```
def render_board():
1
         global board
2
         for y in board:
3
             for x in y:
4
                 if x == 1 or x == -1:
5
                     print(player_text(x), end=" ")
6
                 else:
7
                     print("-", end=" ")
8
             print()
9
         print("0 1 2 3 4 5 6")
10
11
    def render_text(text):
12
        print("\n"* 3, end="")
13
        print(text)
14
        print("\n"* 3, end="")
15
16
    def player_text(player_num: int) -> str:
17
         if player_num == 1:
18
             return f"{red}X{reset}"
19
         elif player_num == -1:
20
             return f"{yellow}0{reset}"
21
22
    def move(move: int, player: int) -> int:
23
         global board
24
         options = [x[move] for x in board]
25
         movey = options.index(0)
26
         spot = 5
27
        while board[spot][move] != 0:
28
             spot -= 1
29
         board[spot][move] = player
30
         return spot
31
32
    def check_input(text: str, full) -> bool:
33
         return text.isdecimal() and int(text) in range(7) and not full[int(text)]
34
35
36
    # check win around a new move because that is the only place a new win can occur
37
    def check_win_move(movex: int, movey: int, player: int) -> bool:
38
        global board
39
         counter = 0
40
         #horizontal win
41
         for x in range(movex-3, movex+4):
42
             if x in range(7):
43
                 spot = board[movey][x]
44
                 if spot == player:
45
46
                     counter += 1
                 else:
47
                     counter = 0
48
             if counter > 3:
49
                 return True
50
         #vertical win
51
         counter = 0
52
         for y in range(movey-3, movey+4):
53
```

```
54
              if y in range(6):
 55
                  spot = board[y][movex]
56
                  if spot == player:
 57
                       counter += 1
 58
                  else:
 59
                       counter = 0
 60
              if counter > 3:
 61
                  return True
 62
          #diagonal 1 down
          counter = 0
 63
 64
          y = movey-3
 65
          for x in range(movex-3, movex+4):
              if x in range(7) and y in range(6):
 66
 67
                  spot = board[y][x]
                  if spot == player:
 68
 69
                      counter += 1
 70
                  else:
                       counter = 0
 71
 72
              if counter > 3:
 73
                  return True
 74
              y += 1
 75
          #diagonal 2 up
 76
          counter = 0
 77
          y = movey+3
 78
          for x in range(movex-3, movex+4): # change movey to x
 79
              if x in range(7) and y in range(6):
 80
                  spot = board[y][x]
 81
                  if spot == player:
 82
                      counter += 1
 83
              if counter > 3:
 84
                  return True
 85
              y -= 1
 86
          return False
 87
     board = [[0] * 7 for i in range(6)]
 88
      full = [False] * 7
 89
 90
 91
     play = True
 92
     player = 1
 93
 94
     # colors
     black = "\u001b[30m"
 95
     red = "\u001b[31m"]
 96
 97
     green = "\u001b[32m"
 98
     yellow = "\u001b[33m"
 99
     blue = \sqrt{u001b[34m]}
100
     magenta = "\u001b[35m"
     cyan = "\u001b[36m"]
101
      white = \sqrt{u001b[37m]}
102
     reset = "\u001b[0m"
103
104
105
     while play:
          print(f"Player: {player_text(player)}")
106
107
          render_board()
          movecol = input("column: ")
108
109
          while not check input(movecol, full):
```

```
movecol = input("column: ")
110
111
         movecol = int(movecol)
         y = move(movecol, player)
112
113
         print("y: ", y)
114
         if y == 0:
115
             full[movecol] = True
116
         if check_win_move(movecol, y, player):
117
118
         player *= -1
119
         if not False in full:
120
             player = 0
121
122
             break
123
     if player == 0:
124
         render_text(f"{yellow}It was a tie{reset}")
125
     else:
126
         render_text(f"Player {player_text(player)} {green}won!{reset}")
```

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