

Hill Climbing Algorithm

1. Generate initial feasible solution s .
2. Find $s' \in N(s)$ such that $z(s') = \min\{z(s^+) \mid s^+ \in N(s)\}$.
3. While $z(s^+) < z(s)$:
 4. $s = s'$
 5. Find $s' \in N(s)$ such that $z(s') = \min\{z(s^+) \mid s^+ \in N(s)\}$.
6. Return s

Simulated Annealing Algorithm

1. Generate initial feasible solution s .
2. Initialize $s^* = s$ and T .
3. Generate $s' \in N(s)$.
4. While not stopping condition:
 5. If $z(s') < z(s)$:
 6. $s = s'$
 7. If $z(s) < z(s^*)$:
 8. $s^* = s$
 9. else:
 10. $s = s'$ with probability $p = e^{\frac{-(z(s') - z(s))}{k T}}$
 11. Decrease T .
 12. Generate $s' \in N(s)$.
13. Return s^* .

Tabu Search Algorithm

1. Generate initial feasible solution s .
2. Initialize $s^* = s$ and $TL = \emptyset$.
3. Find $s' \in N(s)$ such that $z(s') = \min\{z(s^+) \mid \forall s^+ \in N(s), s^+ \in TL\}$.
4. While not stopping condition:
 5. $TL = TL \cup \{s\}$
 6. $s = s'$
 7. If $z(s) < z(s^*)$:
 8. $s^* = s$
9. Return s^* .