Class Activity 2

1. Execute search algorithms through the graph below.
2. For Depth First Search:

* Order of node expansion: (S, A, B, D, G)
* Path found: 10

1. For Breadth First Search:

(S,

A, G)

* Order of node expansion:
* Path found: 12

1. For Uniform Cost Search:

(S,

A(1), C(2), D(3), G(6))

* Order of node expansion:
* Path found: 6

1. For Greedy (Best-First) Search with h(n):

(S, A, C, G)

* Order of node expansion:
* Path found: 4

1. For A\* Search with h(n):

(S, G)

* Order of node expansion:
* Path found: 12

1. Discussion on code
2. How are nodes implemented? Their implemented using a method that gives it parameters like position and its relationship with other nodes.
3. How is the heuristic implemented? It is calculated using both positions from the current node and the end node.
4. What are the similarities and differences between this implementation and the algorithm discussed in class? They both use location of the nodes to calculate the best path to take.
5. Run the implementation and show a snapshot of the code running?

Text

Description automatically generated with low confidence