```
bool puzzle::isUnique(vector< vector<char> > puzzle){
        for(int i = 0; i < prevStates.size(); i++){
                if(puzzle == prevStates.at(i)){
                        return false;
                }
        }
        return true;
}

void puzzle::displayPuzzle(path* x){
        if(x != rootNode)
                {
                        cout << "The best state to expand with a g(n)
= ";
                        cout << x->branchCost;
                        cout << " and h(n) = ";
                        cout << x->heuristic;
                        cout << " is..." << endl;
                }

        for(int i = 0; i < 3; i++)
        {
                for(int j = 0; j < 3; j++)
                {
                        cout << x->puzzle.at(i).at(j) << " ";
                }
                cout << endl;

        }
        cout << endl;
}
```