

SESSION 9 – ASSIGNMENT 9.1

Date: 29th Jan 2019

1. Calculate the p-value for the test in Problem no 2.
2. How do you test the proportions and compare against hypothetical props? Test hypothesis: proportion of automatic cars is 40%

```
1 #1. Calculate the P value for the test in Problem 2.
2
3 pnorm(0.4)
4 pnorm(abs(0.4))
5
6 #2. How do you test the proportions and compare against hypothetical props? Test Hypothesis: proportion
7 #of automatic cars is 40%.
8
9 prop.test(table(mtcars$am)[2], nrow(mtcars), p = 0.4, alternative = "less",
10           conf.level = 0.99, correct = FALSE)
```

```
> pnorm(0.4)
[1] 0.6554217
> pnorm(abs(0.4))
[1] 0.6554217
> prop.test(table(mtcars$am)[2], nrow(mtcars), p = 0.4, alternative = "less",
+           conf.level = 0.99, correct = FALSE)
```

1-sample proportions test without continuity correction

```
data: table(mtcars$am)[2] out of nrow(mtcars), null probability 0.4
X-squared = 0.0052083, df = 1, p-value = 0.5288
alternative hypothesis: true p is less than 0.4
99 percent confidence interval:
 0.0000000 0.6070996
sample estimates:
      p
0.40625
> |
```