AI Lab 4

MinMax Algorithm

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Code

import math as m

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))

value = int(input("Please Enter number of indexes"))

scores = []

for i in range(value):

a = int(input("Enter a number "))

scores.append(a)

c= int(input("Enter current Depth: "))

n= int(input("Enter Node Index: "))

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

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

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

Output

