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1  -- in file gstack.ads
2  generic
3      max:integer;
4      type item is private;
5  package gstack is
6      procedure push(x: in item);
7      function pop return item;
8      function numItems return Integer;
9  end gstack;
10
11 -- in file gstack.adb
12 package body gstack is
13     s:array(1..max) of item;
14     top: integer range 0..max;
15     procedure push(x: in item) is
16     begin
17         top := top + 1;
18         s(top) := x;
19     end push;
20     function pop return item is
21     x: item;
22     begin
23         x := s(top);
24         top := top - 1;
25         return x;
26     end pop;
27     function numItems return Integer is
28     begin
29         return top;
30     end numItems;
31 begin
32     top := 0; --initialize top of stack to empty
33 end gstack;
34

```