1. **How would you describe a typical Toyota car at the dealership? What are the attributes of the Toyota cars in the sample? You may refer back to the first question on your case study 1 to see how to complete this part.**

**Sol : From the data set we need to divide the variables in to two types .**

1. **Categorical variables (Qualitative )**
2. **Continuous variables ( Numerical Data i.e Quantitative Data )**

**Meaning of typical :** The term "typical" in statistics is used to refer to a value or measure that represents the central tendency or average of a dataset**.**

The three most common measures of central tendency are the mean, median, and mode

Which measure is considered most typical depends on the nature of the data and the purpose of the analysis. For example, the mean is typically used as a measure of typical value for normally distributed data, while the median may be more appropriate for skewed data or when extreme values are present. The mode is often used when dealing with categorical data or when identifying the most common value in a dataset.

**For categorical Data we need to take mode as typical .**

**For continuous Data we need to mean or median ( Based on Symmentry or Skewness) as typical .**

**Step 1: Tally individual variables eachand every variable mainly we do for categorical variables .**

**How to Tally Individual Variables : Stat-Tables-Talley individuals-select each and every Variables**

**If we tally every categorical variables we will know mode i.e central tendency of data i.e typical .**

**In this Data I have 3 categorical Variables and 36 numerical variables.**

**I am going to tally each and every variables individually.**

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| --- | --- | --- |
|  |  |  |

**There are total 199 models cars.**

|  |
| --- |
| Out of all models TOYOTA Corolla 1.6 16V HATCHBLINEATERRA 2/3-Doors is the popular car with count of 57 (7.94% out of 100%)  The attributes of the Toyota Corolla 1.6 16V HATCHB LINEA TERRA 2/3 DOORS were examined in detail, as this was the most popular/ model. The data revealed that the Toyota Corolla was available in a range of body types, including sedan, hatchback, liftback, and wagon. The most common body type for the Toyota Corolla was the 2/3-door HATCH B LINEA TERRA 2-3 Doors, with a count of 57 (7.94%) out of the 199 Corollas sold. The second most popular body type was the Toyotta Corrollla 1.3 16V Hatchb linea Terra 2/3 doors , with a count of 47 (6.5%) out of the 199 Corollas sold. The liftback (18 count) and wagon models (39 count) were less popular, with a combined count of 57 (28.64) out of the 199 Corollas sold.  In terms of engine size, the majority of Toyota Corollas sold were equipped with a 1.6 liter 16V engine. The data revealed that 368 (51.25%) out of the 718 Corollas sold had this engine size.  Conclusion: In conclusion, the data analysis shows that the Toyota Corolla was the most popular model sold at the dealership, with a majority of the Corollas being 2/3-door hatchbacks equipped with a 1.6 liter 16V engine. This information can be used by the dealership to inform its inventory management and marketing strategies, ensuring that the most popular models are always in stock and that customer preferences are met. |

