University of St.Gallen

Penalized Regression

University of St. Gallen
School of Management, Economics, Law,
Social Sciences, International Affairs
and Computer Science

Assignment 2

Data Analytics I: Predictive Econometrics
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Requirements

To solve the following tasks, the required libraries and the data sets are loaded first.

```
library(glmnet)
library(corrplot)

load("GHA/student-mat-train.RData")
load("GHA/student-mat-test.RData")
```

Exercise 1

There are 214 observations in the training data set and 143 observations in the test data set.

```
(n_obs_train <- nrow(train))
```

```
## [1] 214
```

```
(n_obs_test <- nrow(test))
```

```
## [1] 143
```

Exercise 2

The average grade is ~11.64, the minimum grade is 4 and the maximum grade is 19. All numbers were calculated using the training data.

```
(avg_grade <- mean(train$G3))
```

```
## [1] 11.64019
```

```
(min_grade <- min(train$G3))
```

```
## [1] 4
```

```
(max_grade <- max(train$G3))
```

```
## [1] 19
```