```
import math


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

  # base case : targetDepth reached
  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))
```

```
The optimal value is : 12
```