016
                          14.5
                                     66 2.41 1460
                                                    40682
summary(x.data)
##
          date
                  prepaypenalty
                                      maturity
                                                           rate
##
   1/1/2004: 1
                  Min.
                         : 8.80
                                   {\tt Min.}
                                           : 40.00
                                                             :2.240
                                                     Min.
##
    1/1/2005: 1
                  1st Qu.:16.95
                                   1st Qu.: 68.25
                                                     1st Qu.:2.482
##
   1/1/2006: 1
                  Median :20.70
                                   Median : 89.00
                                                     Median :2.825
##
   1/1/2007: 1
                  Mean
                          :23.06
                                   Mean
                                          : 95.28
                                                     Mean
                                                             :3.652
##
   1/1/2008: 1
                  3rd Qu.:29.93
                                   3rd Qu.:112.25
                                                     3rd Qu.:4.197
                          :51.90
##
    1/1/2009: 1
                  Max.
                                   Max.
                                           :396.00
                                                     Max.
                                                             :7.410
##
    (Other) :48
##
         size
                          volume
##
   Min.
           : 356.0
                     Min.
                             :11406
##
    1st Qu.: 639.5
                      1st Qu.:15451
##
   Median : 824.5
                      Median :18670
          : 881.7
                             :20824
##
    Mean
                      Mean
##
                      3rd Qu.:24258
    3rd Qu.:1017.8
##
    Max.
           :1715.0
                      Max.
                             :40682
##
```

Analysis

Insert analysis here.

Observations & Recommendations

Insert observations and recommendations summary here.