

```
/*Q2.9*/  
data d;  
input x y;  
cards;  
8.3 1.3  
3.4 18.3  
4.5 14.4  
6.0 9.0  
6.1 9.5  
6.4 7.9  
5.8 10.2  
4.8 13.9  
7.1 5.5  
9.1 -1.1  
8.7 0.0  
5.0 12.9  
8.2 2.2  
3.6 17.6  
8.9 -0.2  
5.7 10.7  
6.1 9.4  
5.7 10.5  
4.2 15.1  
4.2 15.9  
;  
proc reg data = d;  
model y=x /alpha=0.01 clb;  
run;  
  
/* For the F-test, the test-statistic is 9490.75 and the p-value is <0.0001. Since the  
p-value < 0.0001 which is less than alpha = 0.01, we reject the null hypothesis and accept the  
alternative hypothesis, that is, B1 is not equal to 0. Since F(model) is large, it means that a high  
proportion of variation is explained by the model and the model is a good fit.*/
```