

```
1 package chess.pieces;
2
3 import boardgame.Board;
4 import boardgame.Position;
5 import chess.ChessMatch;
6 import chess.ChessPiece;
7 import chess.Color;
8
9 import java.util.Arrays;
10
11 public class Pawn extends ChessPiece {
12
13     public Pawn(Board board, Color color) {
14         super(board, color);
15     }
16
17
18     @Override
19     public boolean[][] possibleMoves() {
20         boolean[][] mat = new boolean[getBoard().getRows()][getBoard().getColumns()];
21
22         int pieceStep = (getColor() == Color.BLACK) ? 1: -1;
23
24         Position p = new Position(position.getRow() + pieceStep, position.getColumn());
25         if (getBoard().positionExists(p) && !getBoard().thereIsAPiece(p)) {
26             mat[p.getRow()][p.getColumn()] = true;
27             if (getMoveCount() == 0) {
28                 p.setRow(p.getRow() + pieceStep);
29                 if (getBoard().positionExists(p) && !getBoard().thereIsAPiece(p))
30                     mat[p.getRow()][p.getColumn()] = true;
31                 p.setRow(p.getRow() - pieceStep);
32             }
33         }
34         p.setColumn(p.getColumn()-1);
35         if (getBoard().positionExists(p) && isThereOpponentPiece(p))
36             mat[p.getRow()][p.getColumn()] = true;
37         p.setColumn(p.getColumn()+2);
38         if (getBoard().positionExists(p) && isThereOpponentPiece(p))
39             mat[p.getRow()][p.getColumn()] = true;
40
41         return mat;
42     }
43
44     @Override
45     public String toString() {
46         return "P";
47     }
48 }
49
```