**PROGRAM [6]:**

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 = int(math.log2(len(scores)))

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

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

**OUTPUT [6]:**

