

LAB -09

Min Max Tic Tac Toe.

```

func minimax (board, depth, is Maximizing):
    score = evalboard (board)

```

```

    if score == 10 or score == -10 or isDraw (board):
        return score

```

```

    if is Maximizing:

```

```

        bs = -inf

```

```

        for e-cell in board:

```

```

            ^ makeMove (board, cell, 'X')

```

```

            score = minimax (board, depth+1, false)

```

```

            undo move (board, cell)

```

```

            bs = max (bs, score)

```

```

        return bs.

```

```

    else:

```

```

        bs = inf

```

```

        for e-cell in board:

```

```

            makeMove (board, cell, 'O')

```

```

            score = minimax (board, depth+1, true)

```

```

            undo move (board, cell)

```

```

            bs = min (bs, score)

```

```

        return bs

```

```

func findbestM (board):

```

```

    bestMove = None

```

```

    bs = -inf

```

```

    for e-cell in board:

```

```

        makeMove (board, cell, 'X')

```

```

        moveVal = miniMax (board, 0, false)

```

```

        undoMove (board, cell)

```

if moveVal > bs :

bmove = cell

bs = moveVal

return bmove

Output :-

	X	

X → player

	X	
O		

O → AI

Best possible move is
in corner -

X		X
O		

X	X	
O		

O → AI

will play here
as that would
minimize the score
the most

X		
X	X	O
O		

→

X		
X	X	O
O		O

→

X		
X	X	O
O	X	O

↓

X		O
X	X	O
O	X	O

"AI Wins"