```cpp
#include <iostream>
using namespace std;

int captured(int kr, int kc, int pr, int pc, int maxmoves)
{
        if(kr < 0 || kr > 7 || kc < 0 || kc > 7 || pr < 0 || pr > 7 ||
           pc < 0 || pc > 7)
        {
                return -1;        //knight and pawn are out of bounds
        }
        else if (kr == pr && kc == pc && maxmoves == 0)
        {
                return -1;        //knight and pawn are in same square
        }
        else if(maxmoves < 1)
        {
                return -1;        //invalid amt of moves
        }
        else if(kr == pr || kc == pc)
        {

                return 1;        //knight can capture in n moves
        }
        else
        {
                if(kr < pr)
                        kr = kr + 2;
                else
                        kr = kr -2;

                if (kc < pc)
                        kc++;
                else
                        kc--;

                return 0;        //connot capture in n moves
        }
};

static void print_board(int kr, int kc, int pr, int pc)
{
    cout << "  ";
    for (int i = 0; i < 8; i ++)
    cout << i << " ";
    cout << endl;
    for (int i = 0; i < 8; i ++)
    {
        cout << i << " ";
        for (int j = 0; j < 8; j ++)
        {
            if (i == kr && j == kc)
                cout << "K ";
            else if (i == pr && j == pc)
                cout << "p ";
            else
                cout << "- ";
        } /* endfor */
        cout << endl;
    } /* endfor */

    return;

} /* end print_board() */

int main(int argc, char *argv[])
{
    int maxmoves, kr, kc, pr, pc;
    bool caught;

    kr=3; kc=0; pr=0; pc=1;
    for (caught = false, maxmoves = 1; !caught; maxmoves ++)
    {
        print_board(kr, kc, pr, pc);
        cout << "maxmoves=" << maxmoves << endl;
        if (caught = captured(kr, kc, pr, pc, maxmoves))
            cout <<"captured" << endl;
        else
            cout <<"not captured" << endl;
    } // endfor
    cout << "--------------------" << endl;


    kr=4; kc=0; pr=0; pc=1;
    for (caught = false, maxmoves = 1; !caught; maxmoves ++)
    {
        print_board(kr, kc, pr, pc);
        cout << "maxmoves=" << maxmoves << endl;
        if (caught = captured(kr, kc, pr, pc, maxmoves))
            cout <<"captured" << endl;
        else
            cout <<"not captured" << endl;
    } // endfor
    cout << "--------------------" << endl;

    kr=3; kc=3; pr=4; pc=4; // 2 moves
    for (caught = false, maxmoves = 1; !caught; maxmoves ++)
    {
        print_board(kr, kc, pr, pc);
        cout << "maxmoves=" << maxmoves << endl;
        if (caught = captured(kr, kc, pr, pc, maxmoves))
            cout <<"captured" << endl;
        else
            cout <<"not captured" << endl;
    } // endfor
    cout << "--------------------" << endl;

    kr=3; kc=3; pr=3; pc=4; // 3 moves
    for (caught = false, maxmoves = 1; !caught; maxmoves ++)
    {
        print_board(kr, kc, pr, pc);
        cout << "maxmoves=" << maxmoves << endl;
        if (caught = captured(kr, kc, pr, pc, maxmoves))
            cout <<"captured" << endl;
        else
            cout <<"not captured" << endl;
    } // endfor
    cout << "--------------------" << endl;

    kr=7; kc=0; pr=0; pc=0; // 5 moves
    for (caught = false, maxmoves = 1; !caught; maxmoves ++)
    {
        print_board(kr, kc, pr, pc);
        cout << "maxmoves=" << maxmoves << endl;
        if (caught = captured(kr, kc, pr, pc, maxmoves))
            cout <<"captured" << endl;
        else
            cout <<"not captured" << endl;
    } // endfor
    cout << "--------------------" << endl;

    exit(0);

} /* end main() */
```