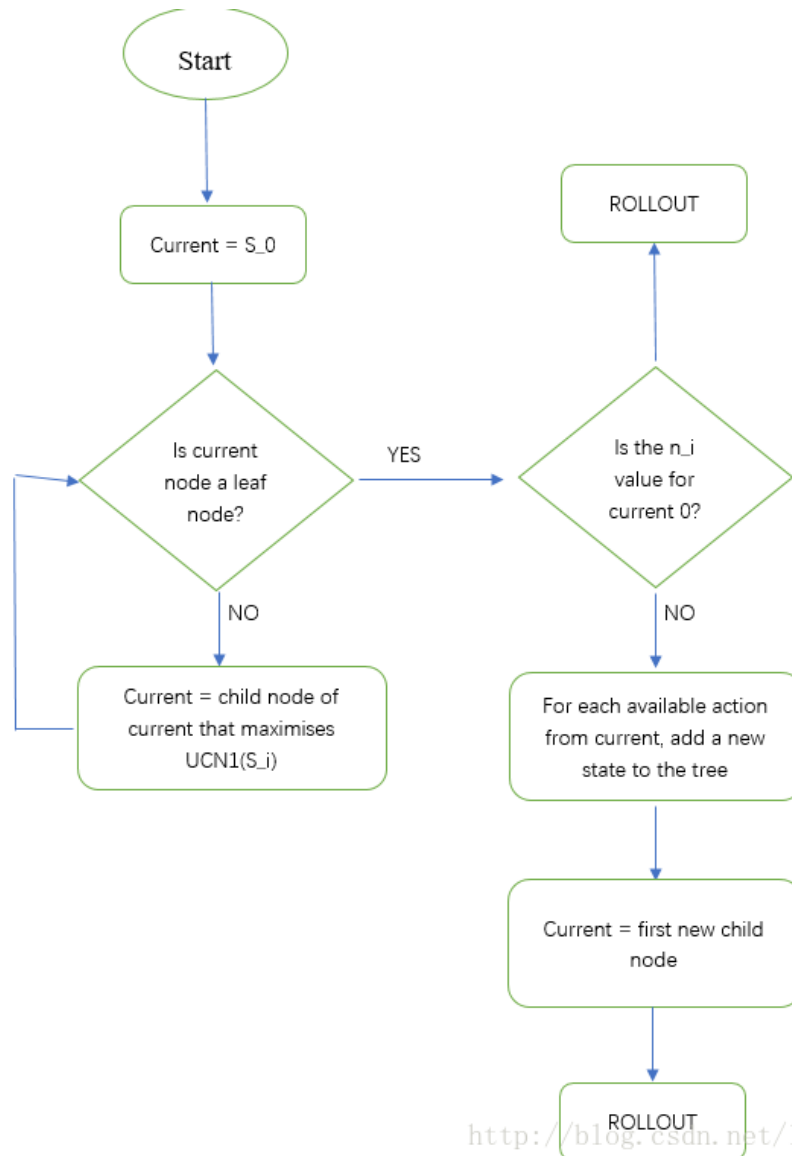


The MCTS(Monte-Carlo Tree) algorithm includes the following 4 steps.

1. Tree traversal.
2. Node expansion.
3. Rollout (random simulation ).
4. Back propagation.



This is followed by step 3 rollout and iteration. Then the simulation results are used in step 4 backpropagation to renew the nodes.

In our code, a fatal error happened when using MCTS, causing the agent to not respond to the program. In order to solve this, we took a different approach, using Minmax to start our first step and replacing it with MCTS after the agent responded.