

January 2024 CSE 102

Online Assignment on Arrays

Longest Palindromic Subarray

Time: 30 minutes

Subsections B1 & B2

Given an array of integers, find the longest contiguous subarray, which is the same as its reverse. A subarray is a contiguous part of an array, and a palindromic subarray is one that is the same as its reverse.

Input

- An integer array **arr** of length **n**

Output

Return the longest palindromic subarray. If there are multiple subarrays of maximum length, return the first one that appears in the array.

Sample I/O

Input	Output
11 3 2 1 2 3 4 5 4 3 2 1	[3, 2, 1, 2, 3]
7 1 2 3 4 3 2 1	[1, 2, 3, 4, 3, 2, 1]

Submission Guideline

1. Create a new folder named “your 7-digit student ID_online_array”.
2. Your .c file should be named “your 7-digit student ID.c”.
3. Put your .c file (not .exe or .o files) in the folder created in step 1.
4. Right-click on the folder, select “send to > compressed (zipped) folder” to zip the folder. Submit the zip file on Moodle.

For example, if your student ID is 2305999, then, rename your .c file as “2305999.c” and create a folder called “2305999_online_array”. Put the .c file in the folder and zip it.