

```
#####
# ladd: Adds all elements of a list.
#####
ladd := proc(l::list)

#-----
# Define local variables.
#-----
local lsum, i:
#-----
# Check for valid argument, exit with error message
# if not valid.
#-----
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:
```

```
#####
# ladd: Alternative, more compact implementation using
# 'add' procedure. Not possible before Maple V.4.
#####
laddnew := proc(l::list)
    local i;
    add( l[i], i=1..nops(l) );
end:
```