CSC 315, Lab 5: Normal Probabilities

The package *swirl* (http://swirlstats.com) is an *R* package for learning *R* programming and data science concepts in *R*. An extension package, *swirl-tbp*, has been recently developed to provide students with unlimited practice problems in selected topics.

For this assignment, you will use the *swirl-tbp* package to complete practice problems dealing with normally distributed random variables. These practice problems are provided to help you understand this material, but this lab will not be collected. However, several questions on the next Exam will be taken from these practice problems.

1. **Install *swirl* and *swirl-tbp*.** Install *swirl* and *swirl-tbp* by running the following commands from within *R*:

   ```
   # install devtools (this allows you to install packages from github)
   install.packages("devtools")

   # install swirl-tbp
   library(devtools)
   install_github("gdancik/swirl-tbp")
   ```

2. **Download the lesson**. From within *R*, type the following to install the lesson.

   ```
   library(swirl)
   install_course_github("gdancik", "swirl-tbp", "swirl-tbp_example")
   ```

   If you want additional R programming practice, the following lesson is recommended

   ```
   install_course("R_Programming")
   ```

3. **Complete the lesson.** At the start of a new *R* session, you must
   a. Load the *swirl* package by running `library(swirl)`
   b. Type *swirl()* to begin your lesson
   c. Select the *swirl-tbp* lesson, and then *normal probabilities*
   d. Questions are randomly generated, so repeat the lesson (or type *rpt()* to repeat a problem) for additional practice!