Project name:Bike Sharing Case Study helps us identify the significant independent variables to determine the demand for shared bikes.

**General Information**

A bike-sharing system in which bikes are made available for shared use to individuals on a short term basis for a price or free. It allow people to use a bike from a "dock" which is usually computer-controlled wherein the user enters the payment information, and the system unlocks it. This bike can then be returned to another dock belonging to the same system. Business objective: The objective is to model the demand for shared bikes with the available independent variables. It will be used by the management to understand how exactly the demands vary with different features. They can accordingly manipulate the business strategy to meet the demand levels and meet the customer's expectations. Further, the model will be a good way for management to understand the demand dynamics of a new market.

**Conclusions**

* Conclusion from the analysis #Inference from the model: #
* yr:A coefficient value of 1968.21 indicated that a unit increase in yr variable, increases the bike hire numbers by 1968.21 units.
* #hum: A coefficient value of -2475.44 indicated that a unit increase in temp variable, increases the bike hire numbers by 2475.44 units.
* #temp:A coefficient value of 4919.47 indicated that a unit increase in temp variable, increases the bike hire numbers by 4919.47 units.
* #windspeed:A coefficient value of -1749.21 indicated that, a unit increase in windspeed variable decreases the bike hire numbers by 1749.21 units.
* #season\_2::A coefficient value of 879.13 indicated that a unit increase in season\_2 variable, increases the bike hire numbers by 879.13 units.
* #season\_4::A coefficient value of 1310.27 indicated that a unit increase in season\_4 variable, increases the bike hire numbers by 1310.27 units.
* #mnth\_9::A coefficient value of 1034.27 indicated that a unit increase in mnth\_9 variable, increases the bike hire numbers by 1034.27 units.
* #weathersit\_3::A coefficient value of -1665.04 indicated that, a unit increase in weathersit\_3 variable decreases the bike hire numbers by 1665.04 units.

**Technologies Used**

Python Anaconda Git and Github