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***Chess code:-***

#include <stdio.h>

#include <stdlib.h>

//i==row && j== column

void queenChecks(int board[8][8] , int i , int j){

int e, k;

for( e =0 ; e<8;e++) {

board[i][e]=1;

board[e][j]=1;

}

for( k=0;k<8;k++) {

if((j-k+i)<8 && (j-k+i)>=0) {

board[k][j-k+i]=1;

}

if(j+k-i<8 && (j+k-i)>=0 ) {

board[k][j+k-i]=1;

}

}

board[i][j]=8;

}

void printBoard(int board[8][8]){

int i,j;

for( i =0 ; i<8 ; i++){

for( j =0 ; j<8 ; j++){

printf("%i ",board[i][j]);

}

printf("\n");

}

}

void nqueens(){

int solved=0;

int x,i,j;

while(solved==0) {

solved = 1;

int board[8][8] ;

for( i=0;i<8;i++) {

for(j=0; j<8 ; j++) {

solved = 0;

if(board[i][j]==0) {

solved = 1;

while(1) {

x =rand()%8;

if(board[i][x]==0) {

queenChecks(board,i,x);

break;

}

}

break;

}

}

if(solved==0)

break;

}

if(solved==1) {

printBoard(board);

printf("\n1's represent empty squares , 8's represent queens\n\n");

printf("Press Any key to generate a new board combination......");

getch();

system("cls");

solved=0;

}

int m,l;

for( m =0 ;m<8 ; m++){

for( l=0;l<8;l++){

board[m][l]=0;

}

}

}

}

int main()

{

nqueens();

return 0;

}















