Brute Estimated Run Time: ~ $N^4/24$
Uses 4 Nested For Loops = N^4
Since its N, N-1, N-2 for each loop iteration, we get 4!

Fast Estimated Run Time: ~ $N^2Ln(N)$
Uses 2 Nested For Loops = N^2
Searches through List of Arrays = $Ln(N)$

Brute: T(N) = 1.2833179e-10 * N^4
Using N = 100 and 50
$[ln(100^4/24) – ln(50^4/24)]/[ln(100)-ln(50)] = ~4 = x$
$T(N) = a*N^x = a*N^4$
$0.012833179 = a*(100)^4$ → a = 1.2833179e-10

T(N) = 1.2833179e-10 * N^4

Fast: T(N) = 7.61469624e-7 * $N^{2.24}$
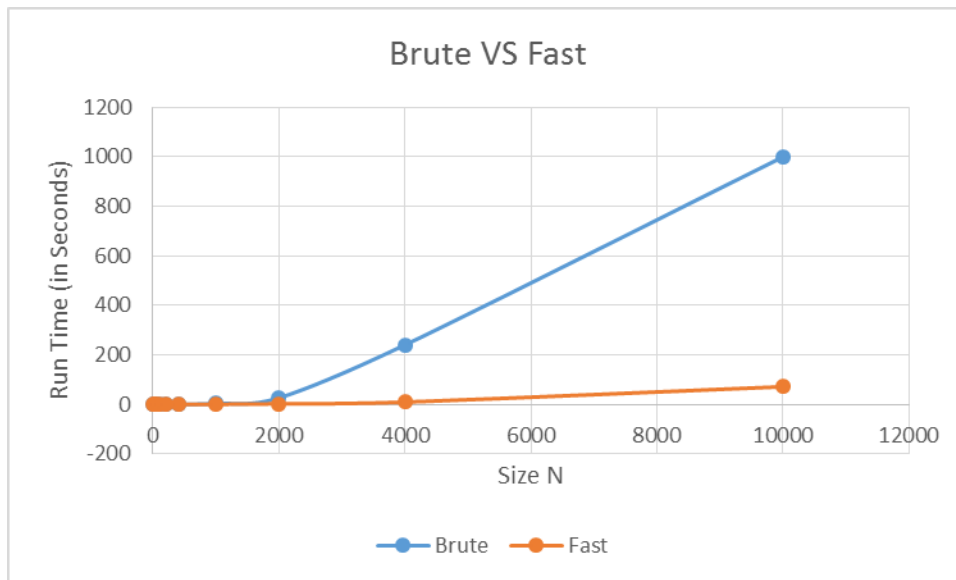Using N = 100 and 50
$[ln(100^2ln(100)) – ln(50^2ln(50))]/[ln(100)-ln(50)] = ~2.24 = x$
$T(N) = a*N^x = a*N^{2.24}$
$0.022996015 = a*(100)^{2.24}$ → a = 7.61469624e-7

T(N) = 7.61469624e-7 * $N^{2.24}$

For N = 1,000,000
Brute: $T(N) = 1.2833179e-10 * (1,000,000)^4$
T(N) = 469,374.37 years

Fast: $7.61469624e-7 * N^{2.24}$
T(N) = 24.274 days