

CS 62: Solving Problems

[Sushi for Two](#)

Sushi for Two

- You and a friend go into a **sushi** restaurant for lunch
- The restaurant only has two types of sushi: **tuna** or **eel**
- The restaurant offers n pieces of sushi lined up on a conveyor
- You only like **tuna** and your friend only likes **eel**
- You have to choose a **continuous subsegment** of sushi such that
 - It has an **equal** number of **tuna** and **eel**
 - Each half of the subsegment only contains sushi of a **one type**
- Find the length of the longest continuous subsegment of sushi

Valid Inputs

- Let's denote **tuna** with 1 and **eel** with 2
- [2, 2, 2, 1, 1, 1]
- [1, 2, 1, 2, 1, 2]

Examples

- [2, 2, 2, 1, 1, 2, 2]




Examples

• [2, 2, 2, 1, 1, 2, 2] : 4

• [1, 2, 1, 2, 1, 2]



Examples

- [2, 2, 2, 1, 1, 2, 2] : 4
- [1, 2, 1, 2, 1, 2] : 2
- [2, 2, 1, 1, 1, 2, 2, 2, 2] 

Examples

- [2, 2, 2, 1, 1, 2, 2] : 4
- [1, 2, 1, 2, 1, 2] : 2
- [2, 2, 1, 1, 1, 2, 2, 2, 2] : 6