To predict the salary of a person when his level is 6.5 by using different algorithms.

From the given dataset: Level – 6 salary = 150000 Level – 7 salary = 200000

SVR

Degree	gamma	Kernel = poly	rdf	sigmoid	precomputed
3	Auto	197014.65	130001.55	129999.99	Error : Precomputed matrix must be a square matrix
	Scale	130477.49	130001.82	129999.84	
4	Auto	175707.67	130001.55	129999.99	
	Scale	134160.63	130001.82	129999.84	
5	Auto	159973.68	130001.55	129999.99	
	Scale	164079.01	130001.82	129999.84	

Random Forest

n_estimators	Criterion -	squared_error	Absolute_error	poisson	Friedman_mse
100	158300		158300	158300	158300
50	161200		161200	161200	161200
10	167000		167000	167000	167000

Decision Tree

Splitter	Criterion -	squared_error	Absolute_error	poisson	Friedman_mse
Random	200000		200000	200000	200000
Best	150000		150000	150000	150000

KNN

n_neighbors	weights	algorithm = ball_tree	auto	brute	kd_tree
3	uniform	153333.33	153333.33	153333.33	153333.33
	distance	165714.28	165714.28	165714.28	165714.28
4	uniform	190000	190000	190000	190000
	distance	182500	182500	182500	182500
5	uniform	168000	168000	168000	168000
	distance	175348.83	175348.83	175348.83	175348.83

Polynomial regression

Degree	Predicted value
2	189498.1
3	133259.46
4	158862.4
5	174878