1. What exactly is the difference between descriptive and inferential statistics?

Ans: **Descriptive statistics** is a branch of statistics that organize, analyse and present data in a meaningful way with the use of tools like pi-chart, histogram, bar graph, tables etc. It explains the data, which is already known, to summarize the sample.  
**Inferential statistics** is a branch of statistics that focusses on drawing conclusions about the population based on sample analysis by performing tests, hypothesis and predictions. The conclusions are made to learn about the population that extends beyond the data available.

1. I'm not sure what is the difference between a sample and a population?

Ans: **Population** refers to collection of all elements possessing common characteristic including each unit of the group. It is generally enormous and used to identify the characteristics.  
**Sample** refers to a subgroup or subset of the complete population that is used to make inferences about populations. The way in which sampling is done depends on the knowledge of domain engineer.

1. What distinguishes descriptive statistics from other types of statistics?

Ans: **Descriptive statistics** is a branch of statistics that organize, analyse and present data in a meaningful way with the use of tools like pi-chart, histogram, bar graph, tables etc. It explains the data, which is already known, to summarize the sample. Descriptive statistics summarize and organize characteristic of data set. It is a quantitative analysis, that describes the characteristic of responses such as relation between 2 variables.

1. What is the difference between quantitative and qualitative data?

Ans: **Quantitative data** is numbers-based, countable, or measurable, to which mathematical operations can be performed to analyse the data by performing statistical analysis. Quantitative data is relatively quick and easy to collect, and it is easier to dear conclusions from.  
**Qualitative data** is interpretation based & descriptive which is analysed by grouping them into category and themes. The data is not in statistically represented form and it relies on the expertise of the host.

1. What is the definition of a percentile?

Ans: A percentile is a measure used in statistics indicating the percentage of data scores are below that certain value. For e.g.: a 50th percentile means the score below which 50% of the scores in the distribution may be found..