5/26/2021 Code: Q2-12.sas

```
/*Q2.12*/
```

/* Test statistic value of hypothesis test for slope = -97.42 Test statistic value of confidence interval for F-test = 9490.75

Comparing test statistics' values:

 $(t-value)^2 = F_alpha(1, n-2)$ $(-97.42)^2 = 9490.67$, which is approximately equal to the F(model) value of 9490.75

As shown above, squaring the t-value gives the F(model) value. This is why the F-test and t-test are the same for simple linear regression of 1 independent variable. */