Artificial Intelligence

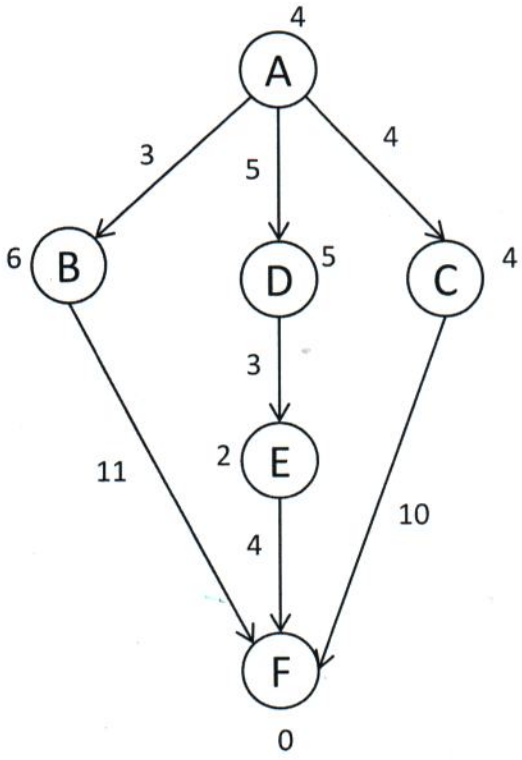
Continuous Evaluation, Group 89

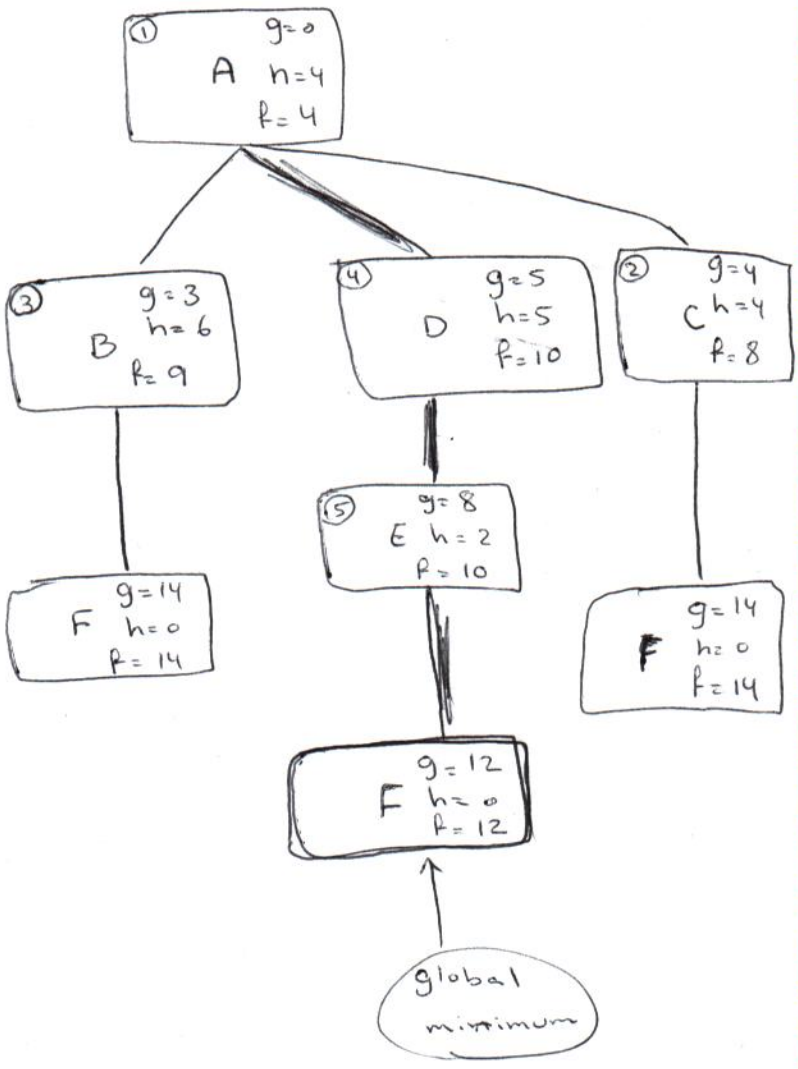
Heuristic Search

21/02/13

Name .....

Consider the graph shown below with initial node A and Goal node F, where the number on each edge is the cost of travelling that edge, and the number next to each node is the heuristic value of that node. For example, the cost of going from D to E is 3 and the estimated heuristic value of node E is 2. Apply A* algorithm to find the path from A to F with the minimum cost. Show the result with a search tree, indicating in each node of the tree the step number, the name of the node in the graph (A, B, ...) and the values g, h, and f.





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Consider the graph shown below with initial node A and Goal node F, where the number on each edge is the cost of travelling that edge, and the number next to each node is the heuristic value of that node. For example, the cost of going from D to E is 3 and the estimated heuristic value of node E is 5. Apply A* algorithm to find the path from A to F with the minimum cost. Show the result with a search tree, indicating in each node of the tree the step number, the name of the node in the graph (A, B, ...) and the values g, h, and f.