# COSC6323 - Exercise 6

### March 2021

## Instructions

#### SUBMIT:

- $1. \ FirstName\_LastName.rmd$
- $2. \ FirstName\_LastName.pdf$

## 1 Task

One aspect of wildlife science is the study of how various habits of wildlife are affected by environmental conditions. In this exercise, we are concerned about the effect of air temperature on the time that the "lesser snow geese" leave their overnight roost sites to fly to their feeding areas. The data is given in Geese.txt.

- 1. Obtain the necessary plots.
- 2. Compute the LM coefficients for the 'time vs temp' model  $(\beta_0, \beta_1)$ .
- 3. Obtain the regression equation.
- 4. Obtain the confidence intervals for  $\beta_1$ .
- 5. Is there correlation between the temperature and time in the Geese data set?