Question 13.1

For each of the following distributions, give an example of data that you would expect to follow this distribution (besides the examples already discussed in class).

a. Binomial

In the recent time, during the clinical trial, covid vaccination was tested amount the selected patients first. CDC determines the binomial distribution based on the cured patients among the total number of patients tested.

b. Geometric

From the history, Thomas Alwa Edison had more than 100 failure attempts to find the electric bulb. The number of times he failed to find the bulb follows the Geometric distribution.

c. Poisson

The number of covid patient admits in the hospital tomorrow will follow the Poisson Distribution.

d. Exponential

The time between two covid patients admitted in the hospital tomorrow will follow the exponential distribution

e. Weibull

Marathon racers used to calculate the running hours prior to the event. More hours to run without huge loss of energy or less energy to run for few miles will follow the Weibull Distribution