Assignment 02

1. You are given an **ArrayList** containing a sequence of elements. try to reverse the order of elements in the **ArrayList** in-place(in the same arrayList) without using the built-in **Reverse**. Implement a function that takes the **ArrayList** as input and modifies it to have the reversed order of elements.
2. You are given a list of integers. Your task is to find and return a new list containing only the even numbers from the given list.
3. implement a custom list called **FixedSizeList<T>** with a predetermined capacity. This list should not allow more elements than its capacity and should provide clear messages if one tries to exceed it or access invalid indices.

**Requirements:**

1. Create a generic class named **FixedSizeList<T>**.
2. Implement a constructor that takes the fixed capacity of the list as a

parameter.

1. Implement an **Add** method that adds an element to the list, but throws an exception if the list is already full.
2. Implement a **Get** method that retrieves an element at a specific index in the list but throws an exception for invalid indices.
3. Given an array  consists of  numbers with size N and number of queries, in each query you will be given an integer X, and you should print how many numbers in array that is greater than  X.

Ex:

Input

3 3 //Size of array , number of queries

11 5 3 //Array

1 //Query1

5 //Query2

13 //Query 3

Output

3 //11,5,3

1 //11

0

1. Given a number N and an array of N numbers. Determine if it's palindrome or not.

Ex:

Input:

5

1 3 2 3 1

Output:

YES

1. Given an array, implement a function to remove duplicate elements from an array.
2. Given an array list , implement a function to remove all odd numbers from it.