

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%

```
> cars_auto = subset(mtcars, am == 0)
> cars_manu = subset(mtcars, am == 1)
> t.test(cars_manu$mpg, cars_auto$mpg, paired = F, var.equal = F)
```

Welch Two Sample t-test

```
data: cars_manu$mpg and cars_auto$mpg
t = 3.7671, df = 18.332, p-value = 0.001374
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 3.209684 11.280194
sample estimates:
mean of x mean of y
24.39231 17.14737
```