

---

**Algorithm 1:** Attractor computation

---

**Input:** A reachability game  $\mathcal{G} = (G, F)$  over the game graph  $G = (V_0, V_1, E)$ .

- 1 Compute the out-degree  $out(v) = |\{v\} \times V \cap E|$  of each vertex  $v \in V$
- 2 Let  $n(v) = out(v)$  for each  $v \in V$
- 3 Mark all vertices  $v \in F$
- 4 Perform a backwards breadth-first search with the following conventions:
  - Mark a vertex  $v \in V_0$  if it is reached backwards from a marked vertex
  - On visiting a vertex  $v \in V_1$  from a marked vertex, let  $n(v) \leftarrow n(v) - 1$
  - Mark vertex  $v \in V_1$  if  $n(v) = 0$

**return**  $Attr_0(F) = \{v \in V \mid v \text{ is marked}\}$

---