STAT361 Laboratory for Advanced R for Data Science

Lab 2

Sidi Wu

January 26/27, 2023

Department of Statistics and Actuarial Science
Simon Fraser University

About Quiz 1

- Due at 5pm on Jan. 27 (Friday)
- Commit and push your R code “mars_SFU_ID.R” to Sandbox folder in “SFUStat360Projects” repository
- “mars_SFU_ID.R” should be based on Lab 1 exercise
- Send your GitHub Credentials to sidi_wu@sfu.ca for access to “SFUStat360Projects” repository if you haven’t done so
- *All test folders/files in Sandbox folder will be removed soon

Group Project

- The Projects directory has been created in “SFUStat360Projects” repository
- Create a folder in the Projects directory of the repository
- Inside your folder create a README.md file that lists the names of your project team members

Office Hours (TBD)

- 10am-11am on Fridays
- (Hybrid) Room K10504 + Zoom
- No more replies to coding questions via email

Lab 2 Exercise

Continue with mars.R

- **Step 1**: Generate a dataset using the given code
- **Step 2**: Apply *`lm()`* and *`step()`* for model fitting & selection
  - *`lm()`*: fit linear models
  - *`step()`*: perform model selection with AIC
  - *Use R help session for more details about the mentioned functions
- **Step 3**: Modify *`mars()`*
  - Add *`lm()`* to *`fwd_stepwise()`*
  - Add *`step()`* to *`bwd_stepwise()`*
  - Test updated *`mars()`* - the output should be the same as that of **Step 2**
- **Step 4**: A debugging practice