

Step 2: Step 2) Use the roulette-wheel method to select an operator.

This strategy is very simple and follows the idea that the suitability of an operator i for the current MOP is proportional to the number of nondominated solutions whose assigned operator index are i in the *EXA*. To avoid the situation that all solutions in the *EXA* have the same assigned operator, each operator has a minimum selection probability p_{\min} . That is, after the calculation of the selection probability of each operator, if $p_i < p_{\min}$, then we set $p_i = p_{\min}$ and $p_j = p_j - (p_{\min} - p_i)$, where p_j is the selection probability of the operator with the overwhelming superiority. Note that in our algorithm, if the *EXA* is not updated, then the calculation of p_i in Step 1 will be ignored.