Extract Method Pseudocode

September 8, 2021

Algorithm 1 Applying the Extract Method refactoring.

1: **function** $applyExtractMethod(method, tool)$
2:     $stmts \leftarrow method.getStatements()$
3:     **if** $stmts.size() < 3$ **then**
4:         **return** $false$ ▷ It is not possible to apply a refactoring.
5:     **end if**
6:     $stmts = stmts - first(stmts) - last(stmts)$ ▷ The first and last statements are removed.
7:     $extract \leftarrow \emptyset$
8:     **for** $stmt \in stmts$ **do**   ▷ iterate all statements in order of declaration
9:         $extract = extract.concat(stmt)$ ▷ Add $stmt$ in the end of extract
10:         **if** $tool.applyExtractMethod(extract)$ **then**   ▷ Can the tool extract the statements?
11:             **return** $true$ ▷ It applies the refactoring, and concludes the process.
12:         **end if**
13:     **end for**
14:     **return** $false$ ▷ It is not possible to apply a refactoring.
15: **end function**