Non-mutating algorithms to choose n unique elements at random from an array

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Algorithm 1 Takes parameters `inArr` and `n` (potentially high run time)

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    initialise `outArr` as empty array
    while `outArr.length` ≤ n **do**
        choose random `elem` from `inArr`
        if `elem` not in `outArr` **then**
            push `elem` to `outArr`
    return `outArr`

Algorithm 2 Takes parameters `inArr` and `n` (potentially high memory usage/allocations)

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    initialise `outArr` as empty array
    copy `inArr` as `tempArr`
    do n **times**
        take random `elem` from `tempArr`
        push `elem` to `outArr`
    return `outArr`