## Find the machine learning regression using r2 value

- 1. Multiple linear regression (r2 value=0.935)
- 2. Support vector machine:

S.NO	C Parameter	Linear (r value)	Poly (r value)	Rbf (r value)	Sigmoid (r value)
1		0.8950	-0.0571	-0.0574	-0.0572
2	C=0.01	0.933	-0.0574	-0.0574	-0.05748
3	C=10	-2.43	-0.0536	-0.0568	-0.0547
4	C=100	-357.0	-0.0198	-0.0507	-0.0304
5	C=1000	-36014	0.2661	0.0067	0.1856

The svm Regression use r2 value. (C Parameter linear c=0.01=0.933)

## 3. Decision Tree Regression

S.NO	Criterion	Splitter	Max_features	r2 Value
1	Squared_error	best	sqrt	0.4534
2	Squared_error	best	log2	-0.612
3	Squared_error	random	sqrt	0.653
4	Squared_error	random	log2	0.493
5	friedman_mse	best	sqrt	0.354
6	friedman_mse	best	log2	0.762
7	friedman_mse	random	sqrt	0.401
8	friedman_mse	random	log2	0.601
9	absolute_error	best	sqrt	0.716
10	absolute_error	best	log2	0.777
11	absolute_error	random	sqrt	0.402
12	absolute_error	random	log2	0.751
13	poisson	best	sqrt	0.758
<mark>14</mark>	poisson	best	log2	0.862
15	poisson	random	sqrt	0.652
16	poisson	random	log2	0.337

The Decision Tree Regression r2 (poisson,best,log2=0.862)