Question 1

1. Input: Array of length n

Output: Permutation of all combination of array of length n

Void swap ( a[] , I, j){

temp = a[i];

a[i] = a[j];

a[j] = temp;

}

Void permute (a[], n) {

if (n == a.length-1) {

for (int x = 0; x < a.length; x++)

print(a[x]);

println();

}

for (int i =n; i<a.length;i++){

swap(a,n,i);

permute(a,n+1);

swap(a,n,i);

}

}

T(n) = n! +(n-1)! +(n-2)! +.. +1<= (n+1)n! = (n+1)! 🡺 O((n+1)!)

Question 2

Question 3

Log log n