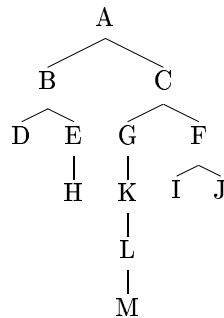


CSE473 Homework #1

Due April 12th 2002 at 9:30 AM in Class on Paper

Name:

Consider the following search tree with start state A and goal state M



with this edge cost g between nodes

Edge	Edge Cost
$A \rightarrow B$	5
$A \rightarrow C$	2
$B \rightarrow D$	8
$B \rightarrow E$	7
$C \rightarrow F$	9
$C \rightarrow G$	1
$E \rightarrow H$	4
$F \rightarrow I$	3
$F \rightarrow J$	4
$G \rightarrow K$	3
$K \rightarrow L$	5
$L \rightarrow M$	4

and this heuristic cost h to the goal state

Node	Heuristic Cost
<i>A</i>	13
<i>B</i>	11
<i>C</i>	11
<i>D</i>	14
<i>E</i>	16
<i>F</i>	18
<i>G</i>	10
<i>H</i>	14
<i>I</i>	17
<i>J</i>	15
<i>K</i>	8
<i>L</i>	2
<i>M</i>	0

1 Node Order

For each of the following search methods, show the order in which the nodes are visited.

1.1 Breadth First

1.2 Depth First

1.3 Uniform Cost

1.4 Greedy

1.5 A*

2 Admissibility

Is the heuristic admissible? Why or why not?