Bike Sharing analysis Report:

Target Variable: Target variable ‘cnt’ shows a strong right-skew with some high demand outliers, which are real demand spikes.

Univariate analysis:

Various predictors are converted to factors for better analysis to ensure that the GLM treated them as categorical predictors. This allows the model to estimate separate effects for each category rather than assuming a numeric relationship.

There are no missing values.

All categorical variables were checked for sufficient representations:

* season, yr, mnth, hr, weekday show good balance across levels.
* Holiday occurs infrequently (~ 3% of observations) but is retained due to its operational importance.
* Weathersits shows category 4 (severe weather) with only 3 cases; this may not support stable coefficient estimates and could be combined with category 3 or dropped from the model. In this case we combined with cat 3.

All numeric predictors atemp, temp, humidity, windspeed were examined.

* All variables show reasonable spread within expected normalized ranges.
* Small humidity outliers near zero could be real (e.g. very dry days)
* Some high-end outliers in windspeed were identified; they will be retailed for now as they may represent real conditions but will be monitored for undue influence during model diagnostics.

Multivariate analysis: