

```
/*Q3_2 */
data d;
input i x1 x2 y;
x1x2 = x1*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 x1x2;
run;
/* The R^2 value for this model is 0.9874, meaning the model explains 98.74% of the total variation in
the observed data, while the R^2 value for the model in sub-question 1 is 0.9975. Because the model in
sub-question 1 has a higher R^2, it explains more of the data, indicating it is a better fit for the model.*/
```