

```
/*Q2.6*/
```

```
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;
```

```
/* Test-statistic = 134.91 and the p-value < 0.0001
```

```
Interpretation of t-test for y-intercept:
```

```
Because the p-value < 0.0001 is less than alpha = 0.01, we reject the null hypothesis and there is evidence that  
B0 is not 0. */
```