

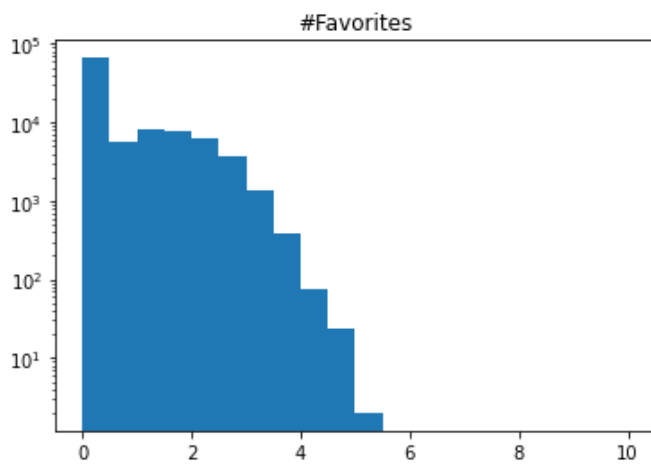
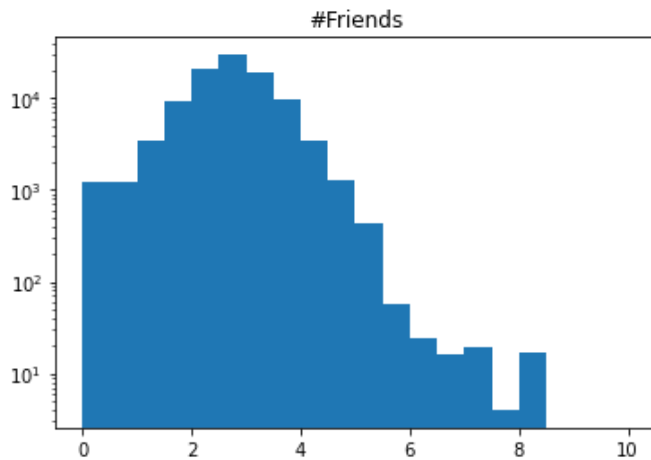
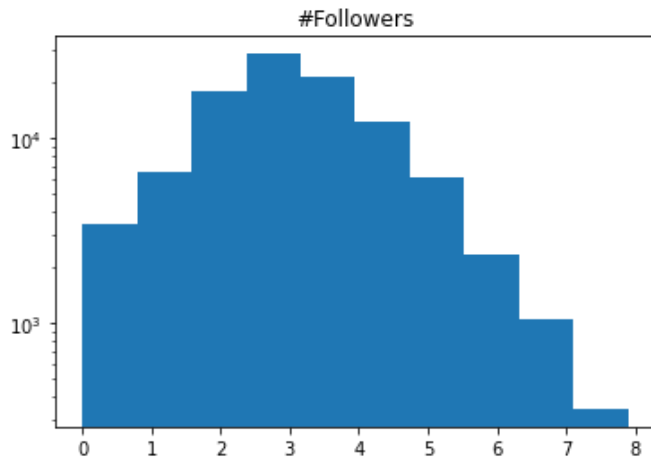
Intro to AI HW2 Outputs

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Visualizations



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Correlation Matrix with respect to #Retweets

	#Retweets
#Followers	0.134503
#Friends	0.026502
#Favorites	0.890328
Positive_sentiment	0.000433
Negative_sentiment	-0.010565
Hour_of_the_Post	-0.009850
#Mentions	-0.015828
#Hashtags	-0.002856

Least Squares Method Performance Metrics

MAE is 17.861671960362546

MSE is 11631.458344394678

R2 Score is 0.7986811923542654

	Features	Predictions
0	#Followers	-1.388267
1	#Friends	2.588393
2	#Favorites	5.117073
3	Positive_sentiment	22.364804
4	Negative_sentiment	-0.608888
5	Hour_of_the_Post	48.648459
6	#Mentions	-0.616327
7	#Hashtags	-0.165251

Ridge Regression Performance Metrics

MAE is 17.861663557212534

MSE is 11631.458344133955

R2 Score is 0.7986811923587781

	Features	Predictions
0	#Followers	-1.388247
1	#Friends	2.588398
2	#Favorites	5.117055
3	Positive_sentiment	22.364835
4	Negative_sentiment	-0.608883
5	Hour_of_the_Post	48.648422
6	#Mentions	-0.616322
7	#Hashtags	-0.165246

Lasso Regression Performance Metrics

MAE is 17.795504611705027

MSE is 11631.531710517213

R2 Score is 0.7986799225237873

	Features	Predictions
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0	#Followers	-1.226571
1	#Friends	2.578041
2	#Favorites	5.066627
3	Positive_sentiment	22.661557
4	Negative_sentiment	-0.616963
5	Hour_of_the_Post	48.491673
6	#Mentions	-0.624412
7	#Hashtags	-0.173176

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Decision Tree Performance Metrics

MAE is 28.536726836341817

MSE is 195353.7937896895

R2 Score is -2.381209102963753

	Features	Predictions
0	#Followers	0.0
1	#Friends	5.0
2	#Favorites	1.0
3	Positive_sentiment	113.0
4	Negative_sentiment	0.0
5	Hour_of_the_Post	26.0
6	#Mentions	0.0
7	#Hashtags	0.0