OOPs 3

- Interfaces
- Packages
- Stacks and Queues

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Multiple Inheritance

Interfaces

- Contracts – to be honored
- Helps in distribution of work
- Enables multiple inheritance

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Interfaces

- All methods are public and abstract
- All data members are final and static
- A non-abstract implementing class must implement all methods or remain abstract
- An interface can extend another interface
- Have no constructor – Can't be "newed"

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Interfaces – Dependency Injection

- Reuse
  - Composition vs Inheritance
  - Flexible, Runtime tweakable reuse
- Dependency Injection
  - Constructor Injection
  - Method Injection
  - Property Injection

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Packages

- Organization of code
- Managing name collision
- package and import statements

Packages & Access Modifiers

- Public
- Protected
- Nothing (Friendly)
- Private

Questions

- Given an expression check if brackets are balanced e.g. { a + [b+ (c + d)] + (e + f) }
- Reverse a queue
- Reverse a stack with the help of another stack

Stack Using Queues

- Push Efficient
- Pop Efficient

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Queue Using Stacks

- Enqueue Efficient
- Dequeue Efficient

CRUX

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Thank you

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