



Quicksort, iterative version
 Source: <http://en.wikipedia.org/wiki/Quicksort>
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 It is from the Wikipedia article "Quicksort" dated 2006-11-07.
 Explicit recursion can be avoided using an iterative form of quicksort that replaces the call stack by an explicit stack data structure. The disadvantage is considerably greater complexity.
 A is an array to be sorted for elements First to Last inclusive.
 v is a variable of type corresponding to the sort key of array A.
 sp is a stack pointer to a small local data structure used by Push and Pop.
 something like local arrays SaveA(32), SaveB(32) of the same type as L and R,
 where Push(x,y); means $sp := sp + 1$; SaveA(sp) := x; SaveB(sp) := y;
 and Pop(x,y); means $x := SaveA(sp)$; $y := SaveB(sp)$; $sp := sp - 1$;
 var L, L2, p, r, r2; longint; of a type equivalent to First and Last.



