1. Although the mean for two groups appears drastically different: Ctl – 18.8 and Ex – 5.7, the p-values indicated by T-test is 0.14 and not statistically significant to reject the null hypothesis, which is the true means of these two groups are the same.

2. A one sided T-test’s null hypothesis is that the sample mean is the same as the true mean. With only one group of data, the function needs a given true mean, as shown in the example : t.test(senior\_data$age, mu = 22).

3.