MIN MAX ALGORITHM

# PROGRAM:

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  
  
=== Code Execution Successful ===