

1. Question — The situation: "You invest everything in one stock. One year later you have either the same/more money or you lost some" can be modeled by which distribution?
2. Question — Provide the pmf for the above statement:
3. Question — According to statista (<https://www.statista.com/statistics/1126823/worldwide-developer-gender/>), roughly 92% of the worldwide software engineers are male. What is the probability that if you select 10 software engineers at random, there are exactly 9 males? What is the probability that there more or less than 9 males?
4. Question — Which distribution can be used to model the following statement: "The number of low and high performers in a company within 52 week interval"?