Unsorted Array: Linear Search

1. Given an unsorted integer array A and a target value X, find if A contains the value X. Return True or False.
2. Given an unsorted integer array A and a target value X, return the index at which X is located in A or return -1 if it is not found in A.
3. Given an unsorted integer array A & a target value X, find if X is found more than once in A.
4. Given an unsorted integer array A and an integer value X, return the number of times X is found in A.
5. Given an unsorted integer array A and an integer value X, return the indices of the locations where X is found in A.
6. Given an unsorted integer array and a target value X, return the location of the second occurrence of the target value in the array and -1 if there is no second occurrence of X.
7. Given an unsorted integer array and a target value X, return the location of the K^{th} occurrence of the target value in the array and -1 if there is no K^{th} occurrence of X.
8. Given an unsorted integer array A, find the smallest element.
9. Given an unsorted integer array A, find the index of the smallest element in the array.
10. Given an unsorted integer array A, find the largest element.
11. Given an unsorted integer array A, find the second largest element.
12. Given an unsorted integer array A, find the largest & second largest element in the array.
13. Given an unsorted integer array A, find the Maximum Pairwise Product which returns the maximum product that can be obtained by multiplying any two integers in the given array.
14. Given an unsorted integer array A, find the number of times the smallest element is found in the array.
15. Given an unsorted integer array A, find the number of times the largest element is found in the array.
16. Given an unsorted integer array, a min and max value, return the count of the elements with values that falls between min and max.