

```
1 using System;
2 using System.Collections.Generic;
3 using System.Text;
4
5 namespace NQueens
6 {
7     /// <summary>
8     /// This object represents a square on a chessboard.
9     /// For the purposes of this object, a 'hit' is when a queen is able to
10    /// attack this square.
11    class Square
12    {
13        public bool isQueen = false;
14        int numHits = 0;
15
16        public int GetNumHits() { return numHits; }
17
18        public void MarkHit(int val )
19        {
20            numHits += val;
21        }
22
23        /// <summary>
24        /// Inherited to enable a deep cloning of a ChessBoard. See
25        /// documentation for ICloneable
26        /// </summary>
27        /// <returns>A by value clone of this object</returns>
28        public Square Clone()
29        {
30            Square newSquare = new Square();
31            newSquare.isQueen = isQueen;
32            newSquare.numHits = numHits;
33            return newSquare;
34        }
35    }
36 }
```