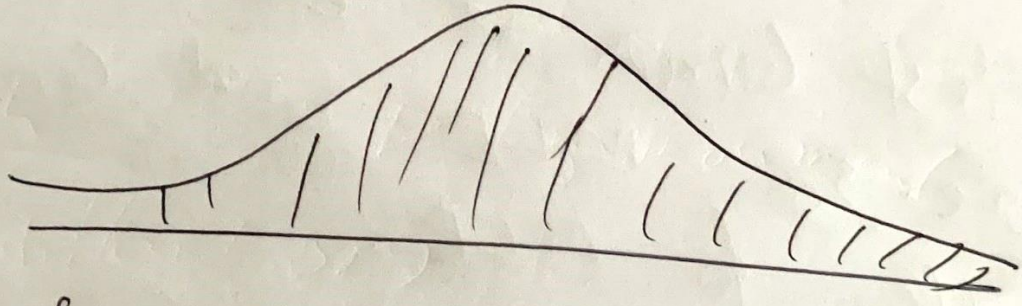
Binomial follows Normal Distribution

If we toss a coin 6 times and Record it and iterate n times then it follows normal distribution.

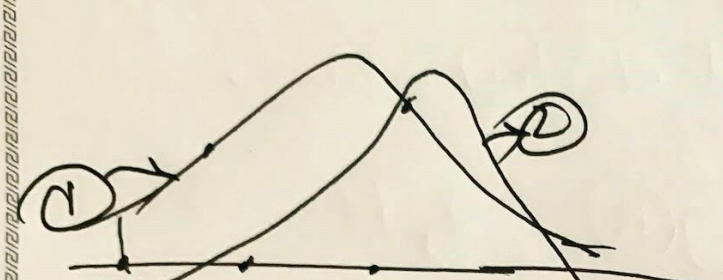
H H T T T H	3H 3T
H T T T T T	1H 5T
H H H H H T	5H 1T
H H H T T T	3H 3T
H T H T H T	3H 3T



Most of the cases, it follow 3H 3T Some times it might come out 1H 5T or 5H 1H.

Probability Density function

3 data of heights 158 168 172



We multiply the P.d.f of every height of both curves and accept height number which is greater.

1st Graph $0.4 \times 0.2 \times 0.3 = 0.024$

2nd Graph $0.45 \times 0.7 \times 0.25 = 0.078$

First Graph fit better than second one. So ~~MLE~~ 2nd Graph is better for MLE.