

OOP exam exercise suggestions:

Classes and objects:

A stack is a “last in, first out” linear data structure. A stack can have any object as an element. It has two fundamental operations, called *push* and *pop*. The *push* operation adds a new item to the top of the stack. If the space allocated to hold the stack is full when the push operation is attempted, then an error condition is raised. The *pop* operation removes an item from the top of the stack. A *pop* reveals previously concealed items, or results in an empty stack. If the stack is empty when a *pop* operation is attempted, then an error condition is raised.

Implement a stack using OOP. Your code should store the stack elements in an array and should not make use of a stack class from a class library.

Inheritance:

Implement the following classes and add an abstract class of your own choice.

