**Tutorial 02**

**1.**

A stack is a linear data structure, a collection of items of the same type

**2.**

1. Push: The "push" operation is used to insert an element onto the top of the stack.

2. Pop: The "pop" operation is used to remove the topmost element from the stack.

3. Peek (or Top): The "peek" operation allows you to examine the topmost element of the stack without removing it.

4. Is Empty (or Empty): The "is empty" operation is a boolean function that checks whether the stack is empty or not.

5. Size (or Length): The "size" operation is used to determine the number of elements currently stored in the stack.

**3.**

* Stack of Trays
* Stacking Boxes
* Browser History
* Book Stack
* Plate Stack

**4.**

The "is empty" or "empty" operation, depending on the naming convention used in the programming language or library you are using, can be used in a program to determine whether a stack is empty. The boolean function used in this operation determines whether or not the stack contains any elements.