**Statistics Questions:**

**What is Anova in SPSS?**

Analysis of Variance, i.e. ANOVA in SPSS, is used for examining the differences in the mean values of the dependent variable associated with the effect of the controlled independent variables, after taking into account the influence of the uncontrolled independent variables. Essentially, ANOVA in SPSS is used as the test of means for two or more populations.

ANOVA in SPSS must have a dependent variable which should be metric (measured using an interval or ratio scale). ANOVA in SPSS must also have one or more independent variables, which should be categorical in nature. In ANOVA in SPSS, categorical independent variables are called factors. A particular combination of factor levels, or categories, is called a treatment.

**What is the difference between one way Anova and two way Anova?**

The only difference between one-way and two-way ANOVA is the number of independent variables. A one-way ANOVA has one independent variable, while a two-way ANOVA has two.

**Machine Learning:**

**In which situation One-hot encoding must be avoided? Which encoding technique can be used in such a case?**

The number of categories is quite large as one-hot encoding can lead to high memory consumption

We can use Label encoding to avoid such situation