Stack CSC 508

## LAB STACK

**Lab sheet** : Applying Stack in programming.

**Estimated Time** : 2 hours

**Objective** : To implement a Stack concept in Java Tools

**Requirements** : Java Tools

**Procedure** : Read all the question and answer the questions

**Conclusion** : Once completing the lab exercise, student should be able to write Java

code application that applies Stack

## **Definition:**

Stack is a subclass of Vector that implements a standard last-in, first-out stack.

Stack only defines the default constructor, which creates an empty stack. Stack includes all the methods defined by Vector, and adds several of its own.

## **Methods in Stack**

boolean empty()	Tests if this stack is empty. Returns true if the stack is empty, and returns false if the stack contains elements
Object peek()	Returns the element on the top of the stack, but does not remove it.
Object pop()	Returns the element on the top of the stack, removing it in the process.
Object push (Object element)	Pushes element onto the stack. Element is also returned.
Int search(Object element)	Searches for element in the stack. If found, its offset from the top of the stack is returned. Otherwise, .1 is returned.

## **Lab Question:**

Write a program to store staff information in company ABC. You are required to implement stack by creating user defined push() method for entering elements and pop() method for retrieving elements from the stack.