GHC Task Group A

To present on We., Feb. 8 in class

A\* and Greedy-Best-First Search

a. Consider the search space below, where *S* is the start node and *G1* and G2 satisfy the goal test. Arcs are labeled with the cost of traversing them and the estimated cost to a goal (the h function itself) is reported inside nodes. We assume A\* (which use g(n)+h(n( as its evaluation function) is applied to this graph; indicate which goal state is reached (if any) and list, *in order*, all the states popped off of the OPEN list and the final content of the open list. When all else is equal, nodes should be removed from OPEN in alphabetical order.

Goal state reached:

States popped off OPEN:

Content of OPEN at time of termination:

 11

2

7

2

1

4

2

9

2

5

8

6

1

4

7

b. Next apply Greedy best first search (which uses h(n) as its evaluation function)!

Goal state reached:

States popped off OPEN:

Content of OPEN at time of termination:

c. A\* terminates when tries it tries to expand a goal state but not when the goal state is inserted to the OPEN list. What is the reason for this?

GHC Task Group B

To present on We., Feb. 8 in class

Devise search strategies for the two players for the labyrinth problem which can be found on the last slide of the Search1 transparencies. Present and justify your chosen search strategy.