Pseudocode of A* Search Algorithm

```
make an openlist containing only the starting node
make an empty closed list

while (the destination node has not been reached):
    consider the node with the lowest f score in the open list

    if (this node is our destination node) :
        we are finished
    if not:
        put the current node in the closed list and look at all of its neighbors

        for (each neighbor of the current node):
            if (neighbor has lower g value than current and is in the closed list) :
                replace the neighbor with the new, lower, g value
                current node is now the neighbor's parent

            else if (current g value is lower and this neighbor is in the open list ) :
                replace the neighbor with the new, lower, g value
                change the neighbor's parent to our current node

            else if this neighbor is not in both lists:
                add it to the open list and set its g
```