```
###### Player 2 Turn 00 ######
Board:
^
 [[0 0 0 0 0 0 0]
  [0 0 0 0 0 0 0]
  [0 0 0 0 0 0 0]
  [0 0 0 0 0 0 0]
  [0 0 0 0 0 0 0]
  [0 0 0 0 0 1 0]]
Using 2 step lookahead
"summary_stats":{'column': 0, 'score': -2, 'column time': 0.02687, 'time_left':
1.95222}
"summary_stats":{'column': 1, 'score': -2, 'column time': 0.02578, 'time_left':
1.92638}
"summary_stats":{'column': 2, 'score': -1, 'column time': 0.02569, 'time_left':
1.90064}
"summary_stats":{'column': 3, 'score': -1, 'column time': 0.02514, 'time_left':
1.87546}
"summary_stats":{'column': 4, 'score': -1, 'column time': 0.02524, 'time_left':
1.85018}
"summary_stats":{'column': 5, 'score': -2, 'column time': 0.02566, 'time_left':
1.82448}
"summary_stats":{'column': 6, 'score': -1, 'column time': 0.0298, 'time_left':
1.79462}
Chosen column: 3
Choice took: 0.20545


###### Player 2 Turn 01 ######
Board:
 [[0 0 0 0 0 0 0]
  [0 0 0 0 0 0 0]
  [0 0 0 0 0 0 0]
  [0 0 0 0 0 0 0]
  [0 0 0 1 0 0 0]
  [0 0 0 2 0 1 0]]
Using 2 step lookahead
"summary_stats":{'column': 0, 'score': -1, 'column time': 0.02534, 'time_left':
1.94942}
"summary_stats":{'column': 1, 'score': -1, 'column time': 0.04916, 'time_left':
1.90021}
"summary_stats":{'column': 2, 'score': 0, 'column time': 0.04982, 'time_left':
1.85034}
"summary_stats":{'column': 3, 'score': -3, 'column time': 0.04854, 'time_left':
1.80174}
"summary_stats":{'column': 4, 'score': -2, 'column time': 0.04094, 'time_left':
1.76074}
"summary_stats":{'column': 5, 'score': -2, 'column time': 0.02711, 'time_left':
1.73357}
"summary_stats":{'column': 6, 'score': -3, 'column time': 0.02607, 'time_left':
1.70746}
Chosen column: 2
Choice took: 0.29263


###### Player 2 Turn 02 ######
Board:
 [[0 0 0 0 0 0 0]
  [0 0 0 0 0 0 0]
```

```
   [0 0 0 0 0 0 0]
   [0 0 0 0 0 0 0]
   [0 0 0 1 0 0 0]
   [0 1 2 2 0 1 0]]
```
Using 2 step lookahead
"summary_stats":{'column': 0, 'score': -4, 'column time': 0.05263, 'time_left':
1.91791}
"summary_stats":{'column': 1, 'score': -3, 'column time': 0.0509, 'time_left':
1.86695}
"summary_stats":{'column': 2, 'score': 0, 'column time': 0.0265, 'time_left':
1.84039}
"summary_stats":{'column': 3, 'score': -3, 'column time': 0.02525, 'time_left':
1.81509}
"summary_stats":{'column': 4, 'score': -4, 'column time': 0.02848, 'time_left':
1.78656}
"summary_stats":{'column': 5, 'score': -3, 'column time': 0.02733, 'time_left':
1.75918}
"summary_stats":{'column': 6, 'score': -4, 'column time': 0.02753, 'time_left':
1.73161}
Chosen column: 2
Choice took: 0.26847

Player 2 Turn 03
Board:
 [[0 0 0 0 0 0 0]
  [0 0 0 0 0 0 0]
  [0 0 0 0 0 0 0]
  [0 0 1 0 0 0 0]
  [0 0 2 1 0 0 0]
  [0 1 2 2 0 1 0]]
Using 3 step lookahead
"summary_stats":{'column': 0, 'score': -7, 'column time': 0.14581, 'time_left':
1.83516}
"summary_stats":{'column': 1, 'score': 0, 'column time': 0.09926, 'time_left':
1.73584}
"summary_stats":{'column': 2, 'score': -3, 'column time': 0.11833, 'time_left':
1.61746}
"summary_stats":{'column': 3, 'score': -3, 'column time': 0.11685, 'time_left':
1.50057}
"summary_stats":{'column': 4, 'score': 1, 'column time': 0.12662, 'time_left':
1.3739}
"summary_stats":{'column': 5, 'score': -5, 'column time': 0.12841, 'time_left':
1.24544}
"summary_stats":{'column': 6, 'score': -7, 'column time': 0.11807, 'time_left':
1.12732}
Chosen column: 4
Choice took: 0.87275

Player 2 Turn 04
Board:
 [[0 0 0 0 0 0 0]
  [0 0 0 0 0 0 0]
  [0 0 0 0 0 0 0]
  [0 0 1 1 0 0 0]
  [0 0 2 1 0 0 0]
  [0 1 2 2 2 1 0]]
Using 3 step lookahead
```

"summary_stats":{'column': 0, 'score': -5, 'column time': 0.12787, 'time_left': 1.8557}
"summary_stats":{'column': 1, 'score': -19, 'column time': 0.08925, 'time_left': 1.7664}
"summary_stats":{'column': 2, 'score': -1, 'column time': 0.13382, 'time_left': 1.63254}
"summary_stats":{'column': 3, 'score': 0, 'column time': 0.11686, 'time_left': 1.51563}
"summary_stats":{'column': 4, 'score': -20, 'column time': 0.14378, 'time_left': 1.3718}
"summary_stats":{'column': 5, 'score': -9, 'column time': 0.1374, 'time_left': 1.23436}
"summary_stats":{'column': 6, 'score': -6, 'column time': 0.11671, 'time_left': 1.11759}
Chosen column: 3
Choice took: 0.88246


###### Player 2 Turn 05 ######
Board:
 [[0 0 0 0 0 0 0]
 [0 0 0 0 0 0 0]
 [0 0 1 2 0 0 0]
 [0 0 1 1 0 0 0]
 [0 0 2 1 0 0 0]
 [0 1 2 2 2 1 0]]
Using 3 step lookahead
Column 4 is terminal.
Chosen column: 4
Choice took: 0.01223


###### Player 2 Turn 06 ######
Board:
 [[0 0 0 0 0 0 0]
 [0 0 0 0 0 0 0]
 [0 0 1 2 0 0 0]
 [0 0 1 1 1 0 0]
 [0 0 2 1 2 0 0]
 [0 1 2 2 2 1 0]]
Using 4 step lookahead
"summary_stats":{'column': 0, 'score': -32, 'column time': 0.57012, 'time_left': 1.3947}
"summary_stats":{'column': 1, 'score': -125, 'column time': 0.34718, 'time_left': 1.04746}
"summary_stats":{'column': 2, 'score': -26, 'column time': 0.69929, 'time_left': 0.34812}
"summary_stats":{'column': 3, 'score': -30, 'column time': 0.64908, 'time_left': -0.30101}
"summary_stats":{'column': 4, 'score': -24, 'column time': 0.60605, 'time_left': -0.90711}
"summary_stats":{'column': 5, 'score': -123, 'column time': 0.71638, 'time_left': -1.62354}
"summary_stats":{'column': 6, 'score': -32, 'column time': 0.70479, 'time_left': -2.32839}
Chosen column: 4
Choice took: 4.32847

```
###### Player 2 Turn 07 ######
Board:
 [[0 0 0 0 0 0 0]
  [0 0 0 1 0 0 0]
  [0 0 1 2 2 0 0]
  [0 0 1 1 1 0 0]
  [0 0 2 1 2 0 0]
  [0 1 2 2 2 1 0]]
Using 4 step lookahead
"summary_stats":{'column': 0, 'score': -43, 'column time': 0.51455, 'time_left':
1.46866}
"summary_stats":{'column': 1, 'score': -141, 'column time': 0.32133, 'time_left':
1.14729}
"summary_stats":{'column': 2, 'score': -29, 'column time': 0.52205, 'time_left':
0.62518}
"summary_stats":{'column': 3, 'score': -37, 'column time': 0.40873, 'time_left':
0.21641}
"summary_stats":{'column': 4, 'score': -33, 'column time': 0.6165, 'time_left':
-0.40014}
"summary_stats":{'column': 5, 'score': -123, 'column time': 0.66768, 'time_left':
-1.06786}
"summary_stats":{'column': 6, 'score': -43, 'column time': 0.53156, 'time_left':
-1.59948}
Chosen column: 2
Choice took: 3.59956


###### Player 2 Turn 08 ######
Board:
 [[0 0 0 0 0 0 0]
  [0 0 2 1 1 0 0]
  [0 0 1 2 2 0 0]
  [0 0 1 1 1 0 0]
  [0 0 2 1 2 0 0]
  [0 1 2 2 2 1 0]]
Using 4 step lookahead
"summary_stats":{'column': 0, 'score': -38, 'column time': 0.41695, 'time_left':
1.56742}
"summary_stats":{'column': 1, 'score': -141, 'column time': 0.30748, 'time_left':
1.25988}
"summary_stats":{'column': 2, 'score': -28, 'column time': 0.394, 'time_left':
0.86584}
"summary_stats":{'column': 3, 'score': -28, 'column time': 0.40888, 'time_left':
0.45691}
"summary_stats":{'column': 4, 'score': -23, 'column time': 0.39657, 'time_left':
0.06029}
"summary_stats":{'column': 5, 'score': -123, 'column time': 0.56983, 'time_left':
-0.50959}
"summary_stats":{'column': 6, 'score': -30, 'column time': 0.54525, 'time_left':
-1.05489}
Chosen column: 4
Choice took: 3.05497


###### Player 2 Turn 09 ######
Board:
 [[0 0 0 1 2 0 0]
  [0 0 2 1 1 0 0]
  [0 0 1 2 2 0 0]
```

```
 [0 0 1 1 1 0 0]
 [0 0 2 1 2 0 0]
 [0 1 2 2 2 1 0]]
Using 5 step lookahead
"summary_stats":{'column': 0, 'score': -30, 'column time': 0.59577, 'time_left':
1.38278}
"summary_stats":{'column': 1, 'score': -132, 'column time': 0.36823, 'time_left':
1.0145}
"summary_stats":{'column': 2, 'score': -18, 'column time': 0.45222, 'time_left':
0.56223}
"summary_stats":{'column': 5, 'score': -123, 'column time': 0.4742, 'time_left':
0.08798}
"summary_stats":{'column': 6, 'score': -20, 'column time': 0.96008, 'time_left':
-0.87215}
Chosen column: 2
Choice took: 2.87223


###### Player 2 Turn 10 ######
Board:
 [[0 0 2 1 2 0 0]
 [0 0 2 1 1 0 0]
 [0 0 1 2 2 0 0]
 [0 0 1 1 1 0 0]
 [0 0 2 1 2 0 0]
 [0 1 2 2 2 1 1]]
Using 5 step lookahead
"summary_stats":{'column': 0, 'score': -22, 'column time': 0.34604, 'time_left':
1.64337}
"summary_stats":{'column': 1, 'score': -132, 'column time': 0.25157, 'time_left':
1.39175}
"summary_stats":{'column': 5, 'score': -123, 'column time': 0.31008, 'time_left':
1.08162}
"summary_stats":{'column': 6, 'score': -22, 'column time': 0.49472, 'time_left':
0.58686}
Chosen column: 0
Choice took: 1.41322


###### Player 2 Turn 11 ######
Board:
 [[0 0 2 1 2 0 0]
 [0 0 2 1 1 0 0]
 [0 0 1 2 2 0 0]
 [0 0 1 1 1 0 0]
 [1 0 2 1 2 0 0]
 [2 1 2 2 2 1 1]]
Using 5 step lookahead
"summary_stats":{'column': 0, 'score': -37, 'column time': 0.3283, 'time_left':
1.6598}
"summary_stats":{'column': 1, 'score': -222, 'column time': 0.18117, 'time_left':
1.47858}
"summary_stats":{'column': 5, 'score': -132, 'column time': 0.26939, 'time_left':
1.20914}
"summary_stats":{'column': 6, 'score': -30, 'column time': 0.45955, 'time_left':
0.74955}
Chosen column: 6
Choice took: 1.25053
```

```
###### Player 2 Turn 12 ######
Board:
 [[0 0 2 1 2 0 0]
 [0 0 2 1 1 0 0]
 [0 0 1 2 2 0 0]
 [1 0 1 1 1 0 0]
 [1 0 2 1 2 0 2]
 [2 1 2 2 2 1 1]]
Using 6 step lookahead
"summary_stats":{'column': 0, 'score': -30, 'column time': 0.95299, 'time_left':
1.02873}
"summary_stats":{'column': 1, 'score': -313, 'column time': 0.35201, 'time_left':
0.67667}
"summary_stats":{'column': 5, 'score': -142, 'column time': 0.59047, 'time_left':
0.08615}
"summary_stats":{'column': 6, 'score': -50, 'column time': 0.69549, 'time_left':
-0.60939}
Chosen column: 0
Choice took: 2.60947


###### Player 2 Turn 13 ######
Board:
 [[0 0 2 1 2 0 0]
 [0 0 2 1 1 0 0]
 [2 0 1 2 2 0 0]
 [1 0 1 1 1 0 1]
 [1 0 2 1 2 0 2]
 [2 1 2 2 2 1 1]]
Using 6 step lookahead
"summary_stats":{'column': 0, 'score': -111, 'column time': 0.62973, 'time_left':
1.3533}
"summary_stats":{'column': 1, 'score': -330, 'column time': 0.17569, 'time_left':
1.17756}
"summary_stats":{'column': 5, 'score': -222, 'column time': 0.48481, 'time_left':
0.6927}
"summary_stats":{'column': 6, 'score': -31, 'column time': 0.60021, 'time_left':
0.09243}
Chosen column: 6
Choice took: 1.90765


###### Player 2 Turn 14 ######
Board:
 [[0 0 2 1 2 0 0]
 [0 0 2 1 1 0 1]
 [2 0 1 2 2 0 2]
 [1 0 1 1 1 0 1]
 [1 0 2 1 2 0 2]
 [2 1 2 2 2 1 1]]
Using 6 step lookahead
"summary_stats":{'column': 0, 'score': 170, 'column time': 0.21024, 'time_left':
1.77801}
"summary_stats":{'column': 1, 'score': -312, 'column time': 0.13517, 'time_left':
1.64279}
"summary_stats":{'column': 5, 'score': -222, 'column time': 0.1686, 'time_left':
1.47414}
"summary_stats":{'column': 6, 'score': 170, 'column time': 0.17892, 'time_left':
```

```
1.29517}
Chosen column: 6
Choice took: 0.7049


###### Player 2 Turn 15 ######
Board:
 [[0 0 2 1 2 0 2]
  [1 0 2 1 1 0 1]
  [2 0 1 2 2 0 2]
  [1 0 1 1 1 0 1]
  [1 0 2 1 2 0 2]
  [2 1 2 2 2 1 1]]
Using 7 step lookahead
"summary_stats":{'column': 0, 'score': 170, 'column time': 0.03314, 'time_left':
1.96023}
"summary_stats":{'column': 1, 'score': -321, 'column time': 0.03264, 'time_left':
1.92754}
"summary_stats":{'column': 5, 'score': -231, 'column time': 0.04022, 'time_left':
1.88728}
Chosen column: 0
Choice took: 0.11279


###### Player 2 Turn 16 ######
Board:
 [[2 0 2 1 2 0 2]
  [1 0 2 1 1 0 1]
  [2 0 1 2 2 0 2]
  [1 0 1 1 1 0 1]
  [1 0 2 1 2 1 2]
  [2 1 2 2 2 1 1]]
Using 7 step lookahead
Column 5 is terminal.
Chosen column: 5
Choice took: 0.00445
Agent order: [opponent, debug_agent]
--- b1ue agent lost ---


###### Game Over ######
Game time: 26.915
```