

Input: *code* in function *func*

Output: A list of pre-deallocation *macros* suggested for *code* in *func*

```
1: procedure CHOOSEPREDEALLOCMACRO(code, func)
2:   macros := []
3:   if code is Assignment OR code is Function call OR
4:     code is Array Generator then
5:     lhs = left-handed side of code
6:     if lhs is Array then
7:       macros.append(PRE_DEALLOC(lhs))
8:     end if
9:   else if code is Return then
10:    ret = return variable of code
11:    for each var variable in func, except for ret variable do
12:      if var is Array then
13:        macros.append(PRE_DEALLOC(var))
14:      end if
15:    end for
16:   else// No needs to use macro
17:   end if
18:   return macros
19: end procedure
```