

# Homework 3

*Due March 4, 2020 (by 11:59pm)*

## Question 1:

Write a R program to get the mean of the first vector in list **g** (assign it to **a1**) and the mean of the first three elements of the first vector (assign it to **a2**) of the following list. Also write a program to extract the second and the third elements in list **g**.

```
g = list(g1 = c(-0.01, 1.72, -0.52, -1.23, -1.17, 1.08, -1.33, -0.34, 0.57, -0.61), g2 = "R Programming", g3 = "HTML")
```

## Question 2:

Read in the **hsb2** dataset from Blackboard, and then answer the following questions:

1. What is the average **read** score in the dataset (assign it to **b1**) ?
2. What is the average **read** score for those who scored 50 or greater in **math** (assign it to **b2**)? Is it greater or smaller than the overall mean?
3. What is the average difference in **math** scores between individuals whose race is **white** and those whose race is not **white** (assign it to **b3**)?
4. Consider only those students whose **ses** is **high**. What is the average difference in **math** scores between individuals whose race is **white** and those whose race is not **white** (assign it to **b4**)?
5. What percentage of students went to **public** schools (assign it to **b5**)?
6. What percentage of students of low **ses** went to **public** schools (assign it to **b6**)?