1) This is the insurance charges prediction based on some parameters.

Inputs and output are in numbers
Requirement is clear
inputs and outputs are labled
Output in numerical
So,

Machine Learning---> Supervised Learning---> Regression

2) Total number of rows, columns = (1338,6)

3) Here we are two columns as string nominal datatype so, we have to convert it to numerical by using " On Hot Encoding " method

4) 1. We are using Linear Regression Algorithm
it's has no hyper tuning parameters so it is has only one model
r_value is 0.78913454847886

2. We are using Support Vector Machine Algorithm

No of Model	kernel	gamma	r_score
1	linear	scale	-0.010195463
2	linear	auto	-0.010195463
3	poly	scale	-0.075717338
4	poly	auto	-0.075717338
5	rbf	scale	-0.083405161
6	rbf	auto	-0.083405161
7	sigmoid	scale	-0.075446385

3. We are using Decision Tree Algorithm

	Hyper Tuning Parameters		
No of Model	criterion	splitter	r_score
1	squared_error	best	0.66305309
2	squared_error	random	0.745286708
3	friedman_mse	best	0.687082124
4	friedman_mse	random	0.720185731
5	absolute_error	best	0.725552763
6	absolute_error	random	0.735108264
7	poisson	best	0.67880449
8	poisson	random	0.67836712

4. We are using Random Forest Algorithm

	Hyper Tuning Parameters			
No of Model	n_estimators	criterion	max_feat	r_score
1	100	squared_error	1	0.945076149
2	100	squared_error	sqrt	0.759211288
3	100	squared_error	log2	0.759211288
4	100	squared_error	None	0.945076149
5	100	absolute_error	1	0.646827123
6	100	absolute_error	sqrt	0.786927265
7	100	absolute_error	log2	0.786927265
8	100	absolute_error	None	0.945908917
9	100	friedman_mse	1	0.597570777
10	100	friedman_mse	sqrt	0.759211288
11	100	friedman_mse	log2	0.759211288
12	100	friedman_mse	None	0.945076149
13	100	poisson	1	0.571779893
14	100	poisson	sqrt	0.773212971
15	100	poisson	log2	0.773212971
16	50	poisson	None	0.946322143

from this data we got the good model from Random Forest Algorithm
And
Hyper tuning parameters (n_estimation=50, criteration='poisson', max_future=None)