```
 1  package engine.utils;
 2
 3  import engine.pieces.*;
 4
 5  public class Cell {
 6
 7      private Piece piece;
 8
 9      private final int x;
10      private final int y;
11
12      /**
13       * Constructor to initialize a Cell object with a piece and its position (x, y).
14       *
15       * @param piece the piece placed on the cell (can be null for an empty cell)
16       * @param x     the x-coordinate of the cell's position
17       * @param y     the y-coordinate of the cell's position
18       */
19      public Cell(Piece piece, int x, int y) {
20          this.piece = piece;
21          this.x = x;
22          this.y = y;
23      }
24
25      /**
26       * Set the piece on the cell to a new piece.
27       *
28       * @param piece the new piece to be placed on the cell
29       */
30      public void setPiece(Piece piece) {
31          this.piece = piece;
32      }
33
34      /**
35       * Get the piece currently on the cell.
```

```java
36      *
37      * @return the piece on the cell (can be null for an empty cell)
38      */
39     public Piece getPiece() {
40         return piece;
41     }
42
43     /**
44      * Check if the cell is empty (contains no piece).
45      *
46      * @return true if the cell is empty, false otherwise
47      */
48     public boolean isEmpty() {
49         return piece == null;
50     }
51
52     /**
53      * Remove the piece from the cell, making it empty.
54      */
55     public void removePiece() {
56         piece = null;
57     }
58
59     /**
60      * Get the x-coordinate of the cell's position.
61      *
62      * @return the x-coordinate of the cell
63      */
64     public int getX() {
65         return x;
66     }
67
68     /**
69      * Get the y-coordinate of the cell's position.
70      *
```

```
71     * @return the y-coordinate of the cell
72     */
73    public int getY() {
74        return y;
75    }
76 }
77
```