

```
/*Q2.7*/
```

```
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  
7.1 .  
;
```

```
proc reg data = d;  
model y=x /alpha=0.01 p clm cli;  
run;
```

```
/* The prediction value for y given x=7.1 is 5.7032,  
the 99% confidence interval for the mean response is (5.5004, 5.9061)  
and the 99% prediction interval is (4.8927,6.5138) */
```