ALL

(i)

You have been given the task of writing a "stack" container which will manage stacks of integers. The only two operations are 'push' and 'pop'.

- This container may be used to store anywhere from zero to millions of values.
- For simplicity there will never be more calls to 'pop' than there were calls to 'push'
- Performance and a small memory footprint are very important.
- The most credit will be awarded for an implementation that runs in "amortized constant time."
- You may not use existing container classes (such as STL).

Fill in the members used by your implementation in the class declaration below.

