

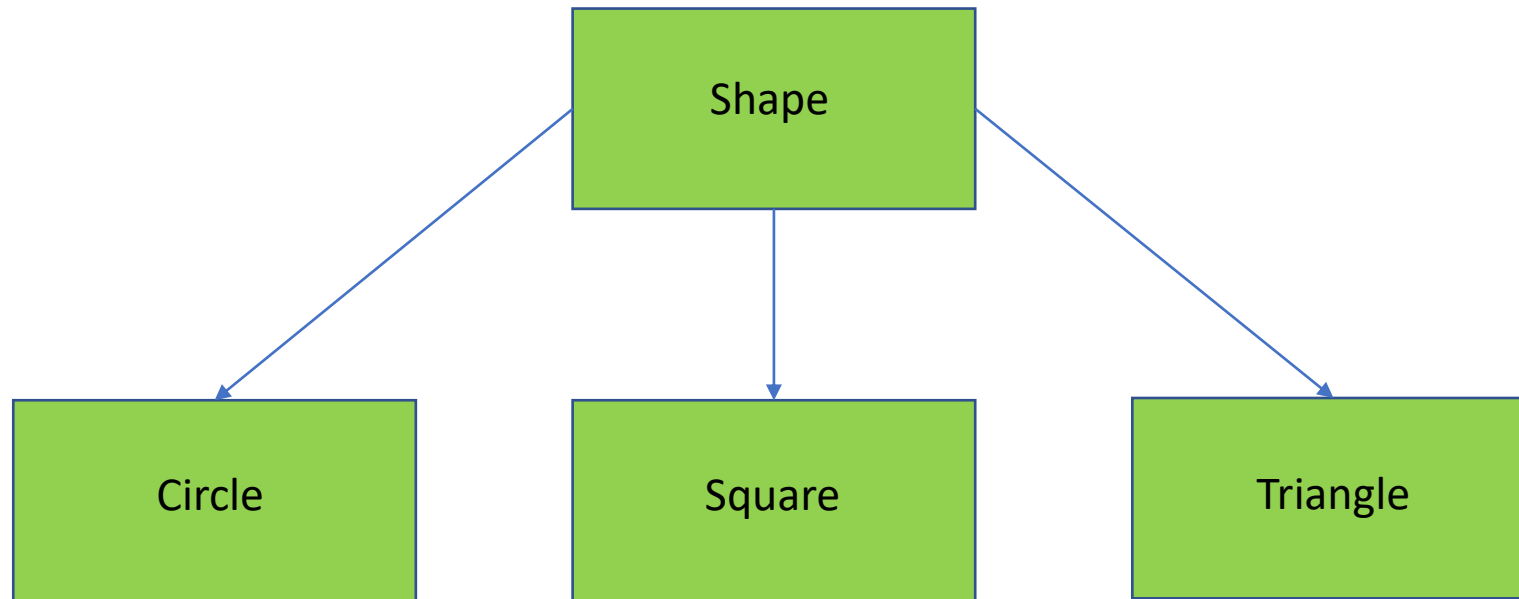
# Classes and Inheritance Solutions

# Class Hierarchy

- What is meant by a class inheritance hierarchy?
  - A class inheritance hierarchy is used to model a group of related concepts
  - The “base class” is at the top of the hierarchy. This is the most general or most basic example of the group
- Give an example of a simple class hierarchy and draw a diagram of it
  - Drawable shapes (circle, triangle, square, etc)
  - The base class is a generic drawable shape

# Class Hierarchies

- Related classes are organised in a hierarchy



Shape is a basic graphical entity

Circle, Square and Triangle are specialized graphical entities

# Derived Classes

- What is meant by the terms "base class" and "derived class"?
  - Base class - defined above
  - A derived class is a more specialized version of the base class, or has enhanced functionality
- Give alternate names for the terms "base class" and "derived class"
  - Base class - parent class
  - Derived class - child class or subclass