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- Administrative details:
 - **Grading:** $20 + 20 + 60$
 - **Class timings:** Keep all four slots open (M,T,Th,Fr); This week we will meet on M,T,Th
 - **Pop quiz:** Attendance
- Motivation
- Frequentist and Bayesian interpretation of probability
- Randomness: (i) Inherently random; (ii) Lack of information
- Sets: Forms the basis over which we will define probability; Sample space; Loosely speaking is a collection of objects
- Defining a set: (i) Explicitly listing out the elements; (ii) Defining through a property
- Finite set
- Infinite set:
 - Countably infinite set: A bijection from the set of natural numbers to the set exists;
Examples: \mathbb{N} , \mathbb{Z} , Set of even integers, Set of prime numbers, \mathbb{Q}
 - Uncountably infinite set (or uncountable set): No bijection from the set of natural numbers to the set exists;
Examples: \mathbb{R} , the interval $(0, 1)$, any non-empty interval on \mathbb{R}
 - When we define random variables, we will define probability mass function (in the case of discrete random variables) and probability density function (in the case of continuous random variables) depending on whether the underlying sample space is countable or uncountable.