6/5/2021 Code: Q3.b.sas

```
/* Q3 1.b */
data d;
input i x1 x2 y;
x2sq = x2*x2;
cards;
1 1.43 2.79 1.23
2 7.90 5.59 6.12
3 - 3.40 \ 3.58 - 1.90
4 52.87 9.73 44.61
5 54.39 9.32 41.28
6 4.70 0.13 10.56
7 39.68 8.91 34.78
8 21.75 7.03 16.57
9 12.62 6.46 10.09
10 -1.85 2.97 2.01
proc reg data = d;
model y = x1 x2 x2sq;
mytest: test x2=0, x2sq=0;
run;
/* The test statistic = 22.63 and the p-value = 0.0016. Since the p-value is
less than the significance level of 0.01, we reject the null hypothesis and
accept the alternative hypothesis, that at least one of B2, B3 does not equal 0.
Thus, at least one of B2, B3 is significant. */
```