**Week 8- Discussion**

Examine the test that he did in the video. Should he reject the null hypothesis or should he fail to reject the null hypothesis?

After observing the steps from video, with given data df <-(1,20),  
Ho:mu=10  
p-value=0.7096

conf.int=0.95

alpha=0.05

so, p-value> alpha value, which indicates that we failed to reject null hypothesis

Perform a hypothesis test of your own with some data of your choice, by using the same approach that he used in the video. Describe your data and test. Share your results (rejecting or failing to reject) and give your own impressions about hypothesis testing with R.

df <- seq(5,50,by=5)

> df

[1] 5 10 15 20 25 30 35 40 45 50

> mean(df)

[1] 27.5

> sd(df)

[1] 15.13825

> (a <-t.test(df, alternative = "two.sided", mu=15, conf.int=0.95))

One Sample t-test

data: df

t = 2.6112, df = 9, p-value = 0.02822

alternative hypothesis: true mean is not equal to 15

95 percent confidence interval:

16.67075 38.32925

sample estimates:

mean of x

27.5

The values selected are 5 to 50.

confidence interval: 95

Alpha - 0.05 and p-value: 0.02822. since, my p-value is greater than alpha value we fail to reject the null hypothesis.

Hypothesis testing in R is better than the traditional computation. This will help to minimize the variations caused by human computing.

Graphical user interface, text, application, Word

Description automatically generated