function $\texttt{SFFS}(n, J)$	*Returns a set of variable subsets of different sizes (B)*
begin	
$\quad S := (\overbrace{0, \ldots, 0}^{n});$	*Start with an empty set*
$\quad k := 0;$	
$\quad B := \emptyset;$	*Initialize the set of best variable sets found*
$\quad$ **while** $k < n$	*Repeat until the set of all variables is reached*
$\qquad R := \emptyset;$	*Initialize the set of evaluations of different branches*
$\qquad$ **for each** $\{j \mid S_j = 0\}$	*Repeat for each possible branch*
$\qquad\quad S' := S;$	
$\qquad\quad S'_j := 1;$	*Add the jth variable*
$\qquad\quad R(j) := J(S');$	*Evaluate the branch*
$\qquad$ **end**;	
$\qquad k := k + 1;$	
$\qquad j := \text{argmin } R(\cdot);$	*Find the best branch*
$\qquad \underline{\textbf{if } R(j) \geq J(B(k))}$	*Was this branch the best of its size found so far?*
$\qquad\quad \underline{S := B(k);}$	*If no, abruptly switch to the best one*
$\qquad \underline{\textbf{else}}$	
$\qquad\quad S_j := 1;$	*If yes, take the branch*
$\qquad\quad B(k) := S;$	*Store the newly found subset*
$\qquad\quad t := 1;$	*This is reset when backtracking is to be stopped*
$\qquad\quad$ **while** $k > 2 \wedge t = 1$	*Backtrack until o better subsets are found*
$\qquad\qquad R := \emptyset;$	*Initialize the set of evaluations of different branches*
$\qquad\qquad$ **for each** $\{j \mid S_j = 1\}$	*Repeat for each possible branch*
$\qquad\qquad\quad S' := S;$	
$\qquad\qquad\quad S'_j := 0;$	*Prune the jth variable*
$\qquad\qquad\quad R(j) := J(S');$	*Evaluate the branch*
$\qquad\qquad$ **end**;	
$\qquad\qquad j := \text{argmin } R(\cdot);$	*Find the best branch*
$\qquad\qquad$ **if** $R(j) < J(B(k-1))$	*Was a better subset of size $k-1$ found?*
$\qquad\qquad\quad k := k - 1;$	*If yes, backtrack*
$\qquad\qquad\quad S_j := 0;$	
$\qquad\qquad\quad B(k) := S;$	*Store the newly found subset*
$\qquad\qquad$ **else**	
$\qquad\qquad\quad t := 0;$	*If no, stop backtracking*
$\qquad\qquad$ **end**;	
$\qquad\quad$ **end**;	
$\qquad \underline{\textbf{end};}$	
$\quad$ **end**;	
$\quad$ **return** B;	
end;	

Fig. 4.5. Sequential forward floating selection algorithm; the fix by Somol et al. (1999) is pointed out by underlining the lines to be added