MIN MAX ALGORITHM

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PROGRAM:

```python
import math

def minimax(curDepth, nodeIndex, maxTurn, scores, targetDepth):

    if curDepth == targetDepth:

        return scores[nodeIndex]

    if maxTurn:

        return max(minimax(curDepth + 1, nodeIndex * 2, False, scores,

                        targetDepth),

            minimax(curDepth + 1, nodeIndex * 2 + 1, False, scores, targetDepth))

    else:

        return min(minimax(curDepth + 1, nodeIndex * 2, True, scores,

                        targetDepth),

            minimax(curDepth + 1, nodeIndex * 2 + 1, True, scores, targetDepth))

scores = [3, 5, 2, 9, 12, 5, 23, 23]

treeDepth = math.log(len(scores), 2)

print("The optimal value is:", end=" ")

print(minimax(0, 0, True, scores, treeDepth))
```

OUTPUT:

The optimal value is: 12