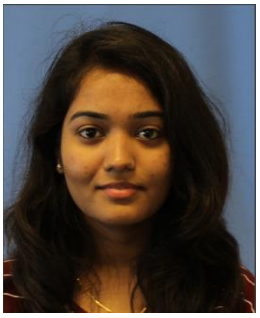
Homework Assignment 06:

STAT 52900	**Presentation Code:** **C2**
Name: ***Swathi Vangala***	**Title:** ***A Bayesian Approach to Property Price Prediction.***
	**Abstract:** In this project, we apply Bayesian methods to model property prices within King County, addressing both the complexities and variability inherent in real estate data. Our approach utilizes Bayesian linear regression with hierarchical modeling, employing Markov Chain Monte Carlo (MCMC) methods for robust estimation of posterior distributions. This methodology enables effective prediction of property prices, considering various influencing factors such as location and property characteristics. The results, derived from analyzing a comprehensive dataset of over 21,000 property listings, offer an innovative and adaptable framework for real estate valuation. The entire analysis is conducted using R, with detailed numerical results and methodology presented in an accessible format.

August 1, 2023