Question Label : Multiple Choice Question

Find the total number of test requirements for edge pair coverage?

Options :

6406531894769. ✖ 7

6406531894770. ✖ 8

6406531894771. ✔ 9

6406531894772. ✖ 10

Question Number : 81 Question Id : 640653566955 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 6

Question Label : Multiple Choice Question

Find the total number of prime paths in the given CFG?

Options :

6406531894773. ✖ 5

6406531894774. ✖ 6

6406531894775. ✔ 7

6406531894776. ✖ 8

AI

Section Id :	64065338431
Section Number :	4
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	9

Number of Questions to be attempted :	9
Section Marks :	25
Display Number Panel :	Yes
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	64065381152
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 82 Question Id : 640653566956 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question

THIS IS QUESTION PAPER FOR THE SUBJECT "DEGREE LEVEL : AI: SEARCH METHODS FOR PROBLEM SOLVING (COMPUTER BASED EXAM)"

ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?
CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.

(IF IT IS NOT THE CORRECT SUBJECT, PLS CHECK THE SECTION AT THE TOP FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406531894777. ✔ YES

6406531894778. ✖ NO

Sub-Section Number :	2
Sub-Section Id :	64065381153
Question Shuffling Allowed :	Yes

Is Section Default? : null

Question Number : 83 Question Id : 640653566957 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

SEARCH

A MoveGen for a state space where S is the start node and G is the goal node is shown in the table. The MoveGen function returns nodes in the order as shown in the table. Use DFS and BFS to find a path from S to G. Note: DFS and BFS inspect only new nodes.

X	MoveGen(X)
S	[A,C]
A	[B,C,D,S]
B	[A,D,E]
C	[A,D,S]
D	[A,B,C,E,G]
E	[B,D,G]
G	[D,E]

What is the path found by DFS? Enter the path as a comma separated list.

NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: S,X,Y,Z

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

S,A,B,E,G

Sub-Section Number :	3
Sub-Section Id :	64065381154
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653566958 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (84 to 88)

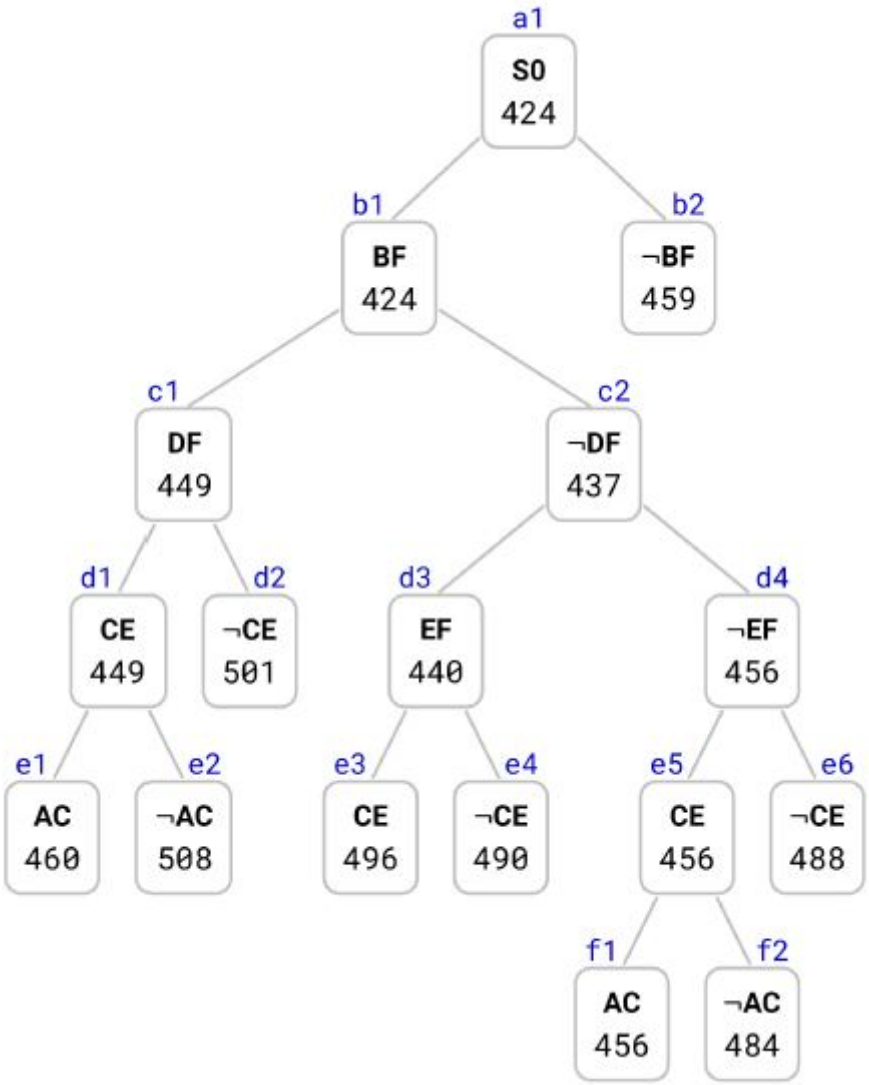
Question Label : Comprehension

TSP BnB

TSP BnB algorithm is solving a TSP instance where the cities are A, B, C, ... and so on. The BnB search tree (at the point when the algorithm discovers the optimal tour) is provided below.

Each node in the search tree displays an edge (either XY or ¬XY), a cost value, and a unique reference number (a1, b1, ..., c1, ..., d1, ..., e1, ..., f1, f2). Use the reference numbers to break ties. When required, use reference numbers in short answers.

What information can you glean from the search tree? Answer the sub-questions based on the information gleaned from the search tree.



Sub questions

Question Number : 84 Question Id : 640653566959 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

Determine the number of cities in the TSP instance. Enter the number of cities in the text box, or enter NIL if it is not possible to determine the number of cities.

Enter an integer.

NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: 42

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

6

Question Number : 85 Question Id : 640653566960 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

Let S0 (ref. no. a1) be the first node to be refined, identify the next 4 nodes (2nd to 5th node) that are refined by the TSP BnB algorithm. Enter the nodes (node reference numbers) in the order they are refined.

Enter a comma separated list of node reference numbers.
NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: a9,b9,c9,d9

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

b1,c2,d3,c1

Question Number : 86 Question Id : 640653566961 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

Which node represents the optimal tour? Enter the node reference number in the text box, or

enter NIL if it is not possible to determine the optimal tour.

Enter a node reference number.

NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: a9

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

f1

Question Number : 87 Question Id : 640653566962 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

What is the cost of the optimal tour? Enter the cost of the optimal tour in the text box, or enter NIL if it is not possible to determine the optimal tour.

Enter an integer.

NO SPACES, TABS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: 42

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

456

Question Number : 88 Question Id : 640653566963 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

Start from city A, what is the path representation of the optimal tour? Enter the path representation in the text box, or enter NIL if it is not possible to determine the optimal tour.

Enter a comma separated list of cities (city labels).
NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: A,B,C

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Set

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

A,C,E,D,B,F

A,F,B,D,E,C

Sub-Section Number :	4
Sub-Section Id :	64065381155
Question Shuffling Allowed :	No
Is Section Default? :	null

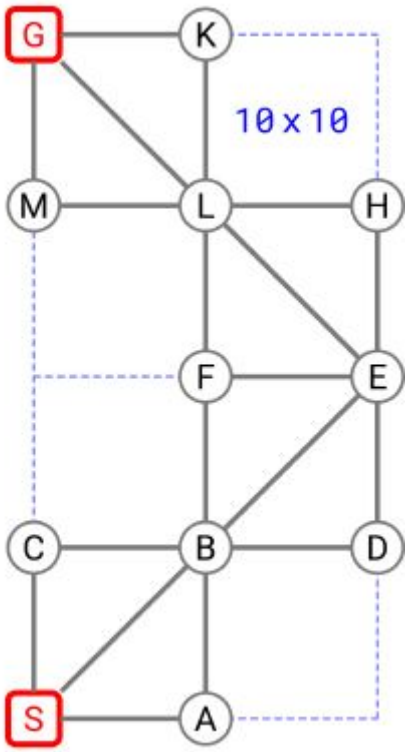
Question Id : 640653566964 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (89 to 91)

Question Label : Comprehension

SEARCH FOR OPTIMAL SOLUTION

The figure shows a map on a uniform grid where each tile is 10x10 in size. The start node is S and the goal node is G and the cost of each edge is **5 units**. The MoveGen function returns nodes in alphabetical order. Use Manhattan Distance as the heuristic function. Where necessary, use node labels to break ties.



Based on the above data, answer the given subquestions.

Sub questions

Question Number : 89 Question Id : 640653566965 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

What is the path found by A*? Enter the path as a comma separated list of node labels.

NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: S,X,Y,Z

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

S,B,F,L,G

Question Number : 90 Question Id : 640653566966 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

What is the cost of the path found by A*?

Enter an integer.

NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: 17

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

20

Question Number : 91 Question Id : 640653566967 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

Is the Manhattan Distance admissible for the given problem?

Options :

6406531894787. ✖ Yes

6406531894788. ✔ No

6406531894789. ✖ Cannot be determined

Sub-Section Number :	5
Sub-Section Id :	64065381156
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653566968 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

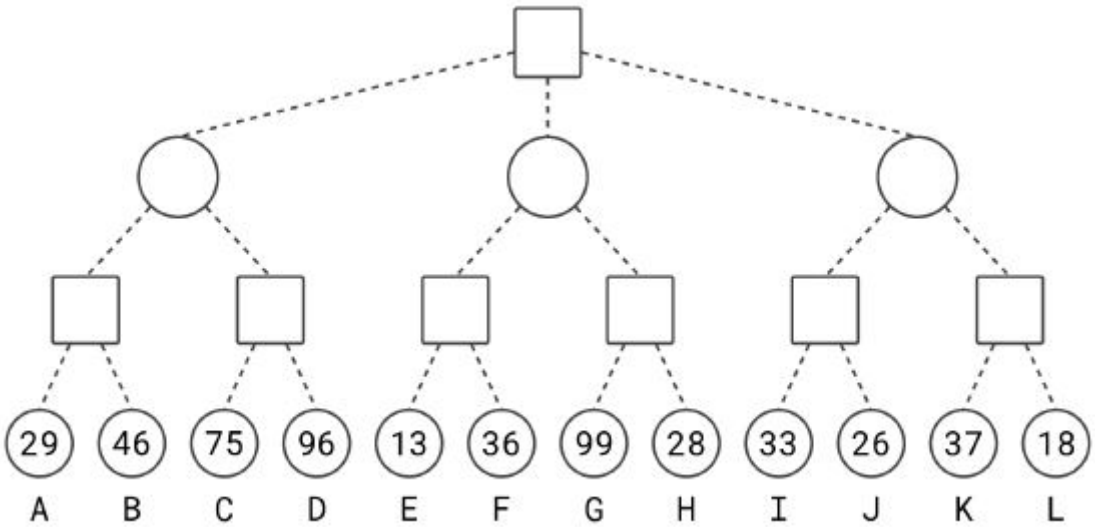
Question Numbers : (92 to 95)

Question Label : Comprehension

GAMES

The figure shows a 3-ply game tree with evaluation function values defined at horizon. The nodes in the horizon are labeled from A to L. Use these labels when asked to enter a horizon node or a list of horizon nodes.

Tie-breaker: when several nodes qualify then select the left most node, if tie persists then select the deepest node among the left most nodes.



Based on the above data, answer the given subquestions.

Sub questions

Question Number : 92 Question Id : 640653566969 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

Which of the following is a strategy for MAX?

Options :

6406531894790. ✖ A,B

6406531894791. ✖ A,B,E,F,I,J

6406531894792. ✔ I,K

6406531894793. ✖ A,E,I,K

Question Number : 93 Question Id : 640653566970 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

List the horizon nodes in the best strategy for MAX. Enter the nodes in the ascending order of node labels.

Enter a comma separated list of node labels.

NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: X,Y,Z

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

B,D

Question Number : 94 Question Id : 640653566971 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

List all the horizon nodes pruned by Alpha-Beta.

Enter a comma separated sorted list of node labels.

NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: X,Y,Z

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

D,G,H,K,L

Question Number : 95 Question Id : 640653566972 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

Force the MinMax value to 36 by changing the eval of only one horizon node. Select the horizon node that you want to change and select the largest possible value for that node.

Enter the node label and the new value as a comma separated list.

NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: X,17

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

B,36

Sub-Section Number :	6
Sub-Section Id :	64065381157
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653566973 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (96 to 98)

Question Label : Comprehension

PROBLEM DECOMPOSITION

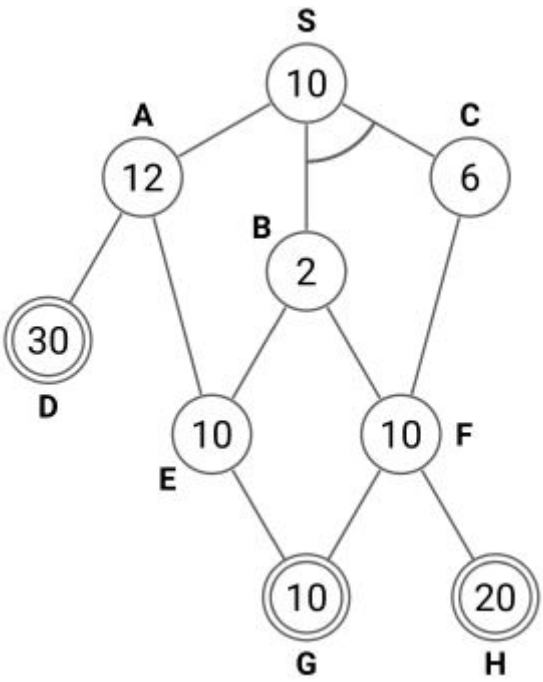
The figure shows an AND-OR graph that depicts how a problem S can be decomposed into one or more simpler problems. Nodes are uniquely identified by labels (S, A, B, ...). The number in each node is the heuristic estimate of the cost of solving that node.

Nodes shown in double lines are primitive nodes and their values are actual costs. Observe that a primitive node is added to the graph by its parent when the parent is expanded, and the primitive node is labeled as SOLVED and it will not be expanded subsequently.

The cost of each edge is 2 units.

Tie-breaker 1: For nodes with the same cost, expand in the ascending order of node labels.

Tie-breaker 2: For AND nodes, expand the unsolved branch with the highest cost.



Use AO* algorithm to solve S, then answer the given subquestions.

Sub questions

Question Number : 96 Question Id : 640653566974 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

List the first three nodes (including S) expanded by AO* algorithm. List the nodes in the order they are expanded. Observe that primitive nodes are not expanded.

Enter a comma separated list of node labels.

NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: X,Y,Z

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Set

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

S,C,A

S,C,A,E

Question Number : 97 Question Id : 640653566975 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

Determine the value of the start node S after each node expansion. Ignore the initial value of S and list the first three values of S computed from the first three node expansions.

Enter a comma separated list of numbers.
NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: 12,42,17

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Set

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

12,14,14

12,14,14,16

Question Number : 98 Question Id : 640653566976 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

What is the final value of the start node S?

Enter a number.

NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: 42

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

16

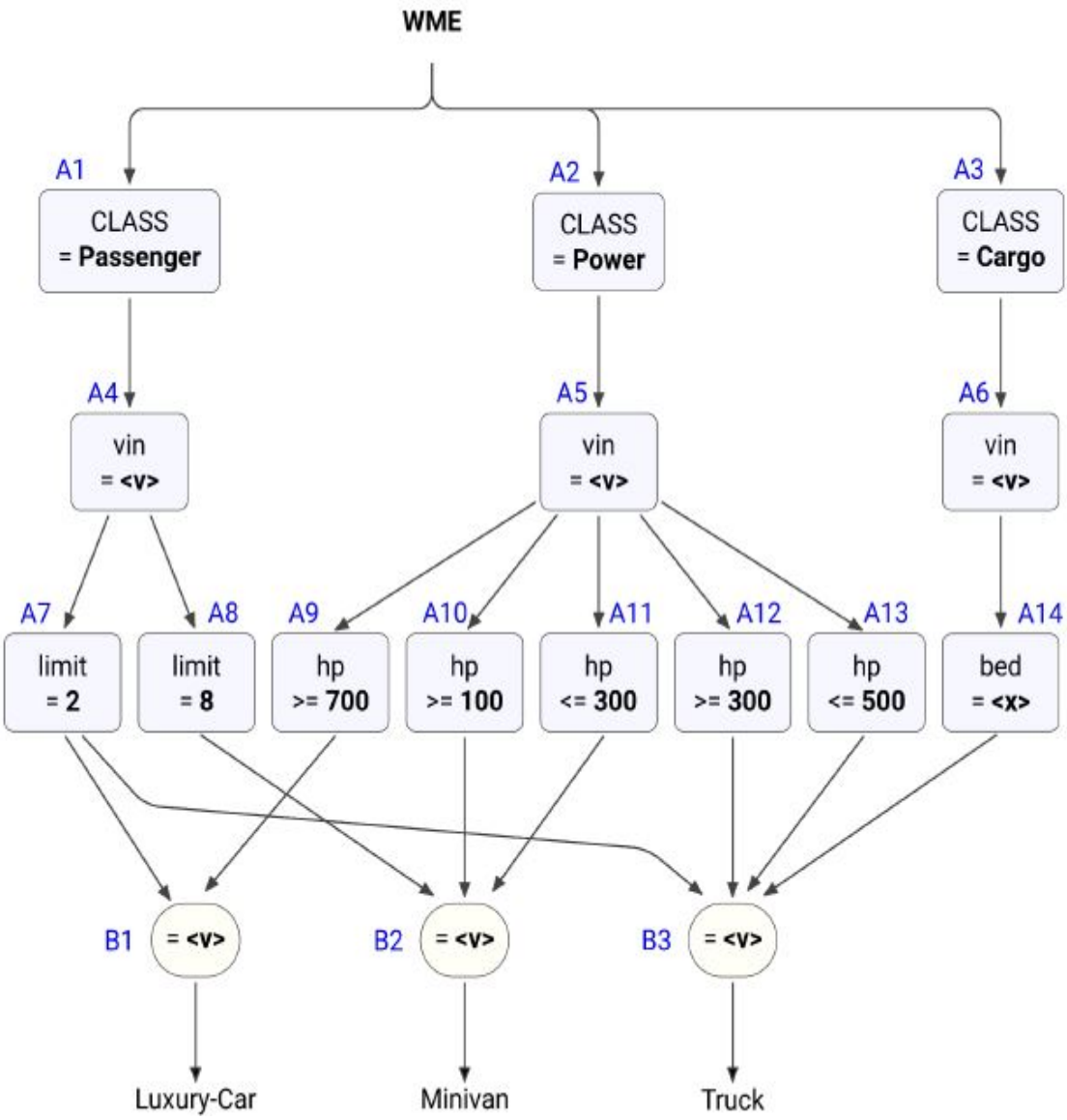
Question Id : 640653566977 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (99 to 101)

Question Label : Comprehension

RULE BASED EXPERT SYSTEMS

A Rete Net for classification of machines is shown in the figure. The labels A1, A2, A3, ..., A10, A11, A12, A13, ..., and B1, B2, B3 uniquely identify nodes in the network. When required, use the above label ordering to **break ties** and to enter short answers.



Run the Rete algorithm for the Working Memory shown below, the WMEs are in timestamp order. Assume that WMEs reside at appropriate Alpha nodes, and the Beta nodes point to WMEs residing in Alpha nodes.

```
101.  (Cargo ^vin A1 ^bed flat)
102.  (Passenger ^vin A1 ^limit 2)
103.  (Passenger ^vin B2 ^limit 8)
104.  (Passenger ^vin C3 ^limit 2)
105.  (Power ^vin A1 ^hp 400)
106.  (Power ^vin B2 ^hp 250)
107.  (Power ^vin C3 ^hp 900)
108.  (Wheel ^vin B2 ^tyre regular)
109.  (Wheel ^vin C3 ^tyre regular)
```

For each WME identify its location (node label) in the Rete Net, and prepare the conflict set for the

first cycle, then answer the given subquestions.

Sub questions

Question Number : 99 Question Id : 640653566978 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Selectable Option : 0

Question Label : Multiple Select Question

Which of the following rule-data tuples are in the conflict-set?

Options :

6406531894800. ✔ Luxury-Car,104,107

6406531894801. ✔ Minivan,103,106

6406531894802. ✔ Truck,101,102,105

6406531894803. ✖ Minivan,103,106,108

Question Number : 100 Question Id : 640653566979 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

If the Inference Engine uses **Specificity** as the conflict resolution strategy then identify the rule-data tuple that will be ready to fire.

Options :

6406531894804. ✖ Luxury-Car,104,107

6406531894805. ✖ Minivan,103,106

6406531894806. ✔ Truck,101,102,105

6406531894807. ✖ Minivan,103,106,108

Question Number : 101 Question Id : 640653566980 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

If the Inference Engine uses **Recency** as the conflict resolution strategy then identify the rule-data tuples that will be ready to fire. If multiple rule-data tuples qualify then choose one.

Options :

6406531894808. ✔ Luxury-Car,104,107

6406531894809. ✖ Minivan,103,106

6406531894810. ✖ Truck,101,102,105

6406531894811. ✖ Minivan,103,106,108

Sub-Section Number :	7
Sub-Section Id :	64065381158
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653566981 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (102 to 105)

Question Label : Comprehension

AUTOMATED PLANNING

The domain description of a Blocks World with a single one-armed robot is given below.

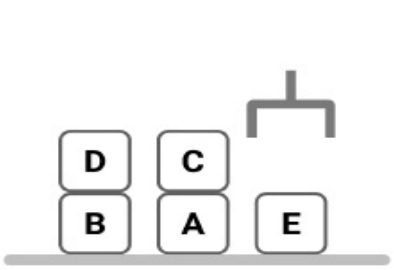
PREDICATES

```
armEmpty        The arm is not holding any block, it is empty.
holding(X)      The arm is holding X.
onTable(X)      X is on the table.
clear(X)        X has nothing above it, it is clear.
on(X,Y)         X is directly placed on Y.
```

OPERATORS

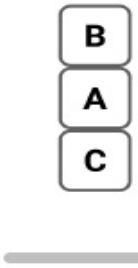
```
Pickup(X). Pick up X from the table.
      Preconditions: { armEmpty, clear(X), onTable(X) }
      Add Effects  : { holding(X) }
      Del Effects  : { armEmpty, onTable(X) }

Putdown(X). Place X on the table.
      Preconditions: { holding(X) }
      Add Effects  : { armEmpty, onTable(X) }
      Del Effects  : { holding(X) }

Unstack(X,Y). Pick up X that is directly sitting on Y.
      Preconditions: { armEmpty, clear(X), on(X,Y) }
      Add Effects  : { clear(Y), holding(X) }
      Del Effects  : { armempty, on(X,Y) }

Stack(X,Y). Place X directly on top of Y.
      Preconditions: { holding(X), clear(Y) }
      Add Effects  : { armEmpty, on(X,Y) }
      Del Effects  : { holding(X), clear(Y) }
```

Consider the following planning problem.



Start State

{ onTable(B), onTable(A), onTable(E),
clear(D), clear(C), clear(E),
on(D,B), on(C,A), armEmpty }



Goal Description

{ on(A,C), on(B,A) }

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 102 Question Id : 640653566982 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time : 0

Correct Marks : 1 Selectable Option : 0

Question Label : Multiple Select Question

Which of the following are **applicable** actions in the start state?

Options :

6406531894812. ✖ Putdown(D)

6406531894813. ✔ Unstack(D,B)

6406531894814. ✔ Unstack(C,A)

6406531894815. ✔ Pickup(E)

6406531894816. ✖ Pickup(A)

6406531894817. ✖ Stack(B,A)

6406531894818. ✖ Stack(A,C)

Question Number : 103 Question Id : 640653566983 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Selectable Option : 0

Question Label : Multiple Select Question

Which of the following are **relevant** actions in the goal state?

Options :

6406531894819. ✖ Putdown(D)

6406531894820. ✖ Unstack(D,B)

6406531894821. ✖ Unstack(C,A)

6406531894822. ✖ Pickup(E)

6406531894823. ✖ Pickup(A)

6406531894824. ✔ Stack(B,A)

6406531894825. ✔ Stack(A,C)

Question Number : 104 Question Id : 640653566984 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Selectable Option : 0

Question Label : Multiple Select Question

In the planning graph, which of the following are mutex action pairs in Layer 1?

Options :

6406531894826. ✔ Unstack(D,B), Pickup(E)

6406531894827. ✔ Unstack(D,B), Unstack(C,A)

6406531894828. ✖ Pickup(E), Stack(B,A)

6406531894829. ✖ Pickup(E), Stack(A,C)

Question Number : 105 Question Id : 640653566985 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Selectable Option : 0

Question Label : Multiple Select Question

In the planning graph, which of the following are mutex proposition pairs in Layer 1?

Options :

6406531894830. ✔ clear(B), holding(C)

6406531894831. ✔ clear(B), clear(A)

6406531894832. ✖ clear(E), on(D,B)

6406531894833. ✖ clear(E), holding(D)

Sub-Section Number : 8

Sub-Section Id : 64065381159

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653566986 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

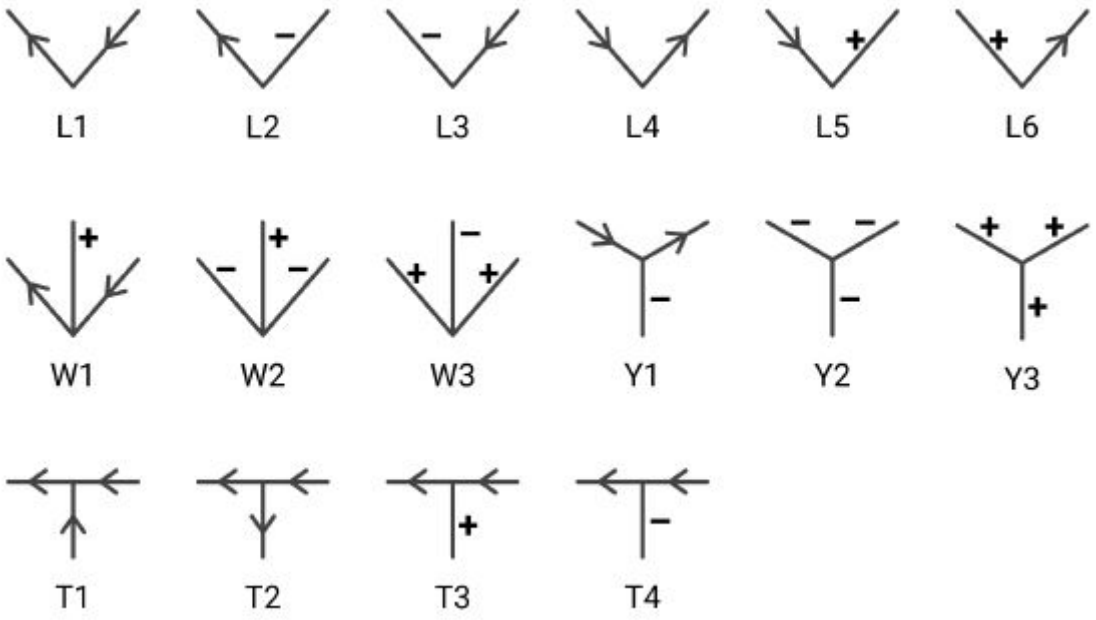
Question Numbers : (106 to 107)

Question Label : Comprehension

CONSTRAINT SATISFACTION

The set of junctions (L, W, Y and T type junctions) that occur in a 2D line drawing of trihedral objects is provided below. The in-plane clockwise/counterclockwise rotations of these junctions are valid as well. These junctions provide constraints on the possible edge assignments (convex, concave, arrow) for the edges/lines in 2D line drawings of trihedral objects.

The junctions carry unique labels: L1, L2, L3, L4, L5, L6, T1, T2, T3, T4, W1, W2, W3, Y1, Y2, Y3. When required, use the labels in short answers.



Apply a suitable algorithm to assign labels to edges/junctions in the 2D line drawings given in the sub-questions, process the edges and junctions in any order you see fit.

Note: A 2D line drawing of trihedral objects is valid if and only if all the edges and junctions in the drawing are assigned consistent labels, otherwise the drawing is inconsistent and all labels are reset to NIL.

Based on the above data, answer the given subquestions.

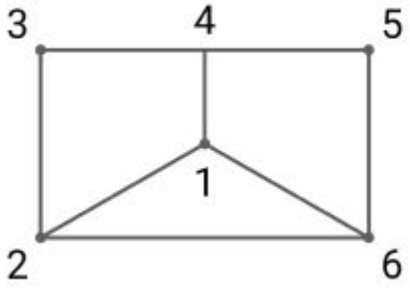
Sub questions

Question Number : 106 Question Id : 640653566987 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

For the 2D line drawing, assign consistent labels to all edges and junctions. Enter the labels of the junctions 1, 2, 3, 4 in the text box, in that order. Or enter NIL if the drawing has no consistent label assignment.



Enter a comma separated list of junction labels, or enter NIL.

NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: X9,Y9,Z9,W9

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

Y2,W3,L5,T4

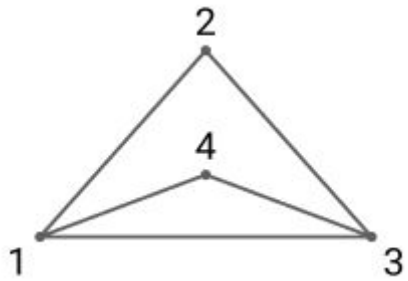
Question Number : 107 Question Id : 640653566988 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

For the 2D line drawing, assign consistent labels to all edges and junctions. Enter the labels of the junctions 1, 2, 3 in the text box, in that order. Or enter NIL if the drawing has no consistent label assignment.



Enter a comma separated list of junction labels, or enter NIL.

NO SPACES, TABS, DOTS, BRACKETS OR EXTRANEOUS CHARACTERS.

Answer format: X9,Y9,Z9

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

NIL

Deep Learning

Section Id : 64065338432