

HW 6: Function and Iteration

Practice

1. Write a greeting function that says “good morning”, “good afternoon”, or “good evening”, depending on the time of day. (Hint: use a time argument that defaults to `lubridate::now()`. That will make it easier to test your function.)
2. Write a `fizzbuzz` function. It takes a single number as input. If the number is divisible by three, it returns “fizz”. If it’s divisible by five it returns “buzz”. If it’s divisible by three and five, it returns “fizzbuzz”. Otherwise, it returns the number.
3. For the following toy dataset `exams` in the lecture note, write a function that counts the best exam score twice and then takes the average for each student.

```
set.seed(1000)
exams <- list(
  student1 = round(runif(10, 50, 100)),
  student2 = round(runif(10, 50, 100)),
  student3 = round(runif(10, 50, 100)),
  student4 = round(runif(10, 50, 100)),
  student5 = round(runif(10, 50, 100))
)
```

4. For the toy dataset `exams` above, write a function that replace all the grades less than 70 with 70, and then take the average for each student.
5. Write down your homework in *Rmarkdown* and generate it to a HTML file with your title and your name. Submit it on the Canvas.