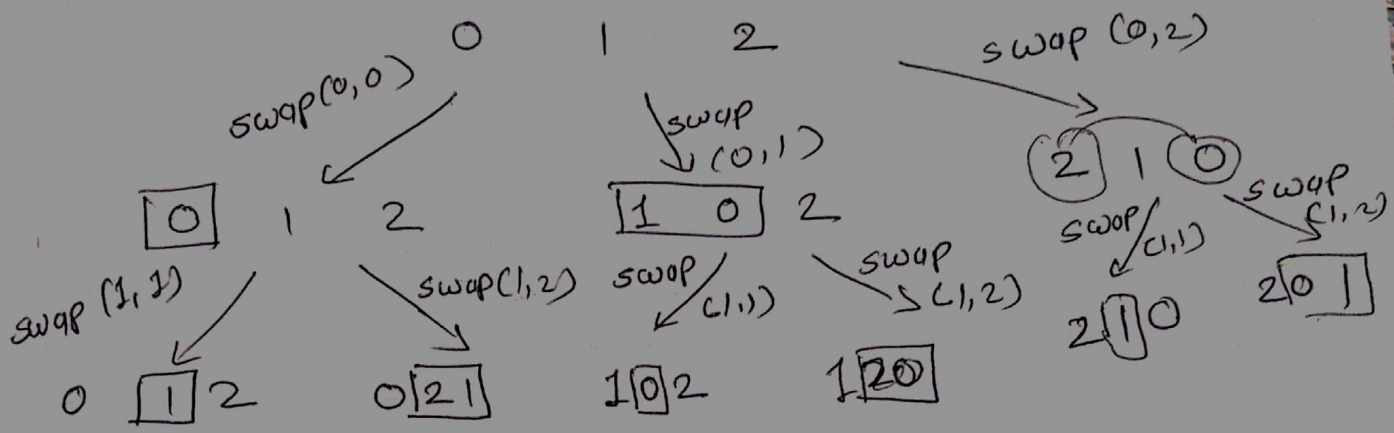
NUID 001826522

Printing Permutation of 3 numbers

f(n) = perm-r(a, s+1, e).

n=3 a= 0, 1, 2. s=0 , e=2.



For each n calls, if lenght is ~~n~~ => (n-1) calls

For each n*(n-1) calls, if lenght is (n-1) => (n-2) calls

⋮

gives F(n) = n*(n-1)*(n-2)*--- 1

≈ n!

T(n) = T(n-1) + C

For n=3, T(3) = T(2) + C

= T(1) + C + C ; T(2) = T(1) + C

~~= T(0)~~

= 2T(n/2) + C + 2C ; T(1) = 2T(n/2)

≈ 1 + 3C

≈ 3C

Hence, T(n) ≈ nC

≈ n.