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It represents a last-in, first-out collection of objects. It is used when you need a last-in, first-out access of items. When you add an item in the list, it is called pushing the item, and when you remove it, it is called popping the item.

## **Properties and Methods of the Stack Class**

The following table lists some of the commonly used **properties** of the **Stack** class:

Property	Description
Count	Gets the number of elements contained in the Stack.

The following table lists some of the commonly used **methods** of the **Stack** class:

## S.N Method Name & Purpose

1 Public Overridable Sub Clear

Removes all elements from the Stack.

2 Public Overridable Function Contains *objAsObject* As Boolean

Determines whether an element is in the Stack.

3 Public Overridable Function Peek As Object

Returns the object at the top of the Stack without removing it.

4 Public Overridable Function Pop As Object

Removes and returns the object at the top of the Stack.

5 **Public Overridable Sub Push** *objAsObject* 

Inserts an object at the top of the Stack.

6 **Public Overridable Function ToArray As Object** 

Copies the Stack to a new array.

## **Example:**

The following example demonstrates use of Stack:

Module collections Sub Main()

```
Dim st As Stack = New Stack()
      st.Push("A")
      st.Push("M")
      st.Push("G")
      st.Push("W")
      Console.WriteLine("Current stack: ")
      Dim c As Char
      For Each c In st
          Console.Write(c + " ")
      Next c
      Console.WriteLine()
      st.Push("V")
      st.Push("H")
      Console.WriteLine("The next poppable value in stack: {0}", st.Peek())
      Console.WriteLine("Current stack: ")
      For Each c In st
          Console.Write(c + " ")
      Next c
      Console.WriteLine()
      Console.WriteLine("Removing values ")
      st.Pop()
      st.Pop()
      st.Pop()
      Console.WriteLine("Current stack: ")
      For Each c In st
          Console.Write(c + " ")
      Next c
      Console.ReadKey()
   End Sub
End Module
```

When the above code is compiled and executed, it produces the following result:

```
Current stack:
W G M A
The next poppable value in stack: H
Current stack:
H V W G M A
Removing values
Current stack:
G M A
Loading [Math]ax]/jax/output/HTML-CSS/fonts/TeX/fontdata.js
```