

```

1 package Project3;
2
3 /*****
4  * CIS 163 Section 01
5  * Project 3: Chess Game
6  * Knight Class
7  *
8  * This class represents a ChessPiece that is a knight.
9  *
10 * @author George Fayette
11 * @version 3/23/2019
12 *****/
13 public class Knight extends ChessPiece {
14
15     /*****
16      * Public constructor sets player to parameter value.
17      * @param player The player type.
18      *****/
19     public Knight(Player player) {
20         super(player);
21     }
22
23     /*****
24      * Public String, returns the ChessPiece type.
25      * @return A string representing the ChessPiece type.
26      *****/
27     public String type() {
28         return "Knight";
29     }
30
31     /*****
32      * Public boolean, returns true if the move is valid.
33      * @param move The move that is being checked.
34      * @param board The array of IChessPieces that is being checked.
35      * @return True if the move is valid.
36      *****/
37     public boolean isValidMove(Move move, IChessPiece[][] board) {
38         boolean valid = true;
39
40         if (!super.isValidMove(move, board)) {
41             valid = false;
42         } else {
43             int vDistance = move.toRow - move.fromRow;
44             int hDistance = move.toColumn - move.fromColumn;
45
46             if (vDistance < 0) {
47                 vDistance *= -1;
48             }
49             if (hDistance < 0) {
50                 hDistance *= -1;
51             }
52
53             if (!(vDistance == 1 && hDistance == 2) &&
54                 !(vDistance == 2 && hDistance == 1)) {
55                 valid = false;
56             }
57         }
58         return valid;
59     }
60 }

```