**1. Determine the types of the below-given variables:**

* Age---**Ratio**
* Salary—**Ratio**
* Income—**Ratio**
* Customer type—There could be limited number of customer types, so **Nominal**
* Stock price—**Ratio**

**3. Is it possible to convert categorical variable into numerical one? If so, how can you make that?**

When we convert numerical to categorical the specific data will be lost. However, we may assign numerical values to the categories for representation. This is possible if we already categorized numerical values. However, if we try to convert categorical to numerical which are previously created from non-numerical values, this is not possible. So the answer yes and no…

**4. While continuous data is generally preferred over discrete data, please indicate circumstances where discrete is the preferred data type although continuous data is available for the same characteristic.**

**It is about what kind of or how deep the information is required. Such as we may collect the data of how long the students late for the class (This is continuous). However, if only the number of students who are late for the class is the information required, continues variables must be chosen.**

**5. While continuous data is measured and attribute data is counted, there is sometimes confusion if some specific**[**dataset**](https://lms.magnimindacademy.com/mod/folder/view.php?id=1121)**should be considered continuous or attribute. Provide some examples of confusing**[**datasets**](https://lms.magnimindacademy.com/mod/folder/view.php?id=1097)**and your inference.**

**Even the example given to answer the question 4 could be used, `number of customers opening a bank account at the bank branch during the day` could be an example. In here if we do not need the exact time the clients opened their bank accounts (continues variable), this discrete value or attribute data is sufficient.**