Homework 1

Suppose a student was going to estimate the probability of Head for a coin. Also, before she started the testing, she had a strong belief that this coin must be a fair coin, namely p(Head)=0.5. After 10 times of tossing this coin, she got the result of 2 Heads and 8 Tails. What is your estimate for the probability of Head of this coin?

Please compose your R script to answer this question. Hint 1: The probability density function of normal distribution can be called by dnorm(). You can type ?dnorm in the console pane in your RStudio to learn the usage of this function. Hint 2: The standard deviation of a distribution represents the variability of the possibly observed values of an event; the smaller it is, the more likely the observed values are quite close to each other.