```
#################################################################
#  Adds all elements of a numeric list.
#################################################################

ladd := proc(l)
#---------------------------------------------------------------
#  Define local variables.
#---------------------------------------------------------------
   local  lsum, i:
#---------------------------------------------------------------
#  Check for valid arguments, exit with error message
#  if not valid.
#---------------------------------------------------------------
   if not type(l,list(numeric)) then
      ERORR(‘argument is not numeric list‘);
   fi;
   if nops(l) = 0 then
      ERROR(‘argument is the NULL list‘);
   fi;
#---------------------------------------------------------------
#  Initialize sum to first element of list.
#---------------------------------------------------------------
   lsum := l[1];
#---------------------------------------------------------------
#  Loop over rest of elements accumulating the sum.
#---------------------------------------------------------------
   for i from 2 to nops(l) do
      lsum := lsum + l[i];
   od;
#---------------------------------------------------------------
#  Return the sum.
#---------------------------------------------------------------
   lsum;
end:
```