```c
#include <stdio.h>


void create_magic_square(int n, int a[n][n]);
void print_magic_square(int n, int a[n][n]);

int main()
{
    printf("Enter size of square: ");
    int n;
    scanf("%d", &n);
    int a[n][n];

    create_magic_square(n, a);
    print_magic_square(n, a);

}


void create_magic_square(int n, int a[n][n])
{
    int i,x,y,x2,y2;

    //initializing the array all to 0
    for (x = 0; x < n; x++){
        for (y = 0; y < n; y++) {
            a[x][y] = 0;
            }
        }


    //starting location
    i = 1; //i is the value stored in array (i.e. 1 to n)
    x = 0;  //x is the row
    y = n / 2;  //y is the column
    x2 = x; //x2 is the potential next x location
    y2 = y;  //y2 is the potential next y location


    //place 0 to n into array
    while (i <= n * n) {

        a[x][y] = i;

        //border check - top of row 1
        if (x == [redacted])
            x2 = [redacted] //goes to bottom
        else
            x2 = x[redacted]  //keep going top, top is 0
```

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50
51          //border check - right border
52          if (y == [redacted])
53              y2 = [redacted];
54          else
55              y2 = [redacted];
56
57          //spot taken check
58          if (a[x2][y2] != 0)
59              [redacted]
60          else {
61              x = x2;
62              y = y2;
63          }
64
65          i++;
66      }
67  }
68
69
70  void print_magic_square(int n, int a[n][n])
71  {
72      int x,y;
73      for (x = 0; x < n; x++)
74      {
75          for (y = 0; y < n; y++)
76              printf("%5d", [redacted]);
77          printf("\n");
78      }
79  }
80
81
82
83
84
```