
Algorithm 1 *Heuristic*($f, J, J_f, \lambda, p, d, \bar{d}$)

 $J_0 = \{j \in J \setminus J_f : f_j = 0\};$ $J_1 = J_f \cup \{j \in J \setminus J_f : f_j = 1\};$ Compute the minimum tardiness solution x for J_1 using the algorithm of Tadei et al. [4]; $J := J \setminus (J_0 \cup J_1);$ Sort J by non-increasing order of λ_j/p_j ;**while** $J \neq \emptyset$ **do** $j^* := \arg \max_{j \in J} \frac{\lambda_j}{p_j};$ Compute the best feasible position p^* for j^* in x with respect to the total tardiness;**if** p^* exists and improves x **then**Insert j^* in position p^* in x ;**end if** $J := J \setminus \{j^*\};$ **end while**Compute the minimum tardiness solution with the set of jobs in x using the algorithm of Tadei et al. [4];Return x ;
