## Comparisons Between different Algorithm and their Best Model %

## 1. Multiple Linear Regression

R2Score = 0.935868097

## 2. Support Vector Machine

Support Vector Machine							
Kernel	degree	r2 Score	Comments				
poly	1	-0.0572305					
poly	0	-0.0508901					
linear		0.8950779					
rbf		-0.0573173					
sigmoid		-0.057499197					
precomputed			Cannot be Calculated asSVR requires a square kernel matrix as input, but your X_train is a 35x5 matrix (35 samples with 5 features).				

## 3. Decision Tree

Decision Tree							
criterion	splitter	max_depth	r2 Score	Comments			
squared_error	best		0.925401938				
squared_error	random		0.892244364				
friedman_mse	best		0.904269884				
friedman_mse	random		0.422935473				
absolute_error	best		0.949840653	Best Model in Decision Tree			
absolute_error	random	5	0.7408381/0.7569438	Using Maxdepth=5, r2 score improved by 1%			
poisson	best	5	0.9318880/0.9111390	Using Maxdepth=5, r2 score decreased by 2%			
poisson	random		0.672222406				