

Given Inputs:

Two binomial random variables X , Y ,

Number of trials T_x and T_y ,

and

Probabilities of Success P_x and P_y .

Output:

Probability($X > Y$) for

$0 < T_x < 100$ and $0 < T_y < 100$.

Exact calculation required (do not use the normal approximation to the binomial distribution).