

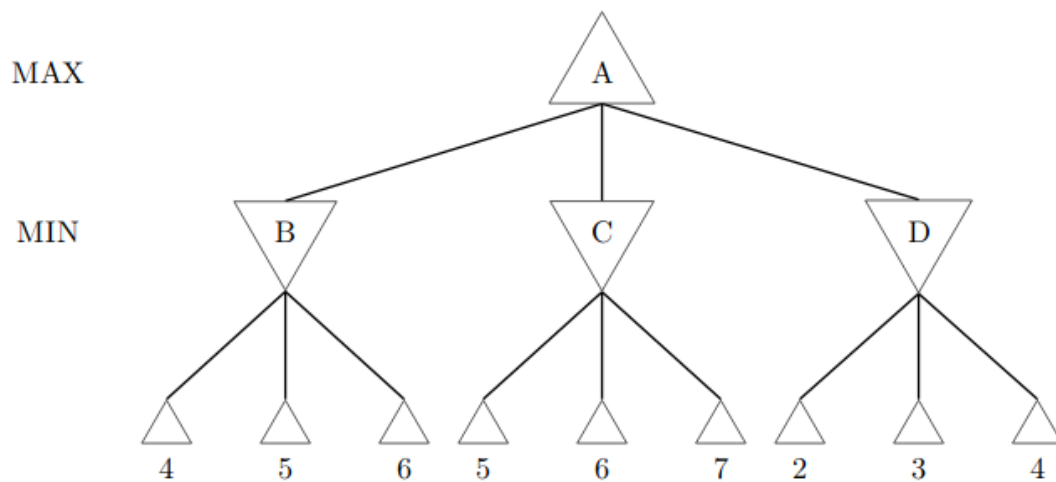
Artificial Intelligence Tutorial 4

You

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1 Question 1

1. Compute the minimax value of the states A , B , C , and D in the following game tree:



1.1 Answer

$B = 4$, $C = 6$, $D = 2$. $A = 5$ this is because it is Min's turn to pick b , c , d and min will always pick the smallest value. Max's turn is to pick A who will always pick the largest value.

2 Question 4

Skipping the BBC shit Let K be a knowledge base which contains the following knowledge

- $A1(x) \wedge A2(x) \rightarrow A(x)$
- $A2(x) \wedge A3(x) \rightarrow B(x)$
- $A(x) \rightarrow C(x)$

and the atomic assertions K_a : $A1(a)$, $A2(a)$, and $A1(b)$. Compute the set Derived Assertions for the knowledge base K

2.1 Answer

Applying $A1(a)$ and $A2(a)$ to the first knowledge results in $A(a)$. From this we know $C(a)$ also. Nothing else. So it is $A1(a), A2(a), A1(b), A(a), C(a)$.

3 Question 5

Using your answer to Question 4, decide whether $K \models B(a)$ and whether $K \models C(a)$