



< Anterior



Siguiente >

## Scenarios

🔖 Marcar esta página

For each of the scenarios listed below, determine the **most** appropriate data structure or ADT to ensure the most logical and efficient use cases (if an ADT is most applicable, pick it, not its backing structure). Write the letter corresponding to your choice in the space provided. **Each scenario will only have ONE answer.**

### Scenarios

0 puntos posibles (no calificables)

The Georgia Tech Housing Department wants to open a digital suggestion box where students can submit feedback. To streamline feedback review, suggestions are processed in the order that they are submitted. What structure is best suited to represent the suggestion box?

Queue ▾

✓ Answer: Queue

In a murder mystery video game, people play as a detective aboard a train (The Object-Oriented Express) where a murder has occurred. To investigate, players start at the first train car and work their way forward looking for clues. However, once they move to the next train car, there is no way to go back to a previously visited train car. What structure is best suited to represent the train?

Singly-Linked List ▾

✓ Answer: Singly-Linked List

A professor is giving a simple online quiz consisting of 10 free response questions, labeled 0 through 9. While not recommended, students are allowed to leave questions blank if they do not know the answers. To quickly access each student's answers by the question number, what structure is best suited to represent a single student's answer sheet?

Array ▾

✓ Answer: Array

A developer is working on a creative file explorer that visualizes files as papers on a desk. Instead of organizing files into folders like a regular file explorer, users put their papers into piles. In these piles, users can only access the most recently added file (the paper at the top of the pile). For example, if they want to see a paper deeper in the pile, they must first remove all the ones on top of it. What structure is best suited to represent a paper pile?

Stack ▾

✓ Answer: Stack

An operating system has an id for each process ranging from 0 to N. It needs to keep track of the amount of memory each process is using. New processes are added occasionally, and the capacity of the data structure will change accordingly. The OS needs to quickly lookup the amount of memory an arbitrary process uses. What data structure should the OS use to keep track of the amount of memory each process is using?

ArrayList ▾

✓ Answer: ArrayList

Enviar

Mostrar respuesta

📘 Las respuestas son mostradas en el problema

< Anterior

Siguiente >



## edX

[Acerca de](#)  
[Afiliados](#)  
[edX para negocios](#)  
[Open edX](#)  
[Carreras](#)  
[Noticias](#)

## Legal

[Condiciones de Servicio y Código de Honor](#)  
[Política de privacidad](#)  
[Políticas de Accesibilidad](#)  
[Política de marcas](#)  
[Mapa del Sitio](#)  
[Política de cookies](#)  
[Opciones de privacidad](#)

## Contáctanos

[Blog](#)  
[Contáctenos](#)  
[Centro de Ayuda](#)  
[Seguridad](#)  
[Kit Multimedia](#)



© 2023 edX LLC. All rights reserved.  
深圳市恒宇博科技有限公司 [粤ICP备17044299号-2](#)